

# ICC 605-202X edition

# First Committee Action Report on the initial draft edition of the ICC 605 Standard

For Committee Actions taken on the Public Input Agenda based on the November 12, 2024, public input initial draft at the meetings held on Microsoft Teams March 10, 24, April 14, May 12, June 2, 30, and July 21, 2025.

### **Matrix for ICC 605 proposals**

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Proposal #	Section	Date of	Committee Action	Notes				
		meeting proposal	Action					
		considered						
Chapter 1 ADMINISTRATION AND APPLICATION								
IS-MHRRC 0-1	TITLE	3-10-25	D	Disapproved with no				
				opposition.				
IS-MHRRC 0-2		3-10-25	AM	Approved in part with no				
				opposition. The committee				
				agreed to remove the word "enhanced," but retained				
				"minimum standards." The				
				subheading was corrected,				
				but no other revisions				
				recommended by the				
	101			comment were approved.				
IS-MHRRC 0-3	101.1[1]	3-10-25	AM	Approved with no opposition.				
IS-MHRRC 0-4	101.1[2]	3-10-25	AM	Approved with no opposition.				
IS-MHRRC 0-5	101.1[3]	3-10-25	AM	Approved with no opposition.				
IS-MHRRC 0-6		3-10-25	D	Based on the action taken on				
	101.1			IS-MHRRC 0-2. Disapproved				
IS-MHRRC 0-7	101.1	3-10-25	AM	with no opposition.  Approved with no opposition.				
IS-IVITING U-1		3-10-23	Alvi	The proposed changes were				
				incorporated into Sections				
				101.2.1 and 101.2.2. Section				
	101.2			101.3 was deleted.				
IS-MHRRC 0-8	101.2	3-10-25	AM	Approved with no opposition.				
IS-MHRRC 0-9	404.0	3-10-25	D	Disapproved with no				
10.14110000.0.40	101.3	0.40.05		opposition.				
IS-MHRRC 0-10	101.4	3-10-25	D	Disapproved with no				
IS-MHRRC 0-11	101.4	3-10-25	D	opposition.  Disapproved with no				
	101.4	3-10-23		opposition.				
IS-MHRRC 0-12	101.4	3-10-25	AM	Approved with no opposition.				
	Cha	apter 2 DEFINITI	ONS					
IS-MHRRC 0-13		3-10-25	AM	Item 4 and deleted the term				
	202			"Fuel Break." Approved with				
IS-MHRRC 0-14	202	3-24-25	AM	no opposition.  The revision to the definition				
13-WITIKKU U-14		3-24-23	Alvi	of ACCESSORY				
				STRUCTURE was approved				
				with no opposition. The				
				revision to the definition of				
				VENTILATION OPENINGS				
	202 additions			was approved with a				

Proposal #	Section	Date of meeting proposal considered	Committee Action	Notes
				modification with no opposition.
IS-MHRRC 0-15	202 APPROVED AGENCY	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-16	202 deletions	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-17	202 DRIVEWAY	3-10-25	AM	Deleted the definition. Approved with no opposition.
IS-MHRRC 0-18	202 EXTERIOR WALL ASSEMBLY	3-10-25	AS	Approved with no opposition.
IS-MHRRC 0-19	202 EXTERIOR WALL COVERING	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-20	202 FIREBRAND	3-10-25	AM	Deleted the definition. Approved with no opposition.
IS-MHRRC 0-21	202 LABELED	3-10-25	D	Disapproved with no opposition.
IS-MHRRC 0-22	202 LISTED	3-10-25	AM	Deleted "fire" before "code official." Approved with no opposition.
IS-MHRRC 0-23	202 PUBLIC SAFETY AGENCY	3-10-25	W	Withdrawn by proponent.
IS-MHRRC 0-24	202 ROOF ASSEMBLY	3-10-25	AS	Approved with no opposition.
IS-MHRRC 0-25	202 WILDFIRE HAZARD AREAS	3-10-25	AM	Deleted the "S" of "AREA" Approved with no opposition.
	Chapter 3 WILDFIR			
IS-MHRRC 0-26	301	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-27	301.1, 301.2	4-14-25	AM	TG2 C1 and C2. Approved with no opposition.
IS-MHRRC 0-28	301.2	3-10-24	AS	Approved with no opposition.
IS-MHRRC 0-29	301	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-30	301.2.1	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-31	301.2.1	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-32	Table 301.2.1	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-33	Table 301.2.1	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-34	Table 301.2.1	4-14-25	AM	Modified by TG2 Comment 3. Approved with no opposition.
IS-MHRRC 0-35	Tables 301.2 and 301.2.1	3-10-25	AM	Approved with no opposition.
IS-MHRRC 0-36	301.2.1, 402.2.1, 402.2.2, 402.2.3	4-14-25	AM	TG2 Comment 3. Approved with no opposition.
IS-MHRRC 0-37	301.2.2	4-14-25	AM	Approved with no opposition.

Proposal #	Section	Date of meeting proposal	Committee Action	Notes				
		considered						
IS-MHRRC 0-38	CHAPTERS 3 AND 4	3-10-25	D	Disapproved with no opposition.				
Chapter 4 FUEL MANAGEMENT								
IS-MHRRC 0-39	401.1, 402.1	3-10-25	AS	Approved with no opposition.				
IS-MHRRC 0-40	402.2	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-41	Tables 402.2, 402.3.4.1, 402.3.4.2, 402.3.4.3	3-24-25	AS	Approved with no opposition.				
IS-MHRRC 0-42	402.2, 402.2.1, 402.2.2, 402.2.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-43	402.2.4	3-24-25	AS	Approved with no opposition.				
IS-MHRRC 0-44	402.2.4 Commentary	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-45	402.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-46	402.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-47	FIGURE 402.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-48	FIGURE 402.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-49	FIGURE 402.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-50	402.3.1	3-24-25	D	Disapproved with no opposition.				
IS-MHRRC 0-51	402.3.1, 402.3.2, 403.3	4-14-25	AM	TG2 comment 11. Approved with no opposition.				
IS-MHRRC 0-52	402.3.2	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-53	402.3.2 Item 4 Exceptions	3-24-25	D	Disapproved with no opposition.				
IS-MHRRC 0-54	402.3.2 Item 5	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-55	402.3.2 Item 5 Exception	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-56	402.3.2 Item 5 Exception	3-24-25	D	Disapproved with no opposition.				
IS-MHRRC 0-57	402.3.2, 402.3.3	3-24-25	D	Disapproved with no opposition.				
IS-MHRRC 0-58	402.3.3 Item 6	3-24-25	D	Disapproved with no opposition.				
IS-MHRRC 0-59	402.3.3 Item 6 Exception	3-24-25	D	Disapproved with no opposition.				
IS-MHRRC 0-60	402.2.1	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-61	402.2.3	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-62	402.2.4.1	3-24-25	AM	Approved with no opposition.				
IS-MHRRC 0-63	402.2.4.2	4-14-24	AM	TG2 comment 16. Approved with no opposition.				

Proposal #	Section	Date of meeting proposal considered	Committee Action	Notes
IS-MHRRC 0-64	402.3.2	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-65	402.3.2	4-14-25	AM	TG2 comment 12. Approved with no opposition.
IS-MHRRC 0-66	402.3.1, Table 402.3.1	4-14-25	D	Disapproved with no opposition.
IS-MHRRC 0-67	Table 402.3.4.2, Table 402.3.4.3	4-14-25	AM	Approved with no opposition.
IS-MHRRC 0-68	402.4.2	4-14-25	AM	Added a new exception to item 4. Approved with no opposition.
IS-MHRRC 0-69	COMMENTARY FIGURE 402.4.3	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-70	CHAPTER 4	4-14-25	D	Disapproved with no opposition.
	Chapter 5 NEW	BUILDING CO	NSTRUCTION	
IS-MHRRC 0-71	502.1	3-24-25	AM	Revised the text at the end. Approved with no opposition.
IS-MHRRC 0-72	502.2.1, 502.2.3, 503.1.1, 503.4.3, 503.5.3.2, 503.7.1, 503.7.4, 504.1.1	3-24-25	D	Disapproved with no opposition.
IS-MHRRC 0-73	502.2.3	3-24-25	AM	Additional related revisions. Approved with no opposition.
IS-MHRRC 0-74	502.2.3	6-30-25	AM	Approved with no opposition.
IS-MHRRC 0-75	502.2.3	3-24-25	D	Disapproved with no opposition.
IS-MHRRC 0-76	502.2.3.3	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-77	502.2.3.3.1	3-24-25	D	Disapproved with no opposition.
IS-MHRRC 0-78	502.2.3.3.1	3-24-25	D	Disapproved with no opposition.
IS-MHRRC 0-79	502.3.1	3-24-25	AM	Removed "components" and changed from "based on" to "determined by" Approved with no opposition.
IS-MHRRC 0-80	502.4	3-24-25	AS	with по оррозион.
IS-MHRRC 0-81	502.4	3-24-25	AM	Removed "(WHA)." Approved with no opposition.
IS-MHRRC 0-82	502.4	3-24-25	AM	Replaced "WHA" to "wildfire hazard area." Approved with no opposition.
IS-MHRRC 0-83	502.4	3-24-25	AM	Removed "(WHA)." Approved with no opposition.

Proposal #	Section	Date of	Committee	Notes
1 Toposai II	Codion	meeting	Action	140100
		proposal		
10.14110000004		considered	0.04	B 1 11 11 11
IS-MHRRC 0-84	502.5	6-2-25	AM	Renumber with subsections. Approved with no opposition.
IS-MHRRC 0-85	502.5.1	6-30-25	AM	Approved with no opposition.
IS-MHRRC 0-86	502.5.1, 505.4, 603.2.2.3	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-87	502.5.3	6-2-25	AM	Revised. Approved with no opposition.
IS-MHRRC 0-88	502.5.4	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-89	502.5.5	5/12/25	AS	Approved with no opposition.
IS-MHRRC 0-90	503.1	5/12/25	AS	Approved with no opposition.
IS-MHRRC 0-91	503.1, 504.1, 505.1	5/12/25	AM	Approved with no opposition.
IS-MHRRC 0-92	503.1.1, 503.1.3 (New), 503.2.3, 504.1.1, 504.1.3	5/12/25	AM	Approved with no opposition.
	(New), 505.1.1.1			
IS-MHRRC 0-93	503.1.1, 504.1.1, and 505.1.1	5/12/25	Withdrawn	
IS-MHRRC 0-94	503.1.1, 504.1.1, 505.1.1, Table A101.1	5/12/25	AM	Approved with no opposition.
IS-MHRRC 0-95	503.1.2, 504.1.2, 505.1.2	6-2-25	AM	Approved with no opposition.
IS-MHRRC 0-96	503.2.2	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-97	503.2.3	6-30-25	Withdrawn	
IS-MHRRC 0-98	503.3	3-24-25	AM	Revised the text and numbering. Approved with no opposition.
IS-MHRRC 0-99	503.4	3-24-25	AM	Revised the exception to: "Log walls constructed in accordance with Section 303 of ICC 400." Approved with no opposition.
IS-MHRRC 0-100	503.4	3-24-25	AM	Removed the change to the end. Approved with no opposition.
IS-MHRRC 0-101	503.4.1	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-102		3-24-25	AM	Added "Intersections, joints and intersections" before exterior wall and changed the section reference to 503.7.
IO MUDDO O 400	503.4.2	0.005		Approved with no opposition.
IS-MHRRC 0-103	503.4.3(1)	6-2-25	D	Disapproved 8-1.

Proposal #	Section	Date of	Committee	Notes
		meeting	Action	1.000
		proposal		
		considered		
IS-MHRRC 0-104		3-24-25	AM	Added commentary as
	E00 4 0(0)			recommended. Approved
IC MUDDO 0 405	503.4.3(2)	F 40 0F	<u> </u>	with no opposition.
IS-MHRRC 0-105		5-12-25	D	Alex Haldeman appealed Task Group 3 vote. Approved
	503.4.3, Option 1			7-3.
IS-MHRRC 0-106	503.4.3, Option 2	6-2-25	D	Approved with no opposition.
IS-MHRRC 0-107		3-24-25	AM	Disapproved with no
	503.5			opposition.
IS-MHRRC 0-108	503.5.1	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-109		4-14-25	D	Addressed by IS-MHRRC 0-
				107. Disapproved with no
	503.5.1, 503.5.2			opposition.
IS-MHRRC 0-110	503.5.3, 503.5.3.1,	6-30-25	D	Disapproved with no
	503.5.3.2 (New),			opposition.
	503.5.3.3, 504.5.3,			
	504.5.3.1, 504.5.3.2			
	(New), 504.5.3.3,			
	505.5.3, 505.5.3.1			
IS-MHRRC 0-111	503.5.3, 504.5.3	6-30-25	AM	Approved with no opposition.
IS-MHRRC 0-112		4-14-25	AM	The section move was not
	500.0			approved. Approved with no
IS-MHRRC 0-113	503.6	4-14-25	AS	opposition.  Approved with no opposition.
15-MITRIC 0-113	503.6, 503.8.2,	4-14-25	AS	Approved with no opposition.
IC MUDDO 0 444	504.6, 504.8.2	0.00.05	A B 4	A
IS-MHRRC 0-114	503.6, 504.6	6-30-25	AM	Approved with no opposition.
IS-MHRRC 0-115	503.7.2	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-116		3-24-25	AM	Also removed the same "with
				sealants" from other affected sections. Changed "to avoid
				flame intrusion" to "to avoid
				ember and flame intrusion" in
				Section 503.7.3 and "to avoid
				ember intrusion" in Sections
	503.7.3,			503.7.4 and 505.7.2 plus
10 MUDDO 0 447	504.7.4,505.7.2	0.00.05		other affected sections.
IS-MHRRC 0-117	503.8	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-118	300.0	6-30-25	D	Disapproved with no
	503.8	0 00 20		opposition.
IS-MHRRC 0-119		6-30-25	D	Disapproved with no
	503.8			opposition.
IS-MHRRC 0-120	500.04	6-30-25	D	Disapproved with no
	503.8.1			opposition.

Proposal #	Section	Date of meeting proposal considered	Committee Action	Notes
IS-MHRRC 0-121	503.8.1	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-122	503.8.2	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-123	503.8.2, 504.8.2	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-124	504.1	5-12-25	AS	Approved with no opposition.
IS-MHRRC 0-125	504.2	5-12-25	AM	Approved with no opposition.
IS-MHRRC 0-126	504.4	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-127	504.4	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-128	504.4	5-12-25	AS	Approved with no opposition.
IS-MHRRC 0-129	504.4	5-12-25	D	Disapproved with no opposition.
IS-MHRRC 0-130	504.4, 504.4.1	5-12-25	D	Disapproved with no opposition.
IS-MHRRC 0-131	504.4.2	6-2-25	W	Withdrawn by proponent.
IS-MHRRC 0-132	504.5	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-133	504.5.1, CHAPTER 7	5-12-25	AM	Add more standards to the requirements. Approved with no opposition.
IS-MHRRC 0-134	504.6	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-135	504.6	6-30-25	AM	Approved with no opposition.
IS-MHRRC 0-136	504.7	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-137	504.8	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-138	504.8.1	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-139	504.8.1	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-140	504.8.2	6-30-25	D	Disapproved with no opposition.
IS-MHRRC 0-141	505 Commentary	5-12-25	AS	Approved with no opposition.
IS-MHRRC 0-142	505.1	5-12-25	AS	Approved with no opposition.
IS-MHRRC 0-143	505.2	5-12-25	AM	Delete 505.2.2. Approved with no opposition.
IS-MHRRC 0-144	505.2.1	5-12-25	AS	Approved with no opposition.
IS-MHRRC 0-145	505.2.2	6-30-25	AS	Approved with no opposition.
IS-MHRRC 0-146	505.4 + Commentary Table	5-12-25	D	Disapproved with no opposition.
IS-MHRRC 0-147	505.4 Commentary	5-12-25	AM	Delete the entire table. Approved with no opposition.

Proposal #	Section	Date of	Committee	Notes
		meeting	Action	
		proposal		
10 MUDDO 0 440		considered		D:
IS-MHRRC 0-148	505.5, 505.6	5-12-25	D	Disapproved with no opposition.
IS-MHRRC 0-149	505.5.2	5-12-25	AS	Approved with no opposition.
	Commentary			
IS-MHRRC 0-150	505.5.3, 505.5.3.1	6-30-25	AS	Approved with no opposition.
IS-MHRRC 0-151	,	4-14-25	AM	Revised the section reference
				and match the changes to the
	505.6			exception in Section 503.6 and 504.6.
IS-MHRRC 0-152	303.0	6-30-25	D	Disapproved with no
10 1/11 11 (10 0 102	505.6	0 00 20		opposition.
IS-MHRRC 0-153		6-30-25	D	Replace the reference from
				Section 503.7 to Section
	505.7.1			502.5. Disapproved with no opposition.
IS-MHRRC 0-154	000.7.1	6-30-25	D	Disapproved with no
	505.8			opposition.
IS-MHRRC 0-155	500 TABLE 004 0 0	6-30-25	D	Disapproved with no
IS-MHRRC 0-156	506, TABLE 301.2.2	6-30-25	D	opposition.  Disapproved with no
13-MITIKIC 0-130	506.2, 506.3, 506.4	0-30-25		opposition.
IS-MHRRC 0-157		6-30-25	D	Disapproved with no
	506			opposition.
IS-MHRRC 0-158	506.2	6-30-25	D	Disapproved with no
IS-MHRRC 0-159	500.2	6-2-25	D	opposition.  Disapproved with no
10-1011 11 (1 ( 0 - 100	CHAPTER 5	0-2-23		opposition.
	Chapter 6	<b>EXISTING BU</b>	ILDINGS	
IS-MHRRC 0-160	CHAPTER 6, 601.1,	5-12-25	W	
	602.2, 603.1, 604.1,			
	608.1			
IS-MHRRC 0-161	602	7.04.05	AM	Approved with no opposition.
IS-MHRRC 0-162	603.2	7-21-25	D	Disapproved with no opposition.
IS-MHRRC 0-163	603.2.1	6-2-25	AM	Approved with no opposition.
IS-MHRRC 0-164	603.2.2	7-21-25	AM	Approved with no opposition.
IS-MHRRC 0-165		5-12-25	D	Disapproved with no
	603.2.2.1			opposition.
IS-MHRRC 0-166	603.2.2.1	7-21-25	AM	Approved with no opposition.
IS-MHRRC 0-167		7-21-25	AM	Approved with no opposition.
IS-MHRRC 0-168	603.2.2.2	6-2-25	AS	Approved with no opposition.
IS-MHRRC 0-169	605.1,607.1	6-2-25	AM	Approved with no opposition.

Proposal #	Section	Date of	Committee	Notes
1 Tupusal #	Jection	meeting	Action	110163
		proposal	Action	
		considered		
IS-MHRRC 0-170		7-21-25	BROKEN	
			INTO 3	
			PARTS:	
			Part 1 AM,	
			Part 2 AM	
			HANDLED	
			BY THE	
			ADMIN	
			GROUP,	
			Part 3 AM	
			CREATE	
			AN	
	000		APPENDIX	
IC MUDDO 0 474	608	7.04.05	В	
IS-MHRRC 0-171	608, 608.1, 608.3,	7-21 25	AM	
	101.6			
IS-MHRRC 0-172		7-21-25	BROKEN	
			INTO 14	
			PARTS:	
			Item 1:	
			Disapproved Item 2:	
			Approved as	
			Modified	
			Item 3:	
			Approved as	
			Modified	
			Item 4:	
			Approved as	
			Submitted in	
			IS-MHRRC	
			0-178 Item	
			42.	
			Item 5:	
			Approved as	
			Modified in	
			IS-MHRRC	
			0-170 Part	
			1.	
			Item 6:	
			Approved as	
			Modified in	
			IS-MHRRC	
			0-170 Part	
			3. Item 7:	
	608.3.13.1			
	000.3.13.1	<u> </u>	Approved as	

Proposal #	Section	Date of	Committee	Notes
1 Toposai #	Jection	meeting	Action	Notes
		proposal	71011011	
		considered		
			Modified in	
			IS-MHRRC	
			0-170 Part	
			1.	
			Item 8:	
			Approved as Modified in	
			IS-MHRRC	
			0-170 Part	
			1.	
			Item 9:	
			Disapproved	
			[intended as	
			homeowner	
			language]	
			Items 10-14:	
			Approved as	
			Modified in	
			IS-MHRRC 0-170 Part	
			3.	
	Chapter 7 REI	FERENCED S		
IS-MHRRC 0-173	CHAPTER 7	3-24-25	AS	Approved with no opposition.
IS-MHRRC 0-174	CHAPTER 7	3-24-25	AS	Approved with no opposition.
	Appendix A F	IRE HAZARD	SEVERITY	
IS-MHRRC 0-175	TABLE A101.1	4-14-25	AS	Approved with no opposition.
IS-MHRRC 0-176	A101.1	4-14-25	AS	Approved with no opposition.
	Multi-c	hapter propo		
IS-MHRRC 0-177		4-14-25	AS	Revised to "WHA
	VADIOLIO			Construction Class."
10.14110000.470	VARIOUS	4.44.05	4.44.05	Approved with no opposition.
IS-MHRRC 0-178		4-14-25	4-14-25:	
		5-12-25	Item 1: AM	
			Item 2: D Item 3: AM	
			Item 4: AS	
			Item 5: AS	
			Items: 6-9	
			AS.	
			Item 16: D	
			Item 17: AS	
			5-12-25:	
			Item 40: AS	
			Item 41: AM	
	VARIOUS		Item 42: AS	

Section	Date of meeting proposal considered	Committee Action	Notes
		Item 43: AS	
		7-21-25: Item 44: AM	
	Section	meeting proposal	meeting proposal considered  Item 43: AS  7-21-25:

Revisions to the text are in legislative format – strikeout of what is to be removed and underlined for new.

# Chapter 1 ADMINISTRATION AND APPLICATION

#### IS-MHRRC 0-1 ICC 605 TITLE

**Proponent:** Charles Jourdain, Mendocino Forest Products

Revise as follows:

#### ICC 605 Standard for Residential Construction in Regions with Wildfire Hazard

Since all types of construction are based upon defensible space provision, I suggest that the term "Defensible Space" be incorporated into the title of the document.

#### Reason:

Since all types of construction are based upon defensible space provision, I suggest that the term "Defensible Space" be incorporated int the title of the document.

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 1 recommendation. Several chapters deal with defensible space, may be limited by PINS, and may give the impression that this standard is primarily dealing with defensible space. The Task Group suggested that Defensible Space be clearly added to the Scope and/or Objectives. See related comment IS MHRRC 0-3.

#### IS-MHRRC 0-2 ICC 605 Section 101

**Proponent:** Larry Stevig, State Farm

#### Revise as follows:

- 1. What is the meaning of "enhanced methodologies" in 101.1? Can it, or should it, be definitively described? There is no mention of "safeguarding of life and property protection" as the IWUI Code includes in the purpose and minimum regulations section 101.3.
- 2. Should "minimum standards" be changed to "enhanced standards" in 101.2.1? And similar to question above, is there a performance expectation associated with this standard better than the IWUI Code?
- 3. There is no heading for the several sections in 101.3, and the subheading in 101.3.1 (Wildfire Mitigation) is identical to 101.2.1.
- 4. Fire hazard severity is said to be out-of-scope for ICC605, yet the prescriptive requirements are dependent on that being known, and Appendix A contains a template for determining that. Will this limit the use of ICC605 if AHJ's are reluctant to define hazard severity?

#### Reason:

**Committee Action:** Approved as Modified – Approved Part 1 and Part 3, Disapproved Part 2 and Part 4

**Committee Reason:** Based on the Task Group 2 recommendation. Part 1 – This standard is not a code; the standard provides provisions on how to meet the intent of the code. (Note there is a proposal in the 2027 cycle to delete this intent from IWUIC and make it nonmandatory). The first sentence of the scope is the only location where the intent of an enhanced standard is expressed. Everywhere else it states requirements as minimums. The word "enhanced" was removed.

Part 2 - Retain "minimum standards."

Part 3 – The subheading for Section 101.3 should be "Limitations."

Part 4 – The standard intentionally allows flexibility to the AHJ to determine their fire severity hazard levels. This standard does not identify or contain a hazard map. Consider additional discussion in Standard Commentary.

#### IS-MHRRC 0-3 ICC 605 Section 101.1

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**101.1 Scope.** The provisions of this standard specify enhanced methodologies of wildfire-resistant design and construction and creation and maintenance of defensible space for new and existing one- and two-family dwellings and townhouses not more than three stories above grade plane in height exposed to the hazard of wildfire.

This standard applies to construction, alteration, inspection, maintenance and repair of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height, their accessory structures, and the lot they are contained within, that are constructed in or relocated into areas exposed to the hazard of wildfire. This includes evaluation of the wildfire hazard in the area in which the structure will be located.

The standard contains provisions for walls, floors, roofs, foundations, windows, doors, decks and other applicable building elements or assemblies.

The standard also provides a methodology for repair or retrofit of existing residential dwellings exposed to the hazard of wildfire.

#### Reason:

The 1<sup>st</sup> paragraph states the standard applies to "design and construction of new and existing". Existing structures are already constructed, and this standard may or may not have been used. The inclusion of existing structures in this sentence is deleted.

The standard does not apply to design and construction of existing structures. However, the standard does apply to repair or alteration of existing structures. This concept is stated in the 4<sup>th</sup> paragraph.

Committee Action: Approved as Modified

**Committee Modification:** Add "establish and maintenance of defensible space..." Add "..based on defensible space conditions for new and existing ..."

**Committee Reason:** Based on the Task Group 1 recommendation.

#### IS-MHRRC 0-4 ICC 605 Section 101.1

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**101.1 Scope.** The provisions of this standard specify enhanced methodologies of wildfire-resistant design and construction for new and existing one- and two-family dwellings and townhouses not more than three stories above grade plane in height exposed to the hazard of wildfire.

This standard applies to construction, alteration, inspection, maintenance and repair of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height, their accessory structures, and the lot they are contained within, that are constructed in or relocated into areas exposed to the hazard of wildfire. This includes evaluation of the wildfire hazard in the area in which the structure will be located.

The standard contains provisions for walls, floors, roofs, foundations, windows, doors, decks and other applicable building elements or assemblies.

The standard also provides a methodology for repair or retrofit of existing residential dwellings exposed to the hazard of wildfire.

#### Reason:

The 2<sup>nd</sup> paragraph states that the standard provides criteria for "evaluation of the wildfire hazard". The only wildfire hazard evaluation is located in the appendix and then it sends the user to the IWUIC.

Since the appendix is not a direct part of the standard, and there is no actual information in this standard for evaluation of the wildfire hazard, this sentence should be deleted.

Committee Action: Approved as Modified

**Committee Modification:** Delete sentence as indicated but add "as defined by authorities having jurisdiction" to the previous sentence.

**Committee Reason:** Based on the Task Group 1 recommendation.

#### IS-MHRRC 0-5 ICC 605 Section 101.1

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**101.1 Scope.** The provisions of this standard specify enhanced methodologies of wildfire-resistant design and construction for new and existing one- and two-family dwellings and townhouses not more than three stories above grade plane in height exposed to the hazard of wildfire.

This standard applies to construction, alteration, inspection, maintenance and repair of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height, their accessory structures, and the lot they are contained within, that are constructed in or relocated into areas exposed to the hazard of wildfire. This includes evaluation of the wildfire hazard in the area in which the structure will be located.

The standard contains provisions for walls, floors, roofs, foundations, windows, doors, decks and other applicable building elements or assemblies.

The standard also provides a methodology for repair or retrofit alteration of existing residential dwellings exposed to the hazard of wildfire.

#### Reason:

This proposal makes two changes to this section.

- 1. The 3<sup>rd</sup> paragraph is deleted. This text is not needed in the scope for the entire standard in Chapter 1. If it is determined that this text is needed, it would be better suited in the scope of Chapter 5.
- 2. The 4<sup>th</sup> paragraph is revised to substitute the word "alteration" for "retrofit". This standard does not require any "retrofit". However, it does provide criteria for modifications, additions or alterations to existing structures.

Committee Action: Approved as Modified

**Committee Modification:** Delete sentence "The standard contains provisions for walls, floors, roofs, foundations, windows, doors, decks and other applicable building elements or assemblies." As well as the sentence which follows. The last sentence is also suggested to be deleted as it is redundant.

# 202X ICC 605 - Standard Comments and Proposals **Committee Reason:** Based on the Task Group 1 recommendation.

#### IS-MHRRC 0-6 ICC 605 Section 101.1

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

Revise as follows:

**101.1 Scope.** The provisions of this standard specify minimum enhanced methodologies ....

#### Reason:

The only use of "enhanced" in the initial draft is in Section 101.1. There are several places where the provisions of the standard are characterized as "minimum" (e.g., 101.2.1, 101.2.2, 401.2). The proposed changes align the scope with the content of the draft, which is important to ensure the reader correctly understands the intention.

**Committee Action:** Disapproved

Committee Reason: Based on the action taken on IS-MHRRC 0-2.

#### IS-MHRRC 0-7 ICC 605 Section 101.2

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

101.2 Objectives.

- **101.2.1 Wildfire mitigation.** The standard is intended to assist with mitigating the effect of wildfires that spread to, or otherwise expose, wildfire hazard areas by establishing minimum standards for construction and maintenance of buildings and parcels subject to wildfire hazard.
- 101.2.2 Vegetation management. This standard provides minimum is intended to create an effective defensible space with requirements for vegetation management.
- 101.2.3 Accessory dwelling units and tiny houses. For the purposes of this standard, accessory dwelling units and tiny houses shall meet the provisions of one or two family dwellings.
- 101.3.1 101.2.3 Wildfire mitigation spread. The standard is not intended to prevent conflagrations that have developed as a result of wildfires and extend beyond wildfire hazard areas. The standard is intended to limit spread of wildfire to other structures, and limit the spread of structure fires to wildland areas.

#### Reason:

This proposal addresses several issues in Section 101.2.

Section 101.2.1 states that the standard assists with mitigating the effect of "wildfires that spread to, or otherwise expose, wildfire hazard areas..." This wording is confusing because a "wildfire" does not spread to a "wildfire hazard area"; the wildfire, by definition, is already in a wildfire hazard area. To clarify this section, this phrase is deleted.

Section 101.2.2 is rewritten to clarify the objective. The text in the standard is not an objective, it is a statement as to items contained in the standard. Since the objective is to provide and maintain a defensible space, the section is revised to clarify the intent.

Section 101.2.3 is deleted since the method of treating accessory dwelling units and tiny houses are not objectives. This section is merely a statement of the contents of the standard. Therefore,

this section is deleted. Accessory dwelling units are habitable buildings; they do not fall under the classification of "accessory structures". This is clearly stated in the definition for accessory structures.

Section 101.3.1 is renumbered to 101.2.3 so it fits under the general subject of objectives. This section has the same title as 101.2.1, so the title is revised to "Wildfire spread". Also, the 1<sup>st</sup> sentence is deleted, because this is the Objectives section, and the objectives should not tell you what the standard is not. The 2<sup>nd</sup> sentence is simplified to say that the standard limits the spread of wildfire to structures, and structure fire to wildlands.

Committee Action: Approved as Modified

**Committee Modification:** Approved requested changes to 101.2.1, 101.2.2. Moved current language of 101.2.3 to the end of Section 101.1. Section 101.3 Subheading Limitations is missing. Deleted Section 101.3.1.

**Committee Reason:** Based on the Task Group 1 recommendation.

#### IS-MHRRC 0-8 ICC 605 Section 101.2

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

#### Revise as follows:

An issue with section numbering is identified, but resolution is left to the committee, based on the assumption their intentions were not captured accurately in the initial draft.

#### Reason:

The numbering of subsections within 101.2 is not correct, and there is no Section 101.3 or subsection 101.2.4. Subsections 101.3.1, 101.3.2, 101.3.3, and 101.3.4 all identify items not within scope. Perhaps the intention was to group these together in a separate Section 101.3.

Committee Action: Approved as Modified

**Committee Modification:** Section 101.3 Subheading Limitations is missing and has been added.

Committee Reason: Based on the Task Group 1 recommendation.

#### IS-MHRRC 0-9 ICC 605 Section 101.3

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

## **101.1.1 Items not within the scope.** The following items are not within the scope of this standard:

- 1. 101.3.2 Fire hazard severity. Determination of fire hazard severity is not within the scope of this standard. Where this standard describes provisions based on fire hazard severity, fire hazard severity shall be determined by the authority having jurisdiction. Appendix A of this standard offers examples for determining fire hazard severity.
- <u>2.</u> 101.3.3 Wildfire mapping. Mapping of wildfire hazard areas is not within the scope of this standard.
- 3. 101.3.4 Classification of vegetation. This standard does not classify Classification of vegetative fuels or species that may exhibit reduced combustibility.

#### Reason:

This is intended to be editorial or grammatical in nature. There is no intended change to the requirements. These items are relocated from Sections 101.3.2, 101.3.3 and 101.3.4. because they are not "objectives". They provide a list of items not included in the standard. Therefore, they are relocated into a new section, similar to the new ICC Scope format, which lists items not included. Items 2 and 3 are simplified to correlate with the revised format.

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 1 recommendation.

**Committee Modifications:** Section 101.3 Subheading Limitations is missing. Deleted "Determination of fire hazard severity is not within the scope of this standard," from beginning of Section 101.3.2.

#### IS-MHRRC 0-10 ICC 605 Section 101.4

**Proponent:** Nicholas Lauria, Wildfire Defense Systems, Inc.

Revise as follows:

**101. 4 Alternative <u>materials, design, means</u> and methods.** A large number of alternatives are available to a designer for providing fire-resistant designs and construction details. The provisions given are not intended to prevent the use of alternative materials, <u>design</u>, or methods as permitted by Section R104. 2.2 of the International Residential Code.

**Reason:** The purposes for revising the language in Section 101.4 are to ensure that 1) the verbiage matches that of ICC IRC R104.2.2 that states "Alternative materials, design, and methods of construction and equipment. The provisions of this code are not intended to prevent the installation of any material or prohibit any design or method of construction not specifically prescribed by the code, provided that any such alternative has been approved," and 2) an opportunity for a design professional to submit a performance-based design that meets the intent of the standard is explicitly stated in the charging language. The use of the word "means" in 101.4 is not consistent with any words used in R104.2.2. The addition of the word "design" creates consistency between the 605 standard and the IRC.

Committee Action: Disapproved

**Committee Reason:** Based on the Task Group 1 recommendation. The preference was for IS-MHRRC 0-12.

#### IS-MHRRC 0-11 ICC 605 Section 101.4

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

**Revise Section 101.4 as follows:** 

101.4 Alternative means and methods. A large number of alternatives Alternative methods are available to a designer for providing fire-resistant designs and construction details. The provisions given are not intended to prevent the use of alternative materials or methods as permitted by Section R104. 2.2 of the *International Residential Code*.

#### Reason:

This is intended to be editorial or grammatical in nature. There is no intended change to the requirements. The wording is simplified to simply state that alternative methods are available. The "large number" of alternatives is an opinion. Alternative methods is the term used in the I-Codes.

Committee Action: Disapproved

**Committee Reason:** Based on the Task Group 1 recommendation. The preference was for IS-MHRRC 0-12.

#### IS-MHRRC 0-12 ICC 605 Section 101.4

Proponent: Gary Ehrlich, NAHB

Revise as follows:

101. 4 Alternative means and methods. A large number of alternatives are available to a designer for providing fire-resistant designs and construction details. The provisions of this standard given are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this standard, provided any such use of alternative has been approved in accordance with materials or methods as permitted by Section R104. 2.2 of the International Residential Code.

#### Reason:

The first sentence is deleted as it's an explanation that belongs in the commentary rather than a mandatory provision permitting their use. The second sentence is editorially revised to better align with the charging language of IRC Section R104.2.2.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 1 recommendation.

**Committee Modifications:** Delete first sentence of 101.4 and move such language to the commentary. Recommend incorporation of other changes, except delete the has clause after the word "approved." No need to reference the IRC because the revised language is consistent with the IRC.

# **Chapter 2 DEFINITIONS**

#### IS-MHRRC 0-13 ICC 605 Section 202

Proponent: Larry Stevig, State Farm

#### Revise as follows:

- 1. Add to definition of Direct Ember Ignition. When embers ignite building materials, combustible contents, and/or furnishings...
- 2. Provide definition for Fuel Break. It is included in the IWUI Code.
- 3. Provide definition for Ventilation Openings.
- 4. In Wildfire Hazard Areas definition, replace "medium" fire hazard severity with "moderate" for consistency in the Standard.

#### Reason:

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 1 recommendation.

Committee Modifications: Item 1. Not considered.

Item 2. Remove the reserved term "Fuel Break."

Item 3. See Comment IS-MHRRC 0-14.

Item 4. Change medium to moderate.

#### IS-MHRRC 0-14 ICC 605 Section 202

Proponent: Gary Ehrlich, NAHB

Revise as follows:

ACCESSORY STRUCTURE [IFC]. A building or structure used to shelter or support any material, equipment, chattel or occupancy other than a habitable building.

**[RB]** ACCESSORY STRUCTURE. A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot.

**ALTERATION** [IFC]. Any construction or renovation to an existing structure other than a repair or addition that requires a permit.

**VENTILATION OPENINGS.** [Reserved.] An opening provided in an attic or rafter assembly to supply unconditioned air to, or remove unconditioned air from, such attic or rafter spaces.

#### Reason:

The IRC definition of Accessory Structure is proposed in place of the IFC definition. The IRC definition highlights an accessory structure is incidental to and on the same lot as the dwelling. The IRC does not assign occupancy groups to buildings and structures as the IBC does (where many accessory structures would be assigned Group U). All accessory structures on a lot associated with a dwelling are by default residential.

The IRC definition for Alteration refers to work "that requires a permit." ICC 605 should avoid regulating de minimis activities.

The definition of Ventilation Openings is created using elements of the definition of "ventilation" in the IRC. The intent is to help further focus the provisions of this standard on traditional openings for ventilated roof assemblies such as eave, soffit, gable or ridge vents, NOT intake or exhaust vents for HVAC systems. This will work together with other proposals to align ICC 605 with actions taken on WUIC48-24 and WUIC54 especially as modified by committee comments approved during CAH #2.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 1 recommendation.

**Committee Modifications:** The definitions of accessory structure and ventilation openings were changed, with addition of "underfloor" spaces and other editorial changes to the definition of ventilation openings as well Add definition of under-floor definition.

# IS-MHRRC 0-15 ICC 605 Section 202 APPROVED AGENCY

Proponent: Kelly Nicolello, UL Solutions

Revise as follows:

APPROVED AGENCY. An established and recognized organization that is regularly engaged in conducting tests, furnishing inspection services or furnishing product evaluation or certification where such organization has been approved by the building official.

#### Reason:

The terms "tested" and "approved" as used within the proposed document, implies multiple meanings. There are a number of uses of the terms that actually imply a listing requirement. Where the intent indicated a listing requirement, we have proposed using the term listed or listed and labeled as appropriate in the document.

It is important to note that just because an item is tested, it does not indicate if it has passed or not. There were few requirements stating that it had to pass the testing. Changing the term to listed ensures that it only applies to items that have passed the testing and further ensures the product is not materially changed post listing by validation through follow-up services. Testing, alone, does not imply that. Some manufactures have been known to market their products as being tested but with no validation of their marketing claims or whether or not they passed the testing.

This revision is consistent with language from the IBC relating to NFPA 285 The term "approved" is defined correctly. However, when a product is approved the liability of the approval moves to the code official's organization. The listing requirement prevents that from happening and the liability lies with the manufacturer and the listing organization.

The term "Approved Agency," "Listed" and "Labeled" are added to the definitions using the definitions stated in the IFC.

UL 10C is added as a test standard for the fire resistivity of the exterior doors in 504.5.1 and if accepted should be added to the reference standards page.

There is an increase to the cost of construction.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 1 recommendation. **Committee Modification:** Add the definition but use the IRC definition.

#### IS-MHRRC 0-16 ICC 605 Section 202

Proponent: Gary Ehrlich, NAHB

Delete as follows:

AREA, BUILDING [IFC]. The area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of vent shafts and courts. Areas of the building not provided with surrounding walls shall be included in the building area if such areas are included within the horizontal projection of the roof or floor above.

BONFIRE [IFC]. An outdoor fire used for ceremonial services.

**CEREMONIAL FIRE.** [Reserved.]

FIRE APPARATUS ACCESS ROAD. A road that provides access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as fire lane, public street, private street, parking lot lane or access roadway.

FIRE DEPARTMENT MASTER KEY [IFC]. A limited issue key of special or controlled design to be carried by fire department officials in command which will open key boxes on specified properties.

FIRE LANE. [Reserved.]

FUEL BREAK. [Reserved.]

**KEY BOX [IFC]**. A secure device with a lock operable only by a fire department master key, and containing building entry keys and other keys that may be required for access in an emergency

PUBLIC SAFETY AGENCY. Any emergency responder department within the jurisdiction that utilizes radio frequencies for communication. This could include, but is not limited to, various public safety agencies such as fire departments, emergency medical services and law enforcement.

#### Reason:

The definitions listed above are proposed to be deleted as they do not currently appear to be used in the main body of ICC 605. Some appear as if they were vestiges of when larger community

considerations were being debated for inclusion in the scope of ICC 605. Some would only come into play if ICC 605 attempted to regulate what activities a homeowner could engage in on their property. That's for local statutes, regulations and ordinances to specify, not a design and construction standard.

Also, the Building Area definition has significant issues being applied to IRC-scope dwellings. The IRC does not explicitly call out fire walls and it's questionable whether the fire separations detailed in 2021 IRC Section R302 are closer to fire walls, fire barriers or perhaps a blending of both. IRC-scope dwellings do not typically have vent shafts and courts.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 1 recommendation.

Committee Modification: Remove the definitions not used in the standard.

# IS-MHRRC 0-17 ICC 605 Section 202 DRIVEWAY

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

Replace as follows:

**DRIVEWAY.** A vehicular ingress and egress route that serves not more than two buildings or structures, not including accessory structures, or more than five dwelling units.

**DRIVEWAY.** A private access road, the use of that is limited to persons residing, employed, or otherwise using or visiting the parcel in which it is located.

#### Reason:

The definition for driveway that was used from the IWUIC doesn't seem to apply well to this standard. The replacement more broadly defines what a driveway is and how its used in most situations and isn't limited by an arbitrary number of buildings or structures. It is taken verbatim from the ICC International Zoning Code.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 1 recommendation.

**Committee Modification:** Revise the definition, except use "lot" in lieu of "parcel" in the definition. However, the term is not used and should be deleted.

# IS-MHRRC 0-18 ICC 605 Section 202 EXTERIOR WALL ASSEMBLY

**Proponent:** Theresa Weston, The Holt Weston Consultancy for The Rainscreen Association in North America (RAiNA)

#### Revise as follows:

**EXTERIOR WALL ASSEMBLY.** A system including the exterior wall covering, framing, and components such as weather-resistive barriers water-resistive barriers and insulating materials. This system provides protection of the building structural members and conditioned interior space from the detrimental effects of the exterior environment.

#### Reason:

This is an editorial change that corrects the definition to include the code defined term "water-resistive barrier" rather than "weather-resistant barrier. This change was proposed and accepted as submitted (will appear on the consensus agenda) in the Group A Hearings to be included in the 2027 IBC.

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 1 recommendation.

# IS-MHRRC 0-19 ICC 605 Section 202 EXTERIOR WALL COVERING

**Proponent:** Theresa Weston, The Holt Weston Consultancy for The Rainscreen Association in North America (RaiNA)

#### Revise as follows:

**EXTERIOR WALL COVERING [IRC].** A material or assembly of materials applied on the exterior side of exterior walls for the purpose of providing a weather resistive barrier weather-resisting barrier, insulation or for aesthetics, including but not limited to, veneers, siding, exterior insulation and finish systems, <u>rainscreen systems</u>, architectural trim and embellishments such as cornices.

#### Reason:

This change updates the definition to the definition as it was updated in the 2024 IBC and will be proposed to be updated in the IRC-2027 in the current Group B. Definitions should be consistent across the documents. Comments on specific changes:

- Changes "weather-resistive barrier" to "weather-resisting barrier" to more clearly distinguish the exterior covering from the defined component water-resistive barrier.
- Adds "rainscreen systems" to the list of example exterior wall covering.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 1 recommendation.

Committee Modification: Added the IRC definition for rainscreen systems.

# IS-MHRRC 0-20 ICC 605 Section 202 FIREBRAND

Proponent: Nicholas Lauria, Wildfire Defense Systems, Inc.

Revise as follows:

FIREBRAND: See ember. A firebrand is an ember lofted by the fire or wind.

Reason: Submitted as editorial.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 1 recommendation.

Committee Modification: The term is not used in the standard and has been deleted.

# IS-MHRRC 0-21 ICC 605 Section 202 LABELED

Proponent: Kelly Nicolello, UL Solutions

#### Revise as follows:

LABELED. Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, approved agency or other organization concerned with product evaluation that maintains periodic inspection of the production of such labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

#### Reason:

The terms "tested" and "approved" as used within the proposed document, implies multiple meanings. There are a number of uses of the terms that actually imply a listing requirement. Where the intent indicated a listing requirement, we have proposed using the term listed or listed and labeled as appropriate in the document.

It is important to note that just because an item is tested, it does not indicate if it has passed or not. There were few requirements stating that it had to pass the testing. Changing the term to listed ensures that it only applies to items that have passed the testing and further ensures the product is not materially changed post listing by validation through follow-up services. Testing, alone, does not imply that. Some manufactures have been known to market their products as being tested but with no validation of their marketing claims or whether or not they passed the testing.

This revision is consistent with language from the IBC relating to NFPA 285 The term "approved" is defined correctly. However, when a product is approved the liability of the approval moves to the code official's organization. The listing requirement prevents that from happening and the liability lies with the manufacturer and the listing organization.

The term "Approved Agency," "Listed" and "Labeled" are added to the definitions using the definitions stated in the IFC.

UL 10C is added as a test standard for the fire resistivity of the exterior doors in 504.5.1 and if accepted should be added to the reference standards page.

There is an increase to the cost of construction.

Committee Action: Disapproved

Committee Reason: Based on the Task Group 1 recommendation. The term is not

used in the standard.

# IS-MHRRC 0-22 ICC 605 Section 202 LISTED

Proponent: Kelly Nicolello, UL Solutions

#### Revise as follows:

LISTED. Equipment, materials, products or services included in a list published by an organization acceptable to the *fire code official* and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose. Terms that are used to identify listed equipment, products or materials include "listed," "certified," "classified" or other terms as determined appropriate by the listing organization.

#### Reason:

The terms "tested" and "approved" as used within the proposed document, implies multiple meanings. There are a number of uses of the terms that actually imply a listing requirement. Where the intent indicated a listing requirement, we have proposed using the term listed or listed and labeled as appropriate in the document.

It is important to note that just because an item is tested, it does not indicate if it has passed or not. There were few requirements stating that it had to pass the testing. Changing the term to listed ensures that it only applies to items that have passed the testing and further ensures the product is not materially changed post listing by validation through follow-up services. Testing, alone, does not imply that. Some manufactures have been known to market their products as being tested but with no validation of their marketing claims or whether or not they passed the testing.

This revision is consistent with language from the IBC relating to NFPA 285 The term "approved" is defined correctly. However, when a product is approved the liability of the approval moves to the code official's organization. The listing requirement prevents that from happening and the liability lies with the manufacturer and the listing organization.

The term "Approved Agency," "Listed" and "Labeled" are added to the definitions using the definitions stated in the IFC.

UL 10C is added as a test standard for the fire resistivity of the exterior doors in 504.5.1 and if accepted should be added to the reference standards page.

There is an increase to the cost of construction.

**Committee Action:** Approved as Modified

Committee Reason: Based on the Task Group 1 recommendation.

**Committee Modification:** Added the term listed but removed "fire" from "fire code official" to match the IRC.

# IS-MHRRC 0-23 ICC 605 Section 202 PUBLIC SAFETY AGENCY

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

## Revise as follows:

**PUBLIC SAFETY AGENCY.** Any emergency <u>response</u> <u>responder</u> department within the <u>a</u> jurisdiction that utilizes radio frequencies for communication. This could include, but is not limited to, various public safety agencies such as fire departments, emergency medical services and law enforcement.

#### Reason:

Why limit what a public safety agency is by the method they use to communicate? If a fire department used cell phones does that make them any less of a fire department? It also raises the question of interpretation, is a cell phone a radio frequency device? This also could limit new technology.

**Committee Action:** No action. This was withdrawn by the proponent.

# IS-MHRRC 0-24 ICC 605 Section 202 ROOF ASSEMBLY

**Proponent:** Aaron R. Phillips, Asphalt Roofing Manufacturers Association

Revise as follows:

**ROOF ASSEMBLY [IRC 2024].** A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and, roof deck and framing members or a single component serving as the roof covering and, roof deck and roof structure. A roof assembly can include an underlayment, thermal barrier, ignition barrier, insulation or a vapor retarder.

#### Reason:

The definition of "roof assembly" is indicated as taken from the 2024 IRC, but it does not match the definition in the 2024 IRC. The corrections proposed above will properly align the definition with the established definition in the 2024 IRC, which has been in place with only minor alterations since the 2000 IRC.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 1 recommendation. To update the definition based on the 2024 IRC definition.

# IS-MHRRC 0-25 ICC 605 Section 202 WILDFIRE HAZARD AREA

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**WILDFIRE HAZARD AREAS (WHA).** A geographic area designated by the local jurisdiction with fire hazard severity of medium, high or extreme factors of wildfire exposure.

WILDFIRE HAZARD AREA (WHA) CONSTRUCTION CLASS. One of three sets of additional requirements for construction of residential buildings in wildfire hazard areas, classified as WHA wildfire hazard area construction Class 1, WHA wildfire hazard area construction Class 2 or WHA wildfire hazard area construction Class 3.

#### Reason:

This is intended to be editorial or grammatical in nature. There is no intended change to the requirements. Remove the acronym "WHA". It is replaced with the term "wildfire hazard area". If acronyms are appropriate, then probably should use IBC rather than International Building Code. The term "WHA" should be spelled out in all locations throughout the standard.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 1 recommendation.

Committee Modification: Deleted the "S" of the definition title of "WILDFIRE HAZARD

AREAS"

# **Chapter 3**

## WILDFIRE HAZARD DESIGN CRITERIA

IS-MHRRC 0-26 ICC 605 Section 301

Proponent: Larry Stevig, State Farm

#### Revise as follows:

- 1. Consider revising the Scope in 301.1 as follows: "The provisions of this chapter provide a methodology to design one- and two-family dwellings and townhouses up to three stories and associated accessory structures within the wildfire hazard areas based on design exposures during a wildfire including direct flame contact, radiant heat exposure and ember exposure, which are dependent on the defensible space provided.
- 2. In Table 301.2, suggest spelling out "WHA" heading in third column as <u>Wildfire Hazard Area Construction Class</u>, and adding the corresponding "Class" associated with each section cited in the body of the table: Section 503 <u>Class 1</u>; Section 504 <u>Class 2</u>; Section 505 <u>Class 3</u> (to improve ease of use).
- 3. In Figure 301.2, should each hatched area of plan be defined? Also consider labeling the different perimeter lines in lieu of the legend provided, to improve clarity.
- 4. In Table 301.2.1, it seems that the references are incorrect under WHS Construction Class should they be revised to 503.8, 504.8, and 505.8? Also consider spelling out WHA and adding Class 1, 2, and 3 respectively for ease of use.
- 5. In Figure 301.2.1, consider labeling Building Site as Building Footprint. Are dimensions needed for deck? Also consider labels in lieu of legend for perimeter lines.
- 6. Do Accessory Dwelling Units need to be mentioned in 301.2.2? Consider clarifying that a detached ADU is a "building."
- 7. In Table 301.2.2, where are Type A, B, and C Detached Accessory Structures defined? Also suggest minor edit to heading above classes as follows: WILDFIRE HAZARD AREA Construction <u>Class</u>.
- 8. Why is ICC605 silent on issues like Access and Water Supply as included in IWUIC Chapter 4 (2024)?

#### Reason:

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

#### **Committee Modification:**

- 1. Included in the modification to IS-MHRRC 0-29
- 2. Included in the modification to IS-MHRRC 0-29
- 3. Included in the modification to IS-MHRRC 0-29
- 4. Editorial Change, disapproved to address other comments causing a change in this section.
- 5. Editorial Change, disapproved to address other comments causing a change in this section.
- 6. Included in the modification to IS-MHRRC 0-29
- 7. Included in the modification to IS-MHRRC 0-29
- 8. ICC 605 requirements are limited to the residential buildings within a lot and do not address water supply and access requirements. These requirements are addressed in the IFC and IWUIC.

# IS-MHRRC 0-27 ICC 605 Sections 301.1, 301.2

Proponent: Gary Ehrlich, NAHB

#### Revise as follows:

**301.1 Scope.** This The provisions of this chapter provides a methodology for establishing the required defensible space and construction class for to design one- and two-family dwellings up to three stories and associated accessory structures within wildfire hazard areas based on design exposures during a wildfire.

**301.2. Buildings.** New buildings constructed in or buildings relocated into wildfire hazard areas shall be evaluated based on the provided defensible space distance and expected exposure, assessed independently for each side of the structure in accordance with Table 301.2 and Figure 301.2, and comply with the requirements of this standard.

#### Reason:

Provides editorial improvements to Section 301.1 (for example, avoids the awkward phrasing of "the provisions...provide..."). Chapter 3 establishes the defensible space criteria, expected exposure and WHA construction class, but does not specify the detailed construction requirements.

It seems like Figure 301.2 should also be referenced in the first paragraph of Section 301.2 to parallel the second paragraph. Each paragraph is its own self-contained provision, first for new construction, then for existing structures being repaired, altered or added to.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

#### Add definition for Dwelling:

[RB] DWELLING. Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

**301.1 Scope.** The provisions of this This chapter provides a methodology to design for establishing the required defensible space and construction class for one- and two-family

dwellings, <u>accessory dwelling units and townhouses</u> up to three stories <u>dwellings</u> and associated <u>accessory structures</u> within <u>wildfire hazard areas</u> based on design exposures during a wildfire including direct flame contact, radiant heat and ember exposures.

**301.2. Buildings Dwellings.** New <u>dwellings</u> <u>buildings</u> constructed in, or <u>buildings</u> relocated into wildfire hazard areas shall be evaluated based on the provided <u>defensible space</u> distance and expected exposure. <u>Each side of the structure shall be</u> assessed independently <u>for each side of the structure</u> in accordance with Table 301.2 <u>and Figure 301.2</u> and comply with the requirements of this standard.

Repair, addition, or alteration of existing <u>dwellings buildings</u> in wildfire hazard areas shall comply with Chapter 6, based on provided <u>defensible space</u> distance <u>and</u> assessed independently for each side of the structure in accordance with Table 301.2. Provided <u>defensible space</u> area for each side of the structure shall be in accordance with Figure 301.2.

❖ Note: Further information provided in the commentary of this chapter. <u>Different hatched areas show provided defensible space on each side of the dwelling.</u>

**Exception:** Where covenants or other agreements permit owners, tenants or associations to manage vegetation outside lot lines, such areas shall be maintained and considered as part of the provided *defensible space*.

Table 301.2. Wildfire exposure and construction classification for dwellings buildings.

<b>Provided Defensible Space</b>	<b>Expected wildfire exposure</b>	Wildfire Hazard Area
		Construction Class
Less than the minimum defensible	Direct flame contact,	Class 1 Constructed in
space distances specified in table	Radiant heat and ember	accordance with section 503
402.2	exposure	
Minimum defensible space distances	Radiant heat and ember	Class 2-Constructed in
specified in table 402.2	exposure	accordance with section 504
Expanded defensible space distances	Ember exposure	Class 3 Constructed in
specified in table 402.2		accordance with section 505

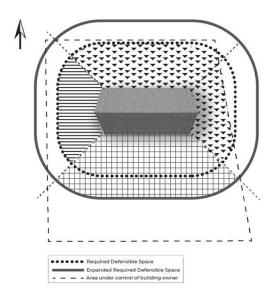


Figure 301.2. Provided defensible space for each side of <u>dwelling</u> <u>building</u>.

# IS-MHRRC 0-28 ICC 605 Section 301.2

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

301.2. 301.2 Buildings. New buildings constructed in, or buildings relocated into, wildfire hazard areas shall be evaluated based on the provided defensible space distance and expected exposure. Each side of the structure shall be assessed independently for each side of the structure in accordance with Table 301.2, and comply with the requirements of this standard.

Repair, addition or alteration of existing buildings in wildfire hazard areas shall comply with Chapter 6, based on provided defensible space distance <u>and</u> assessed independently for each side of the structure in accordance with Table 301.2. Provided defensible space area for each side of the structure shall be in accordance with Figure 301.2.

Note: Further information provided in the commentary to this chapter.

Exception: Where covenants or other agreements permit owners, tenants or associations to manage vegetation outside lot lines, such areas shall be maintained and considered as part of the provided defensible space.

#### Reason:

This proposal addresses several issues in Section 301.2. First, is the section numbering format. The period after the section number is deleted.

The 1<sup>st</sup> paragraph is revised to clarify the methodology in utilizing Table 301.2. The long sentence is split into two sentences. The 2<sup>nd</sup> sentence is revised because it needs to be clear that each side of the structure is evaluated separately, so that phrase is relocated to the start of the sentence.

The 2<sup>nd</sup> paragraph is grammatically revised to add the word "and" so that it is clear that defensible space provided and defensible space required is assessed separately for each side of the structure.

**Committee Action:** Approved as Submitted

**Committee Reason:** Based on the Task Group 2 recommendation.

# IS-MHRRC 0-29 ICC 605 Section 301

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**301.1 Scope.** The provisions of this chapter provide a methodology to design one- and two-family dwellings up to three stories, townhouses up to three stories and associated accessory structures within wildfire hazard areas based on design exposures during a wildfire.

**301.2.1** Unenclosed attached accessory structures. New unenclosed attached accessory structures constructed in, or unenclosed attached accessory structures relocated into, a wildfire hazard area shall be evaluated based on the shortest provided defensible space distance of all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1 and comply with the requirements of this standard.

Repair, addition, or alteration of existing unenclosed attached accessory structures in wildfire hazard areas shall comply with Chapter 6, based on the shortest provided defensible space distance on all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1.

Determination of provided defensible space and corresponding design criteria for unenclosed attached accessory structures shall be performed independently from the building to which the unenclosed accessory structure is attached. Provided defensible space area for each side of the unenclosed attached accessory structures shall be in accordance with Figure 301.2.1.

**Exception:** Where covenants or other agreements permit owners, tenants or associations to manage vegetation outside lot lines, such areas shall be maintained and considered part of the provided defensible space.

**301.2.2 Detached accessory structures.** Detached accessory structures shall be sited and oriented in accordance with Section 402.3. New detached accessory structures constructed in, or detached accessory structures relocated in, wildfire hazard areas shall be evaluated based on horizontal distance from buildings containing habitable space on the same lot and in accordance with Table 301.2.2.

Repair, addition, or alteration of existing detached accessory structures in wildfire hazard areas shall comply with Chapter 6, based on horizontal distance from buildings containing habitable space on the same lot and in accordance with Table 301.2.2.

Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

#### **TABLE 301.2**-

## WILDFIRE EXPOSURE AND CONSTRUCTION CLASSIFICATION FOR UNENCLOSED ATTACHED ACCESSORY STRUCTURES BASED ON SHORTEST PROVIDED DEFENSIBLE SPACE DISTANCE

SHORTEST PROVIDED DEFENSIBLE SPACE DISTANCE OF ALL SIDES	EXPECTED WILDFIRE EXPOSURE	WHA WILDFIRE HAZARD AREA CONSTRUCTION CLASS
Less than the minimum defensible space distances specified in Table 402.2	Direct flame contact, radiant heat and ember exposure	Construction Class 1 in accordance with Section 503.7 503.8
Minimum defensible space distances specified in Table 402.2	Radiant heat and ember exposure	Construction Class 2 in accordance with Section 504.7 504.8
Expanded defensible space distances specified in Table 402.2	Ember exposure	Construction Class 3 in accordance with Section 505.7 505.8

- ❖ Commentary: 301.2. Example for designing a building in ₩HA wildfire hazard area. Figure 1 provides an example for designing buildings and structures based on the provided defensible space on each side. In this This example building is located in an area with extreme wildfire hazard and according to Table 402.3, the required defensible space distance in this condition is equal to 100 feet. As it is shown in Figure 1:
- On the northern side of the building, the area under control of the building owner is less than required defensible space (blue arrow shows the area outside control of building owner). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). The fuel modification area on this side (purple area) will be limited to the lot lines or required defensible space distance (green line) whichever is less.
- On the eastern side of the building, the area under control of the building owner is less than required defensible space (orange arrow shows the area outside control of building owner). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). The fuel modification area on this side (yellow area) will be limited to the lot lines or required defensible space distance (green line), whichever is less.
- On the southern side of the building, <u>the</u> area under control of <u>the</u> building owner is more than 1.5 times of required defensible space. As a result, this side can be constructed in three different ways:
  - a. To only resist against ember exposure and in accordance with WHA Wildfire

- <u>Hazard Area</u> Construction Class 3 (Section 505). In this case, maintenance of defensible space area on this side (green area) will be limited to the lot lines or 1.5 times of required defensible space distance (blue line), whichever is less.
- b. To resist against ember and radiation heat exposures and in accordance with WHA Wildfire Hazard Area Construction Class 2 (Section 504). In this case, the fuel modification area on this side (Zone 1, dark green area) will be limited to the lot lines or required defensible space distance (green line), whichever is less.
- c. To resist against ember, radiation heat and direct flame contact exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). In this case, the fuel modification area on this side (dark green area) will be limited to the lot lines or required defensible space distance (green line), whichever is less—which in this example will be the same as method b and dark green area (Zone 1).
- On the western side of the building, <u>the</u> area under control of <u>the</u> building owner is more than required defensible space and less than 1.5 times of this distance. As a result, this side can be constructed in two different ways:
  - a. To resist against ember and radiation heat exposures and in accordance with WHA Wildfire Hazard Area Construction Class 2 (Section 504). The defensible space area on this side will be limited to the green line (blue line if using 1.5 times the defensible space).
  - b. To resist against ember, radiation heat and direct flame contact exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). The defensible space area on this side will be limited to the green line (blue line if using 1.5 times the defensible space).

Commentary Figure 301.2.1. Required defensible <u>Defensible</u> space around unenclosed attached accessory structures.

#### Reason:

Section 101.1 indicates the scope of the standard includes townhouses. The scope for Chapter 3 also needs to include townhouses because there are no other provisions applicable to only townhouses.

Sections 301.2.1 and 301.2.2 are revised to simplify the text. Since both terms "constructed in" and "relocated into" refer to unenclosed accessory structures, the phrase does not need to be repeated, and is not necessary. The same revision is made in both sections.

Table 301.2 contains three editorial revisions.

- a. The acronym WHA is replaced with wildfire hazard area.
- b. In the 3re column, the term "construction" is replaced with the actual construction class specified in the referenced sections. This correlates with title of the column which indicates it will "construction class"

c. In the 3<sup>rd</sup> column, the section references of 503.7, 504.7 and 505.7 are all "Joints and intersections". The references should be 503.8, 504.8 and 505.8.

The commentary for Section 301.2 is revised to remove the acronym WHA. Additional grammatical corrections are included in this commentary.

The caption for Figure 301.2.1 is revised to remove the word required. This figure does not show the "required" defensible space. The figure shows the required defensible space and 1.5 x defensible space. So which is required? They cannot both be required, because they are not the same.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

Replace as follows:

301.3 Accessory structures. Accessory structures constructed in or relocated into wildfire hazard area shall comply with requirements of this section based on horizontal separation distance from dwellings on the same lot. Repair, addition or alteration of existing accessory structures in wildfire hazard areas shall comply with Chapter 6. New construction on existing accessory structures shall be in accordance with requirements of this section based on horizontal separation distance from dwellings on the same lot. Defensible space Zone X shall be provided around accessory structures in accordance with Section 402.3.1.

301.3.1 Accessory structures located less than 30 ft from a dwelling. Where located less than 30 feet from a dwelling, accessory structures shall be constructed in accordance with Section 506.2.

Exception: Where all sides of the *dwelling* that face the accessory structure are constructed in accordance with Section 503, accessory structure shall not be required to comply with this standard.

301.3.2 Accessory structures located between 30 ft and 50 ft from a dwelling. Where located between 30 feet and 50 ft from a *dwelling*, accessory structures shall be constructed in accordance with Section 506.2 or Section 506.3.

Exception: Where all sides of the *dwelling* that face the accessory structure are constructed in accordance with Section 503, accessory structure shall not be required to comply with this standard.

301.3.3 Accessory structures located more than 50 ft from a dwelling. Where located more than 50 ft from a dwelling, accessory structures shall not be required to comply with this standard.

#### **♦**Commentary:

- ♣301.2. Example for designing a <u>dwelling building</u> in <u>WHA wildfire hazard area</u>. Figure 1 provides an example for designing <u>dwellings buildings and structures</u> based on the provided defensible space on each side. <u>In this This</u> example <u>dwelling building is</u> located in <u>an</u> area with extreme wildfire hazard and according to table 402.3, <u>the</u> required defensible space distance in this condition is equal to 100 ft. As it is shown in Figure 1:
  - On northern side of the <u>dwelling building</u>, <u>the</u> area under control of <u>the dwelling building</u> owner is less than required defensible space (<u>blue arrow shows the area outside control of building owner Diagonal crosshatched area</u>). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with <u>WHA Wildfire Hazard Area</u> Construction Class 1 (Section 503). The fuel modification area on this side (<u>purple area triangle hatched area</u>) will be limited to the <u>lot lines or</u> required defensible space distance <u>line</u> (<u>green dot line</u>) <u>whichever is less</u>.
  - On the eastern side of the <u>dwelling building</u>, the area under control of the <u>dwelling building</u> owner is less than required defensible space (Crosshatched area). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with Wildfire Hazard Area Construction Class 1 (Section 503). The fuel modification area on this side (dot hatched area) will be limited to the lot lines or required defensible space distance whichever is less.
  - On the southern side of the <u>dwelling building</u>, the area under control of the <u>dwelling building</u> owner is more than 1.5 times of required defensible space. As a result, this side can be constructed in three different ways:
    - a. To only resist against ember exposure and in accordance with Wildfire Hazard Area Construction Class 3 (Section 505). In this case, maintenance of defensible space area on this side will be limited to the extended required defensible distance line (solid line).
    - b. To resist against ember and radiation heat exposures and in accordance with Wildfire Hazard Area Construction Class 2 (Section 504). In this case, the fuel modification area on this side (diamond hatched area) will be limited to the required defensible space line.
    - c. To resist against ember, radiation heat and direct flame contact exposures and in accordance with Wildfire Hazard Area Construction Class 1 (Section 503). In this case, the fuel modification area on this side will be initiates from edge of the southern exterior wall of <u>dwelling building</u> and extends 5 ft horizontally away from the perimeter of all projections.

- On the western side of the building, the area under control of the <u>dwelling</u> building owner is more than required defensible space and less than expanded required defensible space. As a result, this side can be constructed in two different ways:
  - a. To resist against ember and radiation heat exposures and in accordance with Wildfire Hazard Area Construction Class 2 (Section 504). The defensible space area on this side will be limited to the dot line (horizontally hatched area).
  - b. To resist against ember, radiation heat and direct flame contact exposures and in accordance with Wildfire Hazard Area Construction Class 1 (Section 503). The defensible space area on this side will be initiates from edge of the western exterior wall of building and extends 5 ft horizontally away from the perimeter of all projections.

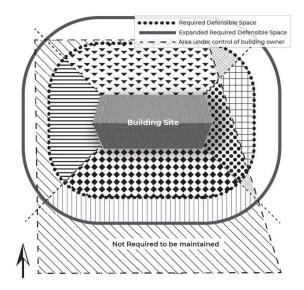


Figure 1. Required defensible space around building

❖ 301.2.1. Example for designing an unclosed accessory structure in wildfire hazard area Replace this drawing with new drawing with two exposed sides

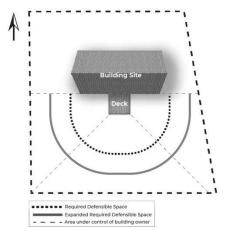


Figure 2. Required defensible space around unenclosed attached accessory structures.

# IS-MHRRC 0-30 ICC 605 Section 301.2.1

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**301.2.1.** Unenclosed attached accessory structures. New unenclosed attached accessory structures constructed in or unenclosed attached accessory structures relocated into a wildfire hazard area shall be evaluated based on the shortest provided defensible space distance of all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1 and comply with the requirements of this standard.

Repair, addition, or alteration of existing unenclosed attached accessory structures in wildfire hazard areas shall comply with Chapter 6, based on the shortest provided defensible space distance on all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1.

Determination of provided defensible space and corresponding design criteria for unenclosed attached accessory structures shall be performed independently from the building to which the unenclosed accessory structure is attached. Provided defensible space area for each side of the unenclosed attached accessory structures shall be in accordance with Figure 301.2.1.

**Exception:** Where covenants or other agreements permit owners, tenants or associations to manage vegetation outside lot lines, such areas shall be maintained and considered part of the provided defensible space.

Table 301.2.1. Wildfire exposure and construction classification for unenclosed attached accessory structures based on shortest provided defensible space distance.

Shortest Provided Defensible Space Distance of all sides	Expected wildfire exposure	Requirements based on WHA Construction Class
Less than the minimum defensible space distances specified in Table 402.2	Direct flame contact, radiant heat and ember exposure	WHA Class 1- Constructed in accordance with Section 503.8 Section 503.7
Minimum defensible space distances specified in Table 402.2	Radiant heat and ember exposure	WHA Class 2- Constructed in accordance with Section 504.8Section 504.7
Expanded defensible space distances specified in Table 402.2	Ember exposure	WHA Class 3- Constructed in accordance with Section 505.8 Section 505.7

TABLE 301.2.2. MINIMUM DISTANCE FROM ADJACENT ONE- AND TWO-FAMILY DWELLING(S) ON THE SAME LOT

Detached Accessory Structure Types A, B and C.

#### Reason:

Throughout the standard it's preferred to use "attached accessory structure" without the preceding word "unenclosed". Later, in Chapter 5 the standard tells you when to enclose the space under the attached accessory structure. Its also possible that it could be misinterpreted to be referring to the above structure space, such as an enclosed or open porch, rather than what's intended, which is the space under the structure, such as occurs below a deck.

While only one example is given here, the intent would be to change all instances throughout the standard.

There are two observed problems in this table. The first is the sections in the third column points to sections on joints and intersections, instead of the section for attached accessory structures which is what the table is addressing.

The second problem is that the title of the third column says WHA construction class, but it points to sections controlling attached accessory structures, so its confusing. It needs a better title.

After reading through the standard, it's still unclear how or where the "type" of and accessory structure is determined. No specific revision is suggested here as it's unclear where to find the info or how to revise it, short of outright deleting the table.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

# IS-MHRRC 0-31 ICC 605 Section 301.2.1

**Proponent:** Brad Douglas, American Wood Council

#### Revise as follows:

**301.2.1. Unenclosed attached accessory structures.** New unenclosed attached accessory structures constructed in, or unenclosed attached accessory structures relocated into a wildfire hazard area shall be evaluated based on the shortest provided minimum defensible space distance provided on of all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1 and comply with the requirements of this standard.

Repair, addition, or alteration of existing unenclosed attached accessory structures in wildfire hazard areas shall comply with Chapter 6, based on the shortest provided minimum defensible space distance provided on all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1.

Determination of shortest provided minimum defensible space and corresponding design criteria for unenclosed attached accessory structures shall be performed independently from the building to which the unenclosed accessory structure is attached. Provided dDefensible space area for each side of the unenclosed attached accessory structures shall be in accordance with Figure 301.2.1.

**Exception:** Where covenants or other agreements permit owners, tenants, or associations to manage vegetation outside lot lines, such areas shall be maintained and considered part of the provided defensible space.

#### Reason:

Use of the term "shortest provided defensible space distance" as a noun is very awkward and hard to read. I would suggest either defining a term or making the proposed changes.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

# IS-MHRRC 0-32 ICC 605 Table 301.2.1

Proponent: Milad Shabanian, IBHS

Revise as follows:

Revise Table 301.2.1 and replace section numbers to the correct section numbers.

Reason:

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

# IS-MHRRC 0-33 ICC 605 Table 301.2.1

Proponent: Brad Douglas, American Wood Council

## Revise as follows:

Table 301.2.1: Change the title to read "Table 301.2.1. Wildfire exposure and construction classification for unenclosed attached accessory structures based on shortest provided minimum defensible space distance". Change the column 1 heading to "Minimum Defensible Space Distance Provided on All Sides"

#### Reason:

Consistent with change proposed to text in Section 301.2.1.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

# IS-MHRRC 0-34 ICC 605 Table 301.2.1

Proponent: Brad Douglas, American Wood Council

**Delete without Substitution:** 

Delete Table 301.2.1 (see Supporting Information)

#### Reason:

This table seems backwards given what is required in Table 301.2.2 for detached accessory structures where a detached accessory structure can be built to 505 if the adjacent side of the primary structure is built to 503 (Class 1). A tenet to this standard is that the provisions are to protect the primary structure (dwelling), not the accessory structures (attached or detached). If the exterior side of the primary structure is designed to resist a fire adjacent to the building (Class 1), why would the attached accessory structure need to be built to Class 1 (503.7)? It would seem to be much more straightforward to require the side of the primary structure to which the accessory structure is attached to be built to Class 1 and allow the attached accessory structure to be built to 505. I'm not sure what this table would look like... potentially it would go away with the addition of text in 301.2.1 that explains this concept.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

# IS-MHRRC 0-35 ICC 605 Tables 301.2 and 301.2.1

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

## Revise as follows:

Add the WHA construction class designations (i.e., Class 1, Class 2, Class 3) before the existing text in the righthand column of each table.

#### Reason:

Adding the WHA construction class designations will simplify comprehension by connecting these table provisions explicitly to the Table of Contents and the other uses of the designations throughout the standard (e.g., in the titles of Sections 503, 504, and 505).

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

## IS-MHRRC 0-36

ICC 605 Sections 301.2.1, 402.2.1, 402.2.2, 402.2.3

Proponent: Gary Ehrlich, NAHB

Revise as follows:

**301.2.1.** <u>Attached</u> <u>Unenclosed attached</u> accessory structures. New <u>unenclosed</u> attached accessory structures constructed in or <u>unenclosed</u> attached accessory structures relocated into a wildfire hazard area shall be evaluated based on the shortest provided defensible space distance of all sides of the <u>unenclosed</u> attached accessory structure in accordance with Table 301.2.1 and comply with the requirements of this standard.

Repair, addition, or alteration of existing unenclosed attached accessory structures in wildfire hazard areas shall comply with Chapter 6, based on the shortest provided defensible space distance on all sides of the unenclosed attached accessory structure in accordance with Table 301.2.1.

Determination of provided defensible space and corresponding design criteria for unenclosed attached accessory structures shall be performed independently from the building to which the unenclosed accessory structure is attached. Provided defensible space area for each side of the unenclosed attached accessory structures shall be in accordance with Figure 301.2.1.

**Exception:** Where covenants or other agreements permit owners, tenants or associations to manage vegetation outside lot lines, such areas shall be maintained and considered part of the provided defensible space.

Table 301.2.1. Wildfire exposure and construction classification for unenclosed attached accessory structures based on shortest provided defensible space distance

Figure 301.2.1. Required defensible space around unenclosed attached accessory structures

**402.2.1 Minimum defensible space.** The minimum required defensible space distances based on fire hazard severity shall be in accordance with Table 402.2. Where the provided defensible space is equal to the minimum defensible space distance, those sides of building shall be constructed in accordance with Table 301.2 to resist radiant heat and ember exposures.

Where the provided defensible space for unenclosed accessory structure is equal to the minimum defensible space distance, unenclosed accessory structures shall be constructed in accordance with Table 301.2.1 to resist radiant heat and ember exposures.

**402.2.2 Expanded defensible space.** Where the expanded defensible space distances in Table 402.2 are provided, those sides of building shall be constructed in accordance with Table 301.2 to resist against ember exposure.

Where the provided defensible space of unenclosed accessory structure is 1.5 times the minimum defensible space distances of Table 402.2, the unenclosed accessory structure shall be constructed in accordance with Table 301.2.1 to resist against ember exposure.

**402.2.3. Lot-limited defensible space.** Where the property does not allow for the required minimum defensible space distances along the entire length of any structure's exposure, the provided defensible space shall extend to the lot line. In such cases, those sides of the building with lot-limited defensible space distances shall be constructed in accordance with Table 301.2 to resist against direct flame contact, radiant heat and ember exposures.

Where the required minimum defensible space for an unenclosed attached accessory structure cannot be provided on the lot, the provided defensible space shall extend to the lot line and the unenclosed attached accessory structure shall be constructed in accordance with Table 301.2.1 to resist against direct flame contact, radiant heat and ember exposures.

#### Reason:

Given the requirements for the three WHA construction classes in Chapter 5 specify under what conditions an attached accessory structure can be left unenclosed rather than needing to be enclosed underneath down to grade, it seems Section 301 merely needs to describe them as "attached accessory structures". Let Chapter 5 specify whether enclosure below is needed or not based on the required and provided defensible space.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

# IS-MHRRC 0-37 ICC 605 Section 301.2.2

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**301.2.2 Detached accessory structures.** Detached accessory structures shall be sited and oriented in accordance with Section 402.3. New detached accessory structures constructed in, or detached accessory structures relocated in, wildfire hazard areas shall be evaluated based on horizontal distance from buildings containing habitable space on the same lot and in accordance with Table 301.2.2.

Repair, addition, or alteration of existing detached accessory structures in wildfire hazard areas shall comply with Chapter 6. New construction on existing detached accessory structures shall be in accordance with Table 301.2.2, based on horizontal distance from buildings containing habitable space on the same lot and in accordance with Table 301.2.2.

Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

TABLE 301.2.2. <u>—</u>MINIMUM DISTANCE <del>FROM ADJACENT ONE- AND TWO-FAMILY</del>
<del>DWELLING(S)</del> <u>BETWEEN ACCESSORY STRUCTURES AND BUILDINGS WITH HABITABLE SPACE</u>
ON THE SAME LOT

DETACHED ACCESSORY STRUCTURE	WILDFIRE HAZARD AREA CONSTRUCTION		
	Class 1	Class 2	Class 3
Type A	5 ft	5 ft	5 ft
Type B	5 ft	30 ft	30 ft
Type C	5 ft	30 ft	30 ft

#### Reason:

The 1<sup>st</sup> paragraph is revised by deleting the 1<sup>st</sup> sentence. This sentence is deleted for two reasons: 1) the referenced Section 402.3 does not address location and orientation of detached accessory structures, and 2) the 2<sup>nd</sup> sentence indicates that the separation to existing structures is already addressed.

The 2<sup>nd</sup> paragraph is revised for clarity. The sentence is split into two sentences, with the 1<sup>st</sup> sentence specifying that existing structures must comply with Chapter 6 for additions or alterations. The 2<sup>nd</sup> sentence adds the criteria that the additions and alterations must comply with Table 301.2.2, the same as new construction is required to do.

The title of Table 301.2.2 is revised. The current title states "minimum distance from adjacent one- and two-family dwellings. However, it does not state what is to be separated by the given

distances. The title is revised to state the table refers to the distance between accessory structures and buildings with habitable space. The revision to habitable space picks up the townhouses that are not one- or two-family dwellings, but are included in the standard.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

# IS-MHRRC 0-38 ICC 605 Chapters 3 and 4

Proponent: Charles Jourdain, Mendocino Forest Products

## Revise as follows:

Chapters 3 and 4 are complex and confusing with multiple options for Fire Hazard Severity, Construction Class, Defensible Space Requirements, Fuel Modification Zones, etc. All of these require evaluation on all four sides of a structure. In reality, a homeowner, builder or AHJ may simply resort to the most stringent construction provisions resulting in noncombustible construction being the only real option.

#### Reason:

Chapters 3 and 4 are complex and confusing with multiple options for Fire Hazard Severity, Construction Class, Defensible Space Requirements, Fuel Modification Zones, etc. All of these require evaluation on all four sides of a structure. In reality, a homeowner, builder or AHJ may simply resort to the most stringent construction provisions resulting in noncombustible construction being the only real option.

Committee Action: Disapproved

**Committee Reason:** Based on the Task Group 2 recommendation.

# Chapter 4 FUEL MANAGEMENT

# IS-MHRRC 0-39 ICC 605 Sections 401.1, 402.1

Proponent: Gary Ehrlich, NAHB

#### Revise as follows:

**401.1 Scope.** Fuel management on the premises of new and existing <u>one- and two-family</u> <u>dwellings</u> <u>buildings</u> and associated accessory structures located within wildfire hazard areas shall comply with this chapter.

**402.1 Objective.** Provisions of this section are intended to modify the fuel load in areas adjacent to <u>buildings</u> and structures to create a defensible space that protects <del>building</del> against exposure to direct flame contact and reduces the radiant heat and ember exposures to a level that minimizes potential for ignition or other damage to <u>buildings</u> and <u>structures</u>.

#### Reason:

Editorially revises 401.1 to match the ICC 605 scope and the scope of the other chapters and 402.1 to provide editorial clarification.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 2 recommendation.

# IS-MHRRC 0-40 ICC 605 Section 402.2

Proponent: Brad Douglas, American Wood Council

#### Add new text as follows:

Add provisions for determining Fire Hazard Severity.

#### Reason:

This section is based on the "fire hazard severity" (FHS) of the site, and its classification appears to be critical; however, the only reference to determining the FHS is in the Objectives where it says that determination of the FHS is not within the scope of this standard. Given the significant differences in the defensible space distances required for the various undefined FHS categories, this seems like a huge hole in the standard. Without more information, the AHJ would be forced to decide and, at any time, an AHJ could change the FHS without cause or reason. I think the determination of the FHS should be brought into this standard or a reference to mandatory requirements added. Also, as an editorial note, we have changed the titles of the construction classes to "Wildfire Hazard Areas" and use the term "wildfire hazard" everywhere in the standard... are these too similar?

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

Revise as follows:

**402.2 Defensible space distance.** The p-Provisions of this section establish *defensible space* distances based on fire hazard severity. Minimum and expanded *defensible space* distances shall be in accordance with Sections 402.2.1 and 402.2.2 Table 402.2. Defensible space distances shall be maintained in accordance with Sections 402.3 and 402.4.

The fire hazard severity of building sites for buildings located in wildfire hazard areas shall be determined by the authority having jurisdiction. Appendix A of this standard offers examples for determining fire hazard severity.

TABLE 402.2. DEFENSIBLE SPACE DISTANCES

FIRE HAZARD SEVERITY	MINIMUM DEFENSIBLE SPACE (feet)	EXPANDED DEFENSIBLE SPACE (feet)
Moderate	30	45
High	50	75
Extreme	100	150

For SI: 1 foot = 304.8 mm.

## IS-MHRRC 0-41

ICC 605 Tables 402.2, 402.3.4.1, 402.3.4.2, 402.3.4.3

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

#### Revise as follows:

Reverse the order of the rows in the referenced tables to align with the order in Tables 301.2 and 301.2.1.

#### Reason:

Tables 301.2 and 301.2.1 establish the defensible space classification with the most severe wildfire exposure in the first row and the least severe in the last row. The tables in Chapter 4 adopt the opposite approach, with the least severe exposures in the first row. Adjustment of the row order is recommended so there is logical consistency throughout the document.

Committee Action: Approved as Submitted

## IS-MHRRC 0-42

ICC 605 Sections 402.2, 402.2.1, 402.2.2, 402.2.3

Proponent: Gary Ehrlich, NAHB

Revise as follows:

**402.2 Defensible space distance.** The provisions of this section establish defensible space distances based on fire hazard severity. Minimum and expanded defensible space distances shall be in accordance with Sections 402.2.1 and 402.2.2 Table 402.2. Defensible space distances shall be maintained in accordance with Sections 402.3 and 402.4.

**402.2.1 Minimum defensible space.** The minimum required defensible space distances based on fire hazard severity shall be in accordance with Table 402.2. Where the provided defensible space is equal to <u>or greater than</u> the minimum defensible space distance, those sides of building shall be constructed in accordance with Table 301.2 to resist radiant heat and ember exposures.

Where the provided defensible space for unenclosed accessory structure is equal to <u>or greater</u> than the minimum defensible space distance, unenclosed accessory structures shall be constructed in accordance with Table 301.2.1 to resist radiant heat and ember exposures.

**402.2.2 Expanded defensible space.** Where the expanded defensible space distances in Table 402.2 are provided, those sides of building shall be constructed in accordance with Table 301.2 to resist against ember exposure.

Where the <u>expanded defensible space</u> <u>distances of Table 402.2 are</u> provided <u>for defensible space</u> <u>of unenclosed</u> accessory structures is 1.5 times the minimum defensible space distances of Table 402.2, the <u>unenclosed</u> accessory structures shall be constructed in accordance with Table 301.2.1 to resist against ember exposure.

**402.2.3. Lot-limited defensible space.** Where the property does not allow for the required minimum defensible space distances along the entire length of any <u>side of the structure</u>'s exposure, the provided defensible space shall extend to the lot line. In such cases, those sides of the building with lot-limited defensible space distances shall be constructed in accordance with Table 301.2 to resist against direct flame contact, radiant heat and ember exposures.

Where the required minimum defensible space for an unenclosed attached accessory structure cannot be provided on the lot, the provided defensible space shall extend to the lot line and the unenclosed attached accessory structure shall be constructed in accordance with Table 301.2.1 to resist against direct flame contact, radiant heat and ember exposures.

#### Reason:

Provides editorial improvements to Section 402.2 and subsections. The change to 402.2 avoids repeating the Table 402.2 reference since it's called out in both subsections. Taken literally, 402.2.1 doesn't tell you what to do if the provided defensible distance is greater than the minimum but less than the expanded, only if it's exactly equal. The 2<sup>nd</sup> paragraph of 402.2.2 is revised for consistency with the 2<sup>nd</sup> paragraph of 402.2.1. Finally, it seems like "side of the" is missing in the first sentence of 402.2.3.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

Revise as follows:

**402.2 Defensible space distance.** The provisions of this section establish *defensible space* distances based on fire hazard severity. Minimum and expanded *defensible space* distances shall be in accordance with Sections 402.2.1 and 402.2.2 Table 402.2. Defensible space distances shall be maintained in accordance with Sections 402.3 and 402.4.

**402.2.1 Minimum defensible space.** The minimum required *defensible space* distances based on fire hazard severity shall be in accordance with Table 402.2. Where the provided *defensible space* meets is equal to the minimum *defensible space* distance, those sides of building shall be constructed in accordance with Table 301.2 to resist radiant heat and ember exposures.

Where the provided *defensible space* for *unenclosed accessory structure* meets is equal to the minimum *defensible space* distance, *unenclosed accessory structures* shall be constructed in accordance with Table 301.2.1 to resist radiant heat and ember exposures. [note: this paragraph may get deleted based on comment 34]

**402.2.2 Expanded defensible space.** Where the expanded *defensible space* distances in Table 402.2 are provided, those sides of building shall be constructed in accordance with Table 301.2 to resist against ember exposure.

Where the expanded defensible space distances of Table 402.2 are provided for defensible space of unenclosed accessory structures is 1.5 times minimum defensible space distances of Table

402.2, the *unenclosed accessory structure* shall be constructed in accordance with Table 301.2.1 to resist against ember exposure. [note: this paragraph may get deleted based on comment 34]

**402.2.3. Lot-limited defensible space.** Where the property distance to lot lines does not allow for the required minimum *defensible* space distances along the entire length of any <u>side of the</u> structure's exposure, the provided *defensible space* shall extend to the lot line. In such cases, those sides of building with lot-limited *defensible space* distances shall be constructed in accordance with Table 301.2 to resist against direct flame contact, radiant heat and ember exposures.

Where the required minimum defensible space for an unenclosed attached accessory structure cannot be provided on the lot, the provided defensible space shall extend to the lot line and the unenclosed attached accessory structure shall be constructed in accordance with Table 301.2.1 to resist against direct flame contact, radiant heat and ember exposures.

## IS-MHRRC 0-43 ICC 605 Section 402.2.4

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**402.2.4 Landscape plans.** Landscape plans shall be provided where required by the enforcing agency. The landscape plan shall include development and maintenance requirements for the management <u>fuel modification</u> zones adjacent to buildings or structures.

**402.2.4.1** Contents. Landscape plans shall be drawn to scale, and shall contain the following:

- 1. Delineation of the horizontal projection of all buildings and structures on the lot.
- 2. <u>Labels identifying Identification of the assigned WHA-wildfire hazard area</u> construction classification for each side of buildings and structures.
- 3. Delineation of fuel management zones, as measured from the horizontal projection of buildings or structures.
- 4. Identification of location and species of existing vegetation to remain and proposed new vegetation.
- 5. A plant legend with both botanical and common names, and identification of all plant material symbols.
- 6. Identification of <u>hardscape</u>, ground treatments <u>location</u> and species of ground coverings <u>vegetation</u> within the 5-foot (1524 mm) zZone X.
- 7. Identification of ground slope within the provided defensible space on each side.

#### Reason:

Section 402.2.4 is revised to clarify it applies to the "fuel modification" zones. The term fuel modification zones is used in Figure 402.3, and is a defined term. "Management zones" or "fuel management zones" are not defined.

Section 402.2.4.1 is revised in Item 2 to use the phrase "wildfire hazard area" rather than WFA. This change is consistent with editorial changes throughout the standard.

Section 402.2.4.1 is revised in Item 6 to clarify all the potential materials falling under ground coverings. It is proposed to show hardscape, ground treatments, and vegetation within Zone X. The term Zone X is used rather than 5 feet, because Zone X is the area adjacent to the structure and within 5 feet.

### **Committee Action:** Approved as Submitted

202X ICC 605 - Standard Comments and Proposals
Committee Reason: Based on the Task Group 2 recommendation.
ICC 605 –Initial Draft Committee Action Report

# IS-MHRRC 0-44 ICC 605 Section 402.2.4 Commentary

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

♣Commentary: An example of a defensible space sign. \*

<b>Building Sides</b>	Provided Defensible Space (ft)	WHA Construction Classification	Slope (%)
Side A			
Side B			
Side C			
Side D			

<sup>\*</sup>Buildings located in <u>an</u> area with extreme wildfire hazard severity and constructed in accordance with ICC 605-2024. <u>Please note that building can be designed with different number of sides. It Buildings</u> can be constructed with one type of construction or as many as applicable according to defensible space distance provided eondition.

#### Reason:

The table is revised by adding and additional row. Typical buildings will have 4 distinct sides. Not including this 4<sup>th</sup> row will likely lead to confusion.

Additionally, the text is revised by deleting the 2<sup>nd</sup> sentence which is not a regulatory requirement, and revising the sentence to refer to the "defensible space provided", rather than the "defensible space condition".

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

**Committee Modification:** 

## Revise as follows:

♣Commentary: An example of a defensible space sign. \*

<b>Building Sides</b>	Provided Defensible Space (ft)	WHA Construction Classification	Slope (%)
Side A			
Side B			
Side C			

<sup>\*</sup>Buildings located in <u>an</u> area with extreme wildfire hazard severity and constructed in accordance with ICC 605-2024. <u>Add additional lines as necessary based on building design.</u> <u>Please note that building can be designed with different number of sides.</u> It <u>Buildings</u> can be constructed with one type of construction or as many as applicable according to defensible space <u>distance provided condition</u>.

# IS-MHRRC 0-45 ICC 605 Section 402.3

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**402.3 Defensible space zones.** The provided defensible space is the area as zones are the areas shown in Figure 402.3. that Each zone represents the area where the vegetation is modified and maintained to create a defensible space between the structure and the surrounding area. In areas where two or more different zones overlap, the most stringent zone requirements shall apply.

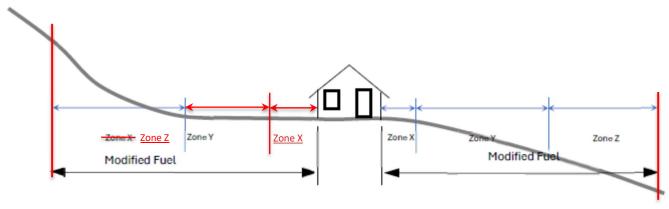


FIGURE 402.3
PROVIDED DEFENSIBLE SPACE AREA AND FUEL MODIFICATION ZONES

#### Reason:

This proposal revises this section to clarify its application by making the following revisions:

- The word "provided" is deleted in Section 402.3. Each of the three zones may or may not be provided on any specific site. The referenced figure shows where the various zones are located. The same revision is made to the title of Figure 402.3.
- In Section 402.3, the 2<sup>nd</sup> sentence is delete. This sentence makes is confusing and based on Figure 402.3 it does not apply. The sentence states "...where two or more different zones overlap..." Where and how will different zones overlap? It is clear in Figure 402.3 that Zone Y starts at the outer boundary of Zone X, so there is no overlap. The same applies for the boundary between Zone Y and Zone Z.

- In Figure 402.3, Zone X is shown as the furthest zone from the building on the uphill side. That zone should be labeled as Zone Z.
- In Figure 402.3, Zone X starts at the building and is not shown on the uphill side. Zone X is added on the uphill side of the building.
- In Figure 402.3, Additionally, revisions are made in the graphic to extend the vertical line at the far left of the figure to show that it reaches the ground level. This indicates that the zone, even though measured horizontally, still must be maintained at the ground surface. Likewise, a vertical line is added at the far right to indicate this is the area of modified fuel and to extend the line to the ground surface.
- The title for Figure 402.3 is revised to delete the word "provided". Zone Z may or may not be provided in any specific situation. This figure shows where the zone boundaries are located and how to measure the distance of fuel modification. The word provided is not appropriate for this figure.

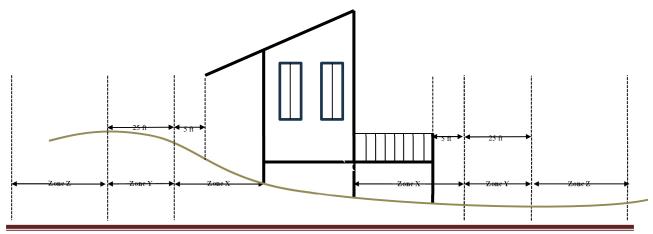
Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

#### **Committee Modification:**

Revise as follows:

402.3 Defensible space zones. The provided defensible space is the area as zones extend horizontally from the building as shown in Figure 402.3 and include Zone X, Zone Y and Zone Z as applicable in accordance with Sections 402.3.1, 402.3.2 and 403.3.3. that Each zone represents the area where the vegetation is modified and maintained to create a defensible space between the structure and the surrounding area. In areas where two or more different zones overlap, the most stringent zone requirements shall apply.



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# FIGURE 402.3 PROVIDED DEFENSIBLE SPACE AREA AND FUEL MODIFICATION ZONES

[Note: remove the overhang from here and make another drawing for Zone X.]

Add a figure to Section 402.3.1

## IS-MHRRC 0-46 ICC 605 Section 402.3

Proponent: Gary Ehrlich, NAHB

## Revise as follows:

1. **Defensible space zones.** The provided defensible space <u>shall extend horizontally from the building is the area</u> as shown in Figure 402.3 <u>and include Zone X, Zone Y and Zone Z as applicable in accordance with Sections 402.3.1, 402.3.2 and 403.3 that represents the defensible space between the structure and the surrounding area. In areas where two or more different zones overlap, the most stringent zone requirements shall apply.</u>

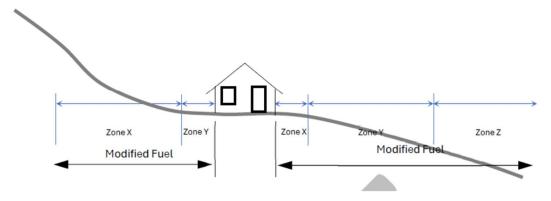


FIGURE 402.3
PROVIDED DEFENSIBLE SPACE AREA AND
FUEL MODIFICATION ZONES

Changes in the figure above:

Replace "Modified Fuel" with "Defensible Space Area" in two places
On the left side of the figure, reverse the labels for Zone X and Zone Y to match the right side.
Zone X is closest to the house.

#### Reason:

Editorially revises 402.3 to provide enforceable text that connects the provided defensible space to the zones as depicted in the figure. Makes editorial corrections to the figures, including fixing the mirrored zone labels to the left side.

Committee Action: Approved as Modified

202X ICC 605 - Standard Comments and Proposals	
Committee Modification: Included in the modification to IS-MHRRC 0-45	
ICC 605 –Initial Draft Committee Action Report	

# **IS-MHRRC 0-47** ICC 605 FIGURE 402.3

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

## Revise as follows:

The order of Zone X and Zone Y appear to be reversed on the left side of the figure. Place Zone X adjacent to the building.

#### Reason:

The recommended change is based on Section 402.3.1, which states that Zone X initiates from the edges of the exterior walls of buildings.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

# **IS-MHRRC 0-48** ICC 605 FIGURE 402.3

**Proponent:** Charles Jourdain, Mendocino Forest Products

## Revise as follows:

Zone X and Y to the left side of the figure are flipped. Also, it is not clear where Zone X initiates, at the wall or at the eave.

#### Reason:

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

# **IS-MHRRC 0-49** ICC 605 FIGURE 402.3

Proponent: Jason Smart, American Wood Council

## Revise as follows:

The zone designations on the left side of the dwelling in this figure are in the wrong order. Zone X should be adjacent to the dwelling.

#### Reason:

This comment provides a correction to Figure 402.3.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

## IS-MHRRC 0-50 ICC 605 Section 402.3.1

**Proponent:** Brad Douglas, American Wood Council

#### Revise as follows:

**402.3.1 Zone X (0 to 5 feet).** Zone X initiates from the edges of the exterior walls of buildings or structures and extends 5 feet (1524 mm) horizontally away from the perimeter of all projections. Except for sides of the primary structure that are built in accordance with 503 where combustible materials are permitted, this This-zone shall be maintained in accordance with the following:

- 1. Any ground cover shall be noncombustible, such as gravel, pavers or bare soil. Combustible ground covers such as bark and mulch shall not be permitted in this zone.
- 2. All vegetation shall be removed from this zone. New vegetation shall not be permitted within this zone.

**Exception:** Where approved by the enforcing agency, existing heritage trees and existing fire smart vegetation maintained in accordance with Section 402.4 shall be permitted adjacent to sides constructed in accordance with Section 503.

2. Fences, gates, and arbors within Zone X shall be constructed with noncombustible materials.

Exception: Fences constructed with combustible materials shall be permitted provided the structure is constructed in accordance with Section 503.

- 4. Detached accessory structures are not permitted in this zone.
- 5. Storage of combustible material is prohibited in Zone X. A permanent sign shall be installed in each unenclosed underfloor area, stating the following: "Storage of combustible material is prohibited in this location."

#### **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material where the structure is constructed in accordance with Section 503. The permanent sign shall not be required in unenclosed underfloor areas constructed in accordance with Section 503.
- 6. All exterior surfaces of buildings such as gutters, roofs and decks, and areas within Zone X shall be maintained free of accumulated combustible debris.

#### Reason:

Are only the listed items exempt if the side of the primary structure is built in accordance with 503 or does the list have to be maintained and potentially grown over time? It seems like it would be more direct to put the exception for 503 constructions in 402.3.1 and remove all of the exceptions from the list, otherwise things get missed. For example, Item 4 prohibits detached accessory structures in Zone X which is in conflict with what is permitted per Table 301.2.2 if the exterior side of the primary structure is built in accordance with 503.

Committee Action: Disapproved

Committee Reason: Based on the Task Group 2 recommendation.

**Committee Note:** Add a figure to explain zone 0 better with the overhang. The intent is for Zone X to apply evenly on all sides of building.

## IS-MHRRC 0-51

ICC 605 Sections 402.3.1, 402.3.2, 403.3

Proponent: Gary Ehrlich, NAHB

#### Revise as follows:

**402.3.1 Zone X (0 to 5 feet).** Zone X extends initiates from the edges of the exterior walls of buildings or structures to and extends 5 feet (1524 mm) horizontally away from the perimeter of all projections. This zone shall be maintained in accordance with the following:

**402.3.2 Zone Y** (<u>Greater than 5 to 30 feet</u>). Zone Y <u>extends from the 5-foot boundary of initiates after Zone X and extends to 30 feet (9144 mm) from the building. Zone Y shall be maintained in accordance with the following:</u>

**402.3.3 Zone Z** (<u>Greater than 30 to 150 feet</u>). Zone Z <u>extends from the 30-foot boundary of initiates after Zone Y to and extends the distance specified in Section 402.3.4. Zone Z shall be maintained in accordance with the following:</u>

Modify Tables 402.3.4.1, 402.3.4.2 and 402.3.4.3 to consistently identify the Zone Y distances as "From 5 to 30" and Zone Z distances as "From 30 to..."

#### Reason:

The extents of Zone X, Y and Z described in Sections 402.3.1, 402.3.2 and 402.3.3 are modified for clarity. To ensure consistent enforcement ICC 605 needs to better clarify what zone are you in at exactly 5 feet and exactly 30 feet. Zone Z is identified as just "Greater than 30 feet" lest someone interpret you need 150 feet even if the tables say you need less.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### Committee Modification:

Delete section 402.3.4 and replace Sections 402.3.1 through 402.3.3 with the following:

402.3.1 Zone X. Zone X extends from the face of the exterior walls to the lesser of 5 feet from the outer most perimeter of all projections or to the lot-line. This zone shall be maintained in accordance with the following:

**402.3.2 Zone** Y. Zone Y extends from Zone X to the lesser of 25 ft from Zone X or to the lot-line. Zone Y shall be maintained in accordance with the following:

402.3.3 Zone Z. Zone Z extends from Zone Y to the lesser of the distance specified in table 402.2 or to the lot-line. Zone Z shall be maintained in accordance with the following:

## IS-MHRRC 0-52 ICC 605 Section 402.3.2

Proponent: Gary Ehrlich, NAHB

#### Revise as follows:

**402.3.2** Zone Y (5 to 30 feet). Zone Y initiates after Zone X and extends to 30 feet (9144 mm) from the building. Zone Y shall be maintained in accordance with the following:

- 1. Groundcover vegetation shall be maintained in accordance with Section 402.4.1.
- 2. Shrubs shall be maintained in accordance with Section 402.4.2.
- 3. All trees shall be removed from this area.

## **Exceptions:**

- 1. Trees trimmed and maintained in accordance with shrubs requirements provided in Section 402.4.2.
- 2. Existing heritage trees approved by the enforcing agency and maintained in accordance with Section 402.4.3, provided the structure is constructed in accordance with Section 503.
- 4. All portions of fences, gates and arbors within 10 feet (3048 mm) from structure shall be constructed with approved noncombustible materials.

#### **Exceptions:**

- 1. Fences, gates and arbors with a total height not exceeding 5 feet (1524 mm) above the ground.
- 2. Fences constructed with combustible materials, provided the structure is constructed in accordance with Section 503

#### Reason:

Item #4 requiring noncombustible fences in Zone Y (5 to 30 feet) should be deleted as this provision would be more significantly more stringent than the anticipated 2027 IWUIC. Proposal WUIC64-24 from IBHS, which was based on the NIST research on accessory structures, only requires fences be noncombustible within 5 feet of the structure. WUIC64-24 was approved unanimously by the IFC/IWUIC Committee at Committee Action Hearing #1 in April 2024 and did not receive a committee comment. Therefore, it is not eligible for a public comment and goes straight to the consent agenda for the 2026 PCH for approval and incorporation into the 2027 IWUIC.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

**Committee Modification:** 

#### Revise as follows:

- **402.3.1 Zone X.** This zone shall be maintained in accordance with the following:
- 1. Any ground cover shall be noncombustible, such as gravel, pavers or bare soil. Combustible ground covers such as bark and mulch shall not be permitted in this zone.
- 2. All vegetation shall be removed from this zone. New vegetation shall not be permitted within this zone.

**Exception:** Where approved by the enforcing agency, existing heritage trees and existing *fire smart vegetation* maintained in accordance with Section 402.4 shall be permitted adjacent to sides constructed in accordance with Section 503.

- 3. Fences, gates and arbors within Zone X shall be constructed with noncombustible materials. **Exception:** Fences constructed with combustible materials shall be permitted provided the structure is constructed in accordance with Section 503.
- 4. Detached accessory structures are not permitted in this zone.
- 54. Storage of combustible material is prohibited in Zone X. A permanent sign shall be installed in each unenclosed underfloor area, stating the following: "Storage of combustible material is prohibited in this location."

### **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material where the structure is constructed in accordance with Section 503. The permanent sign shall not be required in unenclosed underfloor areas constructed in accordance with Section 503.
- 65. All exterior surfaces of buildings such as gutters, roofs and decks, and areas within Zone X shall be maintained free of accumulated combustible debris.
- **402.3.2 Zone Y.** Groundcover vegetation shall be maintained in accordance with Section 402.4.1.
  - 1. Groundcover vegetation shall be maintained in accordance with Section 402.4.1.
  - 2. Shrubs shall be maintained in accordance with Section 402.4.2.
  - 3. All trees shall be removed from this area.

#### **Exceptions:**

1. Trees trimmed and maintained in accordance with shrubs requirements provided in Section 402.4.2.

- 2. Existing heritage trees approved by the enforcing agency and maintained in accordance with Section 402.4.3, provided the side of the structure facing the heritage tree is constructed in accordance with Section 503.
- 4. All portions of fences, gates and arbors within 10 feet (3048 mm) from structure shall be con-structed with approved noncombustible materials.

## **Exception:**

- 1. Fences, gates and arbors with a total height not exceeding 5 feet (1524 mm) above the ground.
- 2. Fences constructed with combustible materials, provided the structure is con-structed in accordance with Section 503.
- 5. All detached accessory structures located within Zone Y shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Exterior openings on enclosed detached accessory structures located less than 20 feet (6096 mm) from a building containing habitable space shall be limited to the sides that are not facing the building. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

Exception: Detached accessory structures constructed with noncombustible or ignition-resistant material, not exceeding 200 square feet (11 m<sup>2</sup>) in floor area, where located not less than 20 feet (6096 mm) from buildings containing habitable spaces. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

6. Storage of combustible material is prohibited in Zone Y.

## **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material where the structure is constructed in accordance with Section 503. Storage of combustible material is permitted, where the side of the dwelling facing combustible material is constructed in accordance with Section 503.
  - **Commentary:** Combustible material can be any combustible item such as trash can, fire wood, etc.
- 7. All areas within Zone Y shall be maintained free of combustible debris.

#### 402.3.3 Zone Z.

- 1. Ground cover vegetation shall be maintained in accordance with Section 402.4.1.
- 2. Shrubs shall be maintained in accordance with Section 402.4.2.
- 3. Trees shall be maintained in accordance with Section 402.4.3.
- 4. A 10-foot (3048 mm) clearance around exposed wood piles shall be provided by noncombustible ground covering in all directions.

5. LP-gas containers or tanks located in Zone Z shall be in accordance with the International Fire Code. A 10 feet (3048 mm) clearance around LP-gas containers shall be provided by noncombustible ground covering in all directions.

6. All detached accessory structures located within Zone Z shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. *Defensible space* shall be provided around detached *accessory structures* in accordance with Section 402.3.1.

Exception: Detached accessory structures not exceeding 200 square feet (11 m<sup>2</sup>) in floor area where located not less than 30 feet (9144 mm) from buildings containing habit- able spaces on the same lot. *Defensible space* shall be provided around detached accessory structures in accordance with Section 402.3.1.

# IS-MHRRC 0-53 ICC 605 Section 402.3.2 Item 4 Exceptions

Proponent: Brad Douglas, American Wood Council

## Revise as follows:

Combine the 2 exceptions into one as follows:

## **Exceptions:**

- 1. Fences-Portions of fences, gates and arbors shall be permitted to be constructed of combustible materials where those combustible portions are located a distance from the side of the primary structure that is at least the height of that portion. With a total height not exceeding 5 feet (1524 mm) above the ground.
- 2. Fences constructed with combustible materials, provided the structure is constructed in accordance with Section 503.

#### Reason:

Why would a 5 feet high fence need to be constructed with noncombustible materials if it is 10 feet from the building (Exception 1) or the whole dwelling be required to be built in accordance with Section 503 if combustible materials are used (Exception 2)? I recommend a reasonable limit be set for combustible fences, gates, and arbors, especially given that a dead 5' tall bush can be located within 5 feet of the primary structure. Also, an arbor is not going to be 5' tall, so Exception 1 needs some adjustments. I would recommend combining the 2 exceptions into one.

Committee Action: Disapproved

## IS-MHRRC 0-54 ICC 605 Section 402.3.2 Item 5

Proponent: Brad Douglas, American Wood Council

#### Revise as follows:

All detached accessory structures located within Zone Y shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Exterior openings on enclosed detached accessory structures located less than 20 feet (6096 mm) from a building containing habitable space shall be limited to the sides that are not facing the building. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

#### Reason:

The requirement to maintain a Zone X defensible space around detached accessory structures doesn't seem warranted given that the standard is not trying to protect detached accessory structures. Recommend deletion of this sentence.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

Committee Modification: Delete Section 402.3.2 Item 5:

5 All detached accessory structures located within Zone Y shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Exterior openings on enclosed detached accessory structures located less than 20 feet (6096 mm) from a building containing habitable space shall be limited to the sides that are not facing the building. *Defensible space* shall be provided around detached accessory structures in accordance with Section 402.3.1.

Exception: Detached accessory structures constructed with noncombustible or ignition resistant material, not exceeding 200 square feet (11 m2) in floor area, where located not less than 20 feet (15 240 mm) from buildings containing habitable spaces. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

# IS-MHRRC 0-55 ICC 605 Section 402.3.2 Item 5 Exception

Proponent: Brad Douglas, American Wood Council

#### **Delete without Substitution:**

Exception: Detached accessory structures constructed with noncombustible or ignition resistant material, not exceeding 200 square feet (11 m2) in floor area, where located not less than 20 feet (6096 mm) from buildings containing habitable spaces. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

#### Reason:

I don't see what this exception adds beyond what is already permitted by reference to Section 301.2.2 in Item 5. If the detached accessory structure is built in accordance with 503, it can be within Zone X. Recommend deletion of this exception.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

# IS-MHRRC 0-56 ICC 605 Section 402.3.2 Item 5 Exception

**Proponent:** Mark Cofer, LP Building Solutions

#### Revise as follows:

- **402.3.2 Zone** Y **(5 to 30 feet).** Zone Y initiates after Zone X and extends to 30 feet (9144 mm) from the building. Zone Y shall be maintained in accordance with the following:
  - 5. All detached accessory structures located within Zone Y shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Exterior openings on enclosed detached accessory structures located less than 20 feet (6096 mm) from a building containing habitable space shall be limited to the sides that are not facing the building. *Defensible space* shall be provided around detached *accessory structures* in accordance with Section 402.3.1.

Exception: Detached *accessory structures* constructed with noncombustible, or-ignition- resistant material, or ASTM E2707 and ASTM E2957 compliant assemblies not exceeding 200 square feet (11 m<sup>2</sup>) in floor area, where located not less than 20 feet (6096 mm) from buildings containing habitable spaces. *Defensible space* shall be provided around detached *accessory structures* in accordance with Section 402.3.1.

#### Reason:

Committee Action: Disapproved

## IS-MHRRC 0-57

ICC 605 Sections 402.3.2, 402.3.3

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**402.3.2 Zone** Y (**5 to 30 feet**). Zone Y initiates after Zone X and extends to 30 feet (9144 mm) from the building. Zone Y shall be maintained in accordance with the following:

No changes to Items 1 through 4...

5. All detached accessory structures located within Zone Y shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Exterior openings on enclosed detached accessory structures located less than 20 feet (6096 mm) from a building containing habitable space shall be limited to the sides that are not facing the building. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

**Exception:** Detached accessory structures constructed with noncombustible or ignition-resistant material, not exceeding 200 square feet (11 m²) in floor area, where located not less than 20 feet (6096 mm) from buildings containing habitable spaces. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

- <u>6. Defensible space shall be provided around detached accessory structures in accordance</u> with Section 402.3.1.
- 6. 7. Storage of combustible material is prohibited on Zone Y.
- 7. 8. All areas within Zone Y shall be maintained free of combustible debris.

**402.3.3 Zone Z (30 to 150 feet).** Zone Z initiates after Zone Y and extends the distance specified in Section 402.3.4. Zone Z shall be maintained in accordance with the following:

No changes to Items 1 through 5...

6. All detached accessory structures located within Zone Z shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

**Exception:** Detached accessory structures not exceeding 200 square feet (11 m<sup>2</sup>) in floor area where located not less than 30 feet (9144 mm) from buildings containing habitable spaces on the same lot. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

7. <u>Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.</u>

#### Reason:

This proposal revises similar requirements in Section 402.3.2 Item 5 and 402.3.3 Item 6.

There are two requirements in Section 402.3.2 Item 5, one is construction, and the other is defensible space. They are not both exempted in the exception. Only the requirement for construction is to be included in the exception.

Therefore, the requirement to create a defensible space is deleted from Item 5 and the exception to Item 5 and added as Item 6. The requirement to provide defensible space applies to the structure complying with Item 5 and the structure complying with the exception.

This simplifies the requirements and clarifies that all structures must comply.

The same revision is repeated in Section 402.3.3 for Item 6.

Committee Action: Disapproved

# IS-MHRRC 0-58 ICC 605 Section 402.3.3 Item 6

Proponent: Brad Douglas, American Wood Council

## Revise as follows:

6. All detached accessory structures located within Zone Z shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

#### Reason:

The requirement to maintain a Zone X defensible space around detached accessory structures doesn't seem warranted given that the standard is not trying to protect detached accessory structures. Recommend deletion of this sentence.

Committee Action: Disapproved

# **IS-MHRRC 0-59**

## ICC 605 Section 402.3.3 Item 6 Exception

**Proponent:** Brad Douglas, American Wood Council

#### **Delete without Substitution:**

Exception: Detached accessory structures not exceeding 200 square feet (11 m2) in floor area where located not less than 30 feet (9144 mm) from buildings containing habitable spaces on the same lot. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

#### Reason:

I don't see what this exception adds beyond what is already permitted by reference to Section 301.2.2 in Item 6. If the detached accessory structure is built in accordance with 503, it can be within Zone X. Recommend deletion of this exception.

**Committee Action:** Disapproved

# IS-MHRRC 0-60 ICC 605 Section 402.2.1

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**402.2.1 Minimum defensible space.** The minimum required defensible space distances based on fire hazard severity shall be in accordance with Table 402.2. Where the provided defensible space is equal to the minimum defensible space distance, those sides of building shall be constructed in accordance with <u>Section 504</u> <u>Table 301.2 to resist radiant heat and ember exposures.</u>

Where the provided defensible space for unenclosed accessory structure is equal to the minimum defensible space distance, unenclosed accessory structures shall be constructed in accordance with Table 301.2.1 to resist radiant heat and ember exposures.

#### Reason:

It's unclear if Table 402.2 applies to all structures or only structures other than unenclosed accessory structures. It's confusing in its application. No specific change is proposed in this comment because of the confusion as to what it is supposed to apply to, but clarification by the committee is necessary.

A second issue is with the end of the first paragraph, "with Table 301.2 to resist radiant heat and ember exposures". This portion sends you to Table 301.2, which then sends you to Section 504. That process is clunky at best so it's suggested to just point to Section 504.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

#### Revise as follows:

**402.2.1 Minimum defensible space.** The minimum required *defensible space* distances based on fire hazard severity shall be in accordance with Table 402.2. Where the provided *defensible space* is equal to the minimum *defensible space* distance, those sides of <u>dwelling</u> building shall be constructed in accordance with Table 301.2 to resist radiant heat and ember exposures.

Where the provided *defensible space* for *unenclosed accessory structure* is equal to the minimum *defensible space* distance, *unenclosed accessory structures* shall be constructed in accordance with Table 301.2.1 to resist radiant heat and ember exposures.

# IS-MHRRC 0-61 ICC 605 Section 402.2.3

Proponent: Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**402.2.3. Lot-limited defensible space.** Where the property does not allow for the required minimum defensible space distances along the entire length of any <u>side of the structure</u>'s exposure, the provided defensible space shall extend to the lot line. In such cases, those sides of the building with lot-limited defensible space distances shall be constructed in accordance with Table 301.2 to resist against direct flame contact, radiant heat and ember exposures.

Where the required minimum defensible space for an unenclosed attached accessory structure cannot be provided on the lot, the provided defensible space shall extend to the lot line and the unenclosed attached accessory structure shall be constructed in accordance with Table 301.2.1 to resist against direct flame contact, radiant heat and ember exposures.

#### Reason:

What is described in the text doesn't match the figures showing a sides exposure in Figure 301.2. The figure shows a sides exposure extends out at a 45-degree angle from the buildings corner, but the text refers to the exposure only along the entire length. Adding "side of the" in the text refers to the whole exposure area more clearly.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

**Committee Modification:** 

#### Revise as follows:

**402.2.2 Expanded defensible space.** Where the expanded *defensible space* distances in Table 402.2 are provided, those sides the side of building shall be constructed in accordance with Section 505Table 301.2 to resist against ember exposure.

Where the provided defensible space of unenclosed accessory structure is 1.5 times the mini- mum defensible space distances of Table 402.2, the unenclosed accessory structures shall be con-structed in accordance with Table 301.2.1 to resist against ember exposure.

**402.2.3. Lot-limited defensible space.** Where the property does not allow for the required minimum defensible space distances along the entire length of any <u>side of the</u> structure's exposure, the provided defensible space shall extend to the lot line.

In such cases, those sides of the building with lot-limited defensible space distances shall be constructed in accordance with Section 503 Table 301.2 to resist against direct flame contact, radiant heat and ember exposures.

Where the required minimum defensible space for an unenclosed attached accessory structure cannot be provided on the lot, the provided defensible space shall extend to the lot line and the unenclosed attached accessory structure shall be constructed in accordance with Table 301.2.1 to resist against direct flame contact, radiant heat and ember exposures.

# IS-MHRRC 0-62 ICC 605 Section 402.2.4.1

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**402.2.4.1** Contents. Landscape plans shall be drawn to scale, and shall contain the following:

- 1. Delineation of the horizontal projection of all buildings and structures on the lot.
- 2. Labels identifying the assigned WHA construction classification for each side of buildings and structures.
- 3. Delineation of fuel <u>modification</u> management zones, as measured from the horizontal projection of buildings or structures.
- 4. Identification of location and species of existing vegetation to remain and proposed new vegetation.
- 5. A plant legend with both botanical and common names, and identification of all plant material symbols.
- 6. Identification of location and species of ground coverings within Zone X the 5-foot (1524 mm) zone.
- 7. Identification of ground slope within the provided defensible space on each side.

#### Reason:

In paragraph 3 it used the term fuel management zone, which I believe should be fuel modification zone. Fuel management zones were not found elsewhere in the standard.

In paragraph 6 it referred to "the 5-foot zone", which isn't referenced elsewhere in the standard. It should be referring to Zone X.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

#### Revise as follows:

**402.2.4.1Contents.** Landscape plans shall be drawn to scale, and shall contain the following:

- 1. Delineation of the horizontal projection of all buildings and structures on the lot.
- 2. Labels identifying Identification of the wildfire hazard area assigned WHA construction classification for each side of buildings and

structures.

- 3. Delineation of fuel management zones, as measured from the horizontal projection of buildings or structures.
- 4. Identification of location and species of existing vegetation to remain and proposed new vegetation.
- 5. A plant legend with both botanical and common names, and identification of all plant material symbols.
- 6. Identification of <a href="https://hardscape.ground-treatments">hardscape, ground treatments</a> <a href="https://hardscape.ground-treatments">location</a> and species of <a href="https://ground-treatments">ground coverings</a> <a href="https://www.ueens.com">vegetation</a> within <a href="https://www.ueens.com">the 5-foot (1524 mm)</a> <a href="https://www.ueens.com">zone</a> <a href="https://www.ueens.com">Zone</a> <a href="https://www.ueens.com">X</a>.
- 7. Identification of ground *slope* within the provided *defensible space* on each side.

# IS-MHRRC 0-63 ICC 605 Section 402.2.4.2

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

## Revise as follows:

**402.2.4.2 Defensible space sign**. Provided defensible space area shall be identified by a permanent sign approved by the enforcing agency, placed next to, or adjacent to, a permanent fixture such as exterior water faucet, exterior water meter or electrical box. The sign shall identify fire hazard severity, provided defensible space distances, WHA construction classification, ground slope on each side and the applicable edition of this standard.

#### Reason:

It's unnecessary to include the ground slope on a sign being placed where you could simply look down and see the ground slopes and by how much. The grade is not something that will be easily or frequently changed. Additionally the commentary section of this that suggest a sign example should use the direction North, South, East and West as opposed to Side A, etc. The cardinal directions will never change, whereas a reference like side A will be easily misunderstood years or even months later.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

## **Committee Modification:**

## Revise as follows:

**402.2.4.2 Defensible space sign.** Provided *defensible space* area shall be identified by a permanent sign approved by the *enforcing agency*, placed next to, or adjacent to, a permanent fixture such as <u>an</u> exterior water faucet, exterior water meter or electrical box. The sign shall identify fire hazard severity, provided *defensible space* distances, *WHA* wildfire hazard area construction classification, ground *slope* on each side and the applicable edition of this standard.

# IS-MHRRC 0-64 ICC 605 Section 402.3.2

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**402.3.2 Zone** Y (**5 to 30 feet**). Zone Y initiates after Zone X and extends to 30 feet (9144 mm) from the building. Zone Y shall be maintained in accordance with the following:

- 1. Groundcover vegetation shall be maintained in accordance with Section 402.4.1.
- 2. Shrubs shall be maintained in accordance with Section 402.4.2.
- 3. All trees shall be removed from this area.

# **Exceptions:**

- 1. Trees trimmed and maintained in accordance with shrubs requirements provided in Section 402.4.2.
- 2. Existing heritage trees approved by the enforcing agency and maintained in accordance with Section 402.4.3, provided the <u>side of the</u> structure <u>facing the heritage tree</u> is constructed in accordance with Section 503.

#### Reason:

In exception 2 the added text is clarifying that the side facing the existing heritage tree requires more robust construction. Whereas written the mere existence of a heritage tree with Zone Y would have required the whole structure to be upgraded.

Committee Action: Approved as Submitted

# IS-MHRRC 0-65 ICC 605 Section 402.3.2

Proponent: Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

402.3.2 Zone Y (5 to 30 feet).

6. Storage of combustible material is prohibited in Zone Y.

# **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material <u>contained in a building</u> where the structure is constructed in accordance with Section 503.

#### Reason:

The new text for exception 2 to paragraph 6 clarifies that the stored combustible materials has to be contained in a building constructed in accordance with 503.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

**Committee Modification:** 

#### Revise as follows:

6. Storage of combustible material is prohibited in Zone Y.

## **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material where the structure is constructed in accordance with Section 503. Storage of combustible material is permitted, where the side of the dwelling facing combustible material is constructed in accordance with Section 503.

# IS-MHRRC 0-66

ICC 605 Section 402.3.1, Table 402.3.1

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

## Revise and relocate as follows:

<u>402.3.1</u> <u>402.3.4</u> **Required defensible space zones**. Required defensible space zones based on defensible space distances and fire hazard severity in Table 402.2 shall be in accordance with Tables 402.3.4.1, <u>402.3.4.2</u> and <u>402.3.4.3</u>.

<u>Table 402.3.1 TABLE 402.3.4.1.</u> MINIMUM DEFENSIBLE SPACE DISTANCES AND CORRESPONDING ZONES

**Reason:** This section would be easier to follow if it started with this section, so it's suggested to move it to the beginning, and renumber remaining sections accordingly. And then throughout the remaining sections of 402.3, all references to the dimensions of defensible space should point to this table. Since most sections just give the dimensions as an alternate option this table and its scoping section could be deleted as well.

Committee Action: Disapproved

# IS-MHRRC 0-67

ICC 605 Table 402.3.4.2, Table 402.3.4.3

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

## Delete in its entirety the following tables:

TABLE 402.3.4.2. LOT-LIMITED DEFENSIBLE SPACE DISTANCES AND CORRESPONDING ZONES

& TABLE 402.3.4.3. EXPANDED DEFENSIBLE SPACE DISTANCES AND CORRESPONDING ZONES

**Reason**: Following a CTRL F search of the document I couldn't find where either of these tables was referenced, so its suggested to delete them since they are not used in the standard.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 2 recommendation.

## **Committee Modification:**

Delete Section 402.3.4 and replace Sections 402.3.1 through 402.3.3 with the following:

402.3.1 Zone X. Zone X extends from the face of the exterior walls to the lesser of 5 feet from the outermost perimeter of all projections or to the lot-line. This zone shall be maintained in accordance with the following:

402.3.2 Zone Y. Zone Y extends from Zone X to the lesser of 25 ft from Zone X or to the lot-line. Zone Y shall be maintained in accordance with the following:

<u>402.3.3</u> Zone Z. Zone Z extends from Zone Y to the lesser of the distance specified in table 402.2 or to the lot-line. Zone Z shall be maintained in accordance with the following:

# IS-MHRRC 0-68 ICC 605 Section 402.4.2

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**402.4.2 Shrubs**. All shrubs within the defensible space shall comply with the following:

- 1. Shrubs located in Zone Y shall not exceed 5 feet (1524 mm) in height.
- 2. Groupings of shrubs are limited to a maximum aggregate diameter of 10 feet (3048 mm).
- 3. Shrub groupings <u>crowns</u> shall be separated from other groupings and structures in accordance with Table 402.4.3.
- 4. Shrubs shall be pruned to remove limbs to a height of 12 inches (305 mm) above the ground surface or 25 percent of the total crown height, whichever is less.
- 5. No combustible material or debris allowed under the shrub canopy.
- 6. Shrubs shall be maintained in a healthy state, by regular and appropriate watering and removal of dead material.
- 7. Shrubs shall be separated from combustible structures such as fences and detached accessory structures a minimum of 5 feet (1524 mm).

**Reason**: Adding the word crowns in paragraph 2 clarifies where groupings are measured to. Alternately if the committee prefers a different point, such as stems it could be further clarified.

In paragraph 4, the last portion of the sentence is struck because its unclear, and if I calculated it as intended it's unnecessary. It's a difference of 1-2 inches.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 2 recommendation.

#### **Committee Modification:**

#### **Revise as follows:**

**402.4.2 Shrubs**. All shrubs within the defensible space shall comply with the following:

- 1. Shrubs located in Zone Y shall not exceed 5 feet (1524 mm) in height.
- 2. Groupings of shrubs are limited to a maximum aggregate diameter of 10 feet (3048 mm).
- 3. Shrub groupings <u>crowns</u> shall be separated from other groupings and structures in accordance with Table 402.4.3.
- 4. Shrubs shall be pruned to remove limbs to a height of 12 inches (305)

mm) above the ground surface or 25 percent of the total crown height, whichever is less.

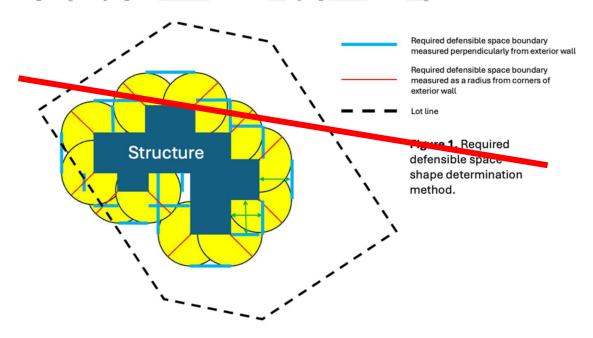
Exception: Shrubs with height less than 2 ft shall be pruned to a level that allows removal of combustible debris or litter.

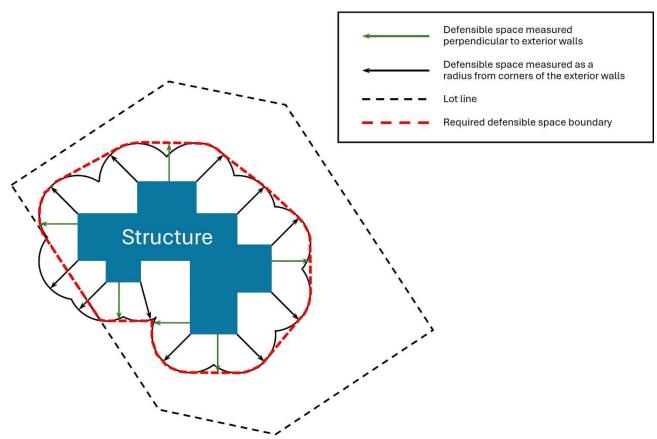
- 5. No combustible material or debris allowed under the shrub canopy.
- 6. Shrubs shall be maintained in a healthy state, by regular and appropriate watering and removal of dead material.
- 7. Shrubs shall be separated from combustible structures such as fences and detached accessory structures a minimum of 5 feet (1524 mm).

# IS-MHRRC 0-69 ICC 605 Commentary Figure 402.4.3

Proponent: Kevin Scott, KH Scott & Associates LLC

Replace the graphic and the notes in the graphic as follows:





❖ COMMENTARY FIGURE 402.4.3 – Required Defensible Space Determination Method

#### Reason:

Commentary Figure 402.4.3 confusing. The end goal for the code user is to show the actual perimeter of the required defensible space, but that is not shown. This proposal revises the graphic to resolve this issue.

The current figure contains many blue lines to indicate measurement from walls which have no impact on the actual defensible space boundary. Additionally, there is a white portion in the center of the graphic which seems to imply that this space is not included in the defensible space.

The proposed graphic shows the method of measurement from exterior walls (green arrows) which are critical in determining the defensible space. It also shows the method of measurement from the corners of the building (black arrow).

The proposed graphic also shows the boundary of the required defensible space when all of the measurements are combined (red dashed line), and indicates where the defensible space does not extend beyond the property line.

Committee Action: Approved as Submitted

# IS-MHRRC 0-70 ICC 605 Chapter 4

**Proponent:** Larry Stevig, State Farm

## Revise as follows:

- 1. In 401.2, should the reference to "minimum" requirements be changed to "enhanced" requirements?
- 2. In addition to Defensible Space, the IWUI Code requires buildings to have sprinkler systems and spark arrestors. Was this considered by the Committee? Why would these not be included in ICC605 if it is an "enhanced" standard?
- 3. In addition to the references to Table 301.2 in sections 402.2.1 and 402.2.2 and 402.2.3, consider adding <u>Class 2</u>, <u>Class 3</u>, and <u>Class 1</u> respectively to improve ease of use.
- 4. In Section 402.2.4, do the landscaping requirements not apply when a Landscape Plan is not required by the Enforcing Agency?
- 5. In Figure 402.3, Zone X and Zone Y are reversed in the uphill (left) portion of the figure.
- 6. No objection to the requirements, but what is the basis for horizontal separation distances of plant canopies as required in Table 402.4.3? Consider including that information in Commentary.

#### Reason:

**Committee Action:** Disapproved (No action taken on Items 1-5, Item 6 will be added)

**Committee Reason:** Based on the Task Group 2 recommendation.

**Committee Note:** In response to Item 6 add a commentary referencing Regulation 14 CCR 1299 (Gilmer, M 1994, California wildfire landscaping)

# Chapter 5 NEW BUILDING CONSTRUCTION

# IS-MHRRC 0-71 ICC 605 Section 502.1

Proponent: Jeffrey Munsterteiger, National Association of Homebuilders

## Revise as follows:

**502.1 General**. Materials and assemblies shall comply with the applicable requirements of Sections 502.2 through 502.3. Intersections of different wildfire hazard area (WHA) construction classes or of different materials shall comply with the applicable requirements of Section 502.4. Ember protection of exterior walls shall comply with 502.5.

## Reason:

Nothing in the section scoped section 502.5, so a scoping sentence is added here.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Revise as follows:

**502.1 General**. Materials and assemblies shall comply with the applicable requirements of Sections 502.2 through 502.3. Intersections of different wildfire hazard area (WHA) construction classes or of different materials shall comply with the applicable requirements of Section 502.4. Minimum required ember protection shall comply with 502.5.

# **IS-MHRRC 0-72**

ICC 605 Sections 502.2.1, 502.2.3, 503.1.1, 503.4.3, 503.5.3.2, 503.7.1, 503.7.4, 504.1.1

Proponent: Kelly Nicolello, UL Solutions

Revise as follows:

**502.2.1 Noncombustible material.** Materials required to be noncombustible shall be tested in accordance with ASTM E136 and pass the test. Alternately, materials required to be noncombustible shall be tested in accordance with ASTM E2652 using the acceptance criteria prescribed by ASTM E136.

**Exception:** Materials having a structural base of noncombustible material as determined in accordance with ASTM E136, or with ASTM E2652 using the acceptance criteria prescribed by ASTM E136, with a surfacing of not more than 0.125 inch (3.18 mm) in thickness having a flame spread index not greater than 50 when tested or listed in accordance with ASTM E84 or UL 723 shall be acceptable as noncombustible.

**502.2.3 Ignition-resistant building material.** Material shall be <u>listed and tested</u> on the front and back faces in accordance with the extended ASTM E84 or UL 723 test, for a total test period of 30 minutes, or with the ASTM E2768 test. The materials shall bear identification showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.18 mm). The materials, when <u>listed and tested</u> in accordance with the <del>test</del> procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, shall comply with Sections 503.2.3.1 through 503.2.3.3.

**Exception:** Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019-inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149-inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

# 503.1 Roof assembly.

**503.1.1.Rating.** Roofs shall have a Class A rated roof assembly when tested <u>listed</u> in accordance with ASTM E108 or UL 790. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

- **503.4.3** Coverings. Exterior wall coverings shall be constructed using one of the following methods:
  - 1. Components of the exterior wall coverings shall be of noncombustible material in accordance with Section 502.2.1 Exterior surface of exterior sheathing shall have a flame-spread index not more than 25. Gaps or openings at base of wall covering (such as a rainscreen) shall be protected with noncombustible corrosion-resistant mesh with openings a minimum of 1/16 inch (1.6 mm) and not larger than 1/8 inch (3.2 mm) or be designed and approved to prevent flame or ember penetration into the cavity.

**Exception:** Wall coverings where the water-resistive barrier is the only combustible com- ponent and has water-resistive barriers having a peak heat release rate of less than 150 Kw/m<sup>2</sup>, a total heat release of less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723.

- 2. Exterior wall assemblies that are tested listed in accordance with and comply with the acceptance criteria of NFPA 285.
- 403 **Ventilation opening locations.** Ventilation openings shall be located in accordance with the following:
  - 1. Attic ventilation openings located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas shall comply with the performance requirements in Section 503.5.3.1 and shall have a minimum 1-hour fire-resistance rating when tested listed in accordance with ASTM E119 or UL 263.
  - 2. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines or shall have a minimum 1-hour fire-resistance rating when tested-listed in accordance with ASTM E119 or UL 263.
  - 3. Underfloor ventilation openings shall be located as close to grade as practical.
    - **503.7.1 Protection.** Except as provided in Sections 503.7.2, 503.7.3, 503.7.4 and 503.7.5, joints and intersections of different construction elements and joints within construction elements shall be protected by an approved listed fire-resistant joint system designed to resist the passage of fire for a period of not less than 1 hour. Fire-resistant joint systems shall be tested listed in accordance with the requirements of either ASTM E1966 or

UL 2079.

- **503.7.4 Control joints.** Where provided, control joints shall not exceed a maximum width of 0.625 inch (15.9 mm) and shall achieve a 1-hour fire-resistance rating when tested listed as part of an assembly in accordance with ASTM E119 or UL 263.
- **504.1.1 Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested <u>listed</u> in accordance with ASTM E108 or UL 790, or an approved a <u>listed</u> noncombustible roof covering. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire stopped to preclude entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

## Reason:

The terms "tested" and "approved" as used within the proposed document, implies multiple meanings. There are a number of uses of the terms that actually imply a listing requirement.

Where the intent indicated a listing requirement, we have proposed using the term listed or listed and labeled as appropriate in the document.

It is important to note that just because an item is tested, it does not indicate if it has passed or not. There were few requirements stating that it had to pass the testing. Changing the term to listed ensures that it only applies to items that have passed the testing and further ensures the product is not materially changed post listing by validation through follow-up services. Testing, alone, does not imply that. Some manufactures have been known to market their products as being tested but with no validation of their marketing claims or whether or not they passed the testing.

This revision is consistent with language from the IBC relating to NFPA 285. The term "approved" is defined correctly. However, when a product is approved the liability of the approval moves to the code official's organization. The listing requirement prevents that from happening and the liability lies with the manufacturer and the listing organization. The term "Approved Agency," "Listed" and "Labeled" are added to the definitions using the definitions stated in the IFC.

Committee Action: Disapproved

Committee Reason: Based on the Task Group 3 recommendation.

Section 502.2.1 currently lines up with the IBC.

Sections 502.2.3 and 503.1.1 currently line up with the IWUIC.

The revision to Section 503.4.3 would complicate approval.

Sections 503.7.1, 503.7.4, 504.1.1 - There may not be listed systems for all situations,

which would cause problems with applications. Better to leave it as "approved".

# IS-MHRRC 0-73 ICC 605 Section 502.2.3

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Add the following sentence to the end of Section 502.2.3: "<u>Fire-retardant-treated wood</u> complying with Section 502.2.2 shall be considered an ignition-resistant building material."

## Reason:

The proposed additional sentence clarifies that fire-retardant-treated wood is considered an ignition-resistant building material.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Revise as follows:

502.2.2 Fire-retardant-treated wood. Fire-retardant-treated wood shall be qualified in accordance with Section 502.2.3 and labeled with the words "No increase in the listed classification when subjected to the Standard Rain Test" Identified for exterior use and meeting the requirements of Section R302.15 of the International Residential Code.

**502.2.3 Ignition-resistant building material.** Material Ignition-resistant building materials shall be tested on the front and back faces in accordance with the extended ASTM E84 or the extended UL 723 test, for a total test period of 30 minutes, or in accordance with the ASTM E2768 test. The materials shall bear identification showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.18 mm). The materials, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or in accordance with ASTM E2768, shall comply with Sections 503.2.3.1 through 503.2.3.3.

**Exception:** Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019-inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149-inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

- **502.2.3.1 Flame spread.** The material shall exhibit a flame spread index not exceeding 25.
- **502.2.3.2 Flame front.** The material shall exhibit a flame front that does not progress more than 10 feet 6 inches (3200 mm) beyond the centerline of the burner at any time during the test.
- **502.2.3.3 Weathering.** Ignition-resistant building materials shall maintain their performance in accordance with this section under conditions of use. The materials shall meet the performance requirements for after exposure to weathering (including exposure to temperature, moisture and ultraviolet radiation) contained in accordance with Sections 503.1.3.3.1 through 503.1.3.3.3, as applicable to the materials and conditions of use.
  - 502.2.3.3.1 Evaluation requirements for weathering. Fire-retardant-treated wood, wood-plastic composite materials and plastic lumber materials Ignition-resistant building materials shall be evaluated after weathering in accordance with Method A, "Test Method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing," in ASTM D2898. No increase in the listed classification shall be permitted where the material has been exposed to the Standard Rain Test.

# IS-MHRRC 0-74 ICC 605 Section 502.2.3

Proponent: Milad Shabanian, IBHS

## Revise as follows:

**502.2.3 Ignition-resistant building material.** Material shall be tested on the front and back faces in accordance with the extended ASTM E84 or UL 723 test, for a total test period of 30 minutes, or with the ASTM E2768 test. The materials shall bear identification showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.2 mm). The materials, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, shall comply with Sections 503.2.3.1 through 503.2.3.3.

**Exception:** Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019-inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149-inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

**502.2.3.1 Flame spread.** The material shall exhibit a flame spread index not exceeding 25. The certification of the flame spread index shall be accompanied by a test report stating that all portions of the test specimen ahead of the flame front remained in position during the test in accordance with ASTM E84 or UL 723. Materials or products which melt, drip or delaminate to the extent that the continuity of the flame front is destroyed are not permitted.

#### Reason:

This is to align scope of E84 and UL 723 with ASTM E2652 which excludes materials that melt and drip.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Revise as follows:

502.2.3.1 Ignition-resistant building material. Material shall be tested on the front and back faces in accordance with the extended ASTM E84 or extended UL 723 test, for a total test period of 30 minutes, or with the ASTM E2768 test. The materials shall bear identification showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.2 mm). The materials, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, shall comply with Sections 503.2.3.1 through 503.2.3.3.

Exception: Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019-inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149-inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

502.2.3.2 Flame spread. The material shall exhibit a flame spread index not exceeding 25. The certification of the flame spread index shall be accompanied by a test report or other supporting documentation from an approved agency stating that all portions of the test specimen ahead of the flame front remained in position during the test in accordance with ASTM E2768, extended ASTM E84, or extended UL 723. Materials or products which melt, drip or delaminate to the extent that the continuity of the flame front is destroyed are not permitted.

# IS-MHRRC 0-75 ICC 605 Section 502.2.3

Proponent: Mark Cofer, LP Building Solutions

# Revise as follows:

**502.2.3 Ignition-resistant building material.** Material shall be tested on the front and back from the exterior side faces in accordance with the extended ASTM E84 or UL 723 test, for a total test period of 30 minutes, or with the ASTM E2768 test. The materials shall bear identification showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.18 mm). The materials, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, shall comply with Sections 503.2.3.1 through 503.2.3.3.

#### Reason:

Committee Action: Disapproved

# IS-MHRRC 0-76 ICC 605 Section 502.2.3.3

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

# Revise as follows:

**502.2.3.3 Weathering.** Ignition-resistant building materials shall maintain their performance in accordance with this section under conditions of use. The materials shall meet the performance requirements for weathering (including exposure to temperature, moisture and ultraviolet radiation) contained in Sections <u>503.2.3.3.1</u> <u>503.1.3.3.1</u> through <u>503.2.3.3.3</u> <u>503.1.3.3.3</u>, as applicable to the materials and conditions of use.

## Reason:

Correct the reference to subsections.

Committee Action: Approved as Submitted

# IS-MHRRC 0-77 ICC 605 Section 502.2.3.3.1

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

**502.2.3.3.1** Evaluation requirements for weathering. Fire-retardant-treated wood, wood-plastic Wood-plastic composite materials and plastic lumber materials shall be evaluated after weathering in accordance with Method A, "Test Method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing," in ASTM D2898.

#### Reason:

Fire-retardant-treated wood should not be included in this weathering requirement. Section 502.2.2 addresses fire-retardant-treated wood and requires compliance with IRC Section R302.15 which already includes a weathering requirement for fire-retardant-treated wood.

Section 502.2.3.3 only addresses ignition-resistant wood. The inclusion of fire-retardant-treated wood is inappropriate in this subsection.

Committee Action: Disapproved

# IS-MHRRC 0-78 ICC 605 Section 502.3.3.1

Proponent: Milad Shabanian, IBHS

## Revise as follows:

**502.2.3.3.1 Evaluation requirements for weathering.** <u>Ignition resistant building materials such as coated wood materials</u> <u>Fire-retardant-treated wood</u>, wood-plastic composite materials, and plastic lumber materials shall be evaluated after weathering in accordance with Method A, "Test Method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing," in ASTM D2898.

#### Reason:

This revision aims to resolve an existing issue in other WUI codes concerning coated wood materials and clarify Section 502.2.3.3.1. The fire-retardant-treated wood (FRTW) requirements outlined in the IBC, as referenced in Section 502.2.2, do not align with the purpose of Section 502.2.3.3.1, which pertains to "ignition-resistant building materials." Therefore, referencing FRTW in this section is inappropriate.

**Committee Action:** Disapproved

# IS-MHRRC 0-79 ICC 605 Section 502.3.1

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Section 502.3.1: Items 2 and 3 of this section reference sections that do not exist within the ICC-605 standard (they are intended to reference sections within the IBC). Since it will be Ne essary to reference the IBC anyway, I propose simplifying this section to use language similar to IRC Section R302.3.2. For example, suggest replacing all of Section 502.3.1 with the following language: "Where this standard requires fire-resistance-rated construction, the rating of building elements, components or assemblies from the exterior side shall be based on testing in accordance with ASTM E119 or UL 263, or an analytical method in accordance with Section 703.2.2 of the International Building Code. Fire-resistance-rated log wall construction in accordance with Section 303 of ICC 400 shall be permitted."

#### Reason:

(See above)

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Revise as follows:

**502.3.1 Fire-resistance-rated construction.** Where this standard requires fire-resistance-rated construction, the rating of building elements, components or assemblies from the exterior side shall be determined by the test procedures set forth in ASTM E119 or UL 263 or an analytical method in accordance with Section 703.2.2 of the International Building Code. Fire-resistance-rated log wall construction in accordance with Section 303 of ICC 400 shall be permitted.

# IS-MHRRC 0-80 ICC 605 Section 502.4

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

Revise as follows:

502.4 Intersections.

**502.4.1 Intersection of different Wildfire Hazard Area (WHA) International Wildland-Urban Interface Code construction classes.** The intersection of different Wildfire Hazard Area (WHA) International Wildland-Urban Interface Code construction classes, as identified in Section 301, shall be protected with materials compliant with the more stringent class.

502.4.2 Intersection of different construction elements within the same Wildfire Hazard Area (WHA) International Wildland-Urban Interface Code construction class. The intersection of different construction elements within the same Wildfire Hazard Area (WHA) International Wildland-Urban Interface Code Construction class shall conform to the requirements listed within each Wildfire Hazard Area (WHA) International Wildland-Urban Interface Code Construction classification section.

#### Reason:

All occurrences of "IWUIC construction class" need to become "Wildfire Hazard Area (WHA) construction class" throughout. As written there is no text that sends the user to the IWUIC for classification.

Committee Action: Approved as Submitted

# IS-MHRRC 0-81 ICC 605 Section 502.4

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Section 502.4: Replace the words "International Wildland-Urban Interface Code construction classes" with the words "wildfire hazard area (WHA) construction classes" for consistency with terminology agreed upon by the committee. This occurs in four locations within 502.4.1.

#### Reason:

(See above)

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Revise as follows:

**Section 502.4**: Replace the words "International Wildland-Urban Interface Code construction elasses" with the words "wildfire hazard area (WHA) construction classes" for consistency with terminology agreed upon by the committee. This occurs in four locations within 502.4.1.

# IS-MHRRC 0-82 ICC 605 Section 502.4

Proponent: Milad Shabanian, IBHS

Revise as follows:

**502.4 Intersections** 

# 502.4.1 Intersection of different International Wildland-Urban Interface Code WHA construction classes

**502.4.1.1** The intersection of different International Wildland-Urban Interface Code WHA construction classes, as identified in section 301, shall be protected with materials compliant with the more stringent class.

# 502.4.2 Intersection of different construction elements within the same <del>International Wildland-Urban Interface Code</del> <u>WHA</u> construction class

**502.4.2.1** The intersection of different construction elements within the same International Wildland-Urban Interface Code WHA construction class shall conform to the requirements listed within each International Wildland-Urban Interface Code WHA construction classification section.

#### Reason:

Based on committee's final decision IWUIC construction is changed to WHA to avoid possible confusion between IWUI code construction classifications and ICC 605 classes.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Modification:** 

Revise as follows:

502.4 Intersections.

# 502.4.1 Intersection of different International Wildland-Urban Interface Code Wildfire Hazard Area construction classes

502.4.1.1 The intersection of different International Wildland-Urban Interface Code Wildfire Hazard Area construction classes, as identified in section 301, shall be protected with materials compliant with the more stringent class.

# 502.4.2 Intersection of different construction elements within the same <del>International Wildland-Urban Interface Code</del> <u>Wildfire Hazard Area</u> construction class

**502.4.2.1** The intersection of different construction elements within the same International Wildland-Urban Interface Code Wildfire Hazard Area construction class shall conform to the requirements listed within each International Wildland-Urban Interface Code Wildfire Hazard Area construction classification section.

# IS-MHRRC 0-83 ICC 605 Section 502.4

Proponent: Brad Douglas, American Wood Council

Revise as follows:

502.4 Intersections.

502.4.1 Intersection of different International Wildland-Urban Interface Code construction Wildfire Hazard Area (WHA) classes. The intersection of different International Wildland-Urban Interface Code construction Wildfire Hazard Area (WHA) classes, as identified in Section 301, shall be protected with materials compliant with the more stringent class.

**502.4.2** Intersection of different construction elements within the same International Wildland- Urban Interface Code construction Wildfire Hazard Area (WHA) class. The intersection of different construction elements within the same International Wildland-Urban Interface Code construction—Wildfire Hazard Area (WHA) class shall conform to the requirements listed within each International Wildland-Urban Interface Code construction Wildfire Hazard Area (WHA) class.

#### Reason:

In 502.4 and its subsections, "International Wildland-Urban Interface Code construction class" was not changed consistent with the changes to use the new terminology used in the standard.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Revise as follows:

**502.4 Intersections.** 

<u>Wildfire Hazard Area (WHA) classes.</u> The intersection of different <u>International Wildland-Urban Interface Code construction</u> <u>Wildfire Hazard Area (WHA) classes</u>, as identified in Section 301, shall be protected with materials compliant with the more stringent class.

502.4.2 Intersection of different construction elements within the same International Wildland-Urban Interface Code construction Wildfire Hazard Area (WHA) class. The intersection of different construction elements within the same International Wildland-Urban Interface Code construction Wildfire Hazard Area (WHA) class shall conform to the requirements listed within each International Wildland-Urban Interface Code construction Wildfire Hazard Area (WHA) class.

# IS-MHRRC 0-84 ICC 605 Section 502.5

Proponent: Milad Shabanian, IBHS

## Revise as follows:

**502.5 Minimum Required Ember Protection.** All buildings located in WHA, shall be constructed with following requirements:

- **502.5.1 Exterior walls.** Exterior walls at the intersection with grade, balconies, decks, and roofs shall be protected from ignition caused by ember accumulation in accordance with one or more of the following:
- 1. Weather-exposed surface of noncombustible materials or metal flashing, extending minimum 6" vertically.
- 2. A minimum of 6" noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.
- **502.5.2** Gaps shall not exceed ½ inch (3.2 mm) between exterior doors and door openings, at the bottom, sides, and tops of doors.
- **502.5.3** Exterior doors and door frames shall resist ignition from the accumulation of embers.
- **502.5.4** Operable skylights shall be protected by noncombustible corrosion-resistant mesh not to exceed 1/16 inch.
- **502.5.5** Skylights shall be designed and constructed to resist ignition from the accumulation of embers and the glazing shall not be plastic.
- ❖ The roof-to-skylight interface creates an ember accumulation condition. If the skylight frame is combustible, or has exposed combustible materials (e.g. wood), metal flashing can be used to resist ignition from accumulated embers. Skylights are located through roofs which makes them nearly horizontal surfaces and thus potential ember accumulators. Dome skylights are typically made of plastic material which is susceptible to penetration from embers.

#### Reason:

This section needs more clarification.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Revise as follows:

#### Revise as follows:

- **502.4 Minimum Required Ember Protection.** <u>All buildings</u> <u>located in WHAWildfire Hazard Area</u>, shall be constructed with following requirements:
  - **502.4.1 Exterior walls. 1.** Exterior walls at the intersection with grade, balconies, decks, and roofs shall be protected from ignition caused by ember accumulation in accordance with one or more of the following:
  - 1. Weather-exposed surface of noncombustible materials or metal flashing, extending minimum 6" vertically.
  - 2. A minimum of 6" noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.
  - **502.4.2 2.** Gaps shall not exceed  $\frac{1}{8}$  inch (3.2 mm) between exterior doors and door openings, at the bottom, sides, and tops of doors.
  - **3.** Exterior doors and door frames shall resist ignition from the accumulation of embers.
  - **502.4.4 4.** Operable skylights shall be protected by noncombustible corrosion-resistant mesh not to exceed 1/16 inch.
  - **502.4.5 5.** Skylights shall be designed and constructed to resist ignition from the accumulation of embers and the glazing shall not be plastic.
  - ❖ The roof-to-skylight interface creates an ember accumulation condition. If the skylight frame is combustible, or has exposed combustible materials (e.g. wood), metal flashing can be used to resist ignition from accumulated embers. Skylights are located through roofs which makes them nearly horizontal surfaces and thus potential ember accumulators. Dome skylights are typically made of plastic material which is susceptible to penetration from embers.

# IS-MHRRC 0-85 ICC 605 Section 502.5.1

**Proponent:** Mark Cofer, LP Building Solutions

## Revise as follows:

**502.5.1** Exterior walls. Exterior walls at the intersection with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:

- 4. Weather-exposed surface of noncombustible materials, or fire-retardant-treated material, or ignition resistant material, or a solid material with a min. of ¾ inch (19 mm) nominal thickness, or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
- 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather exposed surfaces shall be maintained.

#### Reason:

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

## **Committee Modification:**

## Replace as follows:

502.5.1 Exterior walls. Noncombustible material or metal flashing, extending a minimum of 6 inches vertically, is required on the exterior side of exterior walls at intersections with the ground, decking, balconies, and roofs.

# IS-MHRRC 0-86

ICC 605 Sections 502.5.1, 505.4, 603.2.2.3

Proponent: Gary Ehrlich, NAHB

## Revise as follows:

**502.5.1 Exterior walls.** Exterior walls at the intersection with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:

- 1. Weather-exposed surface of noncombustible materials or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
- 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.

<u>Flashing provided in accordance with this section shall be lapped with flashing, counterflashing,</u> or water-resistive barriers as required by the International Residential Code

- **505.4 Exterior walls.** Exterior walls at the intersection with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:
  - 1. Weather-exposed surface of noncombustible materials or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
  - 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.

<u>Flashing provided in accordance with this section shall be lapped with flashing, counterflashing,</u> or water-resistive barriers as required by the International Residential Code

- **603.2.2.3. Replacement.** For exterior wall covering replacement for walls needing to comply with Section 505.4, the intersections with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:
  - 1. Weather-exposed surface of noncombustible materials or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
  - 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.

Flashing provided in accordance with this section shall be lapped with flashing, counterflashing, or water-resistive barriers as required by the International Residential Code

#### Reason:

Language is proposed to ensure any flashing added against the face of an exterior wall at a deck or other projection to comply with this section is properly integrated with flashing and water-resistive barrier materials provided in accordance with the IBC and IRC for moisture protection. Similar language was suggested by NAHB in a committee comment for proposal WUIC39-24 from IBHS and was approved by the IFC/IWUIC Committee at the recent Committee Action Hearing #2.

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 3 recommendation.

# IS-MHRRC 0-87 ICC 605 Section 502.5.3

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

#### **Delete without Substitution:**

**502.5.3.** Exterior doors. Exterior doors and door frames shall resist ignition from the accumulation of embers.

#### Reason:

This sentence would mean many things to different people. It seems to be unnecessary because exterior doors are addressed separately in each of the sections below for Class 1, 2, & 3 WHA. Therefore, its suggested to delete it in its entirety.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

#### **Committee Modification:**

#### Revise as follows:

**502.5.2** Gaps shall not exceed ½ inch (3.2 mm) between exterior elements doors and door openings, at the bottom, sides, and tops of doors.

**502.5.3** Exterior doors and door frames shall resist ignition from the accumulation of embers.

**502.5.4** Operable skylights fenestrations shall be protected by noncombustible corrosion-resistant mesh not to exceed 1/16 inch. (Make sure language in 88 is captured.)

**502.5.5** – addressed by 89

# IS-MHRRC 0-88 ICC 605 Section 502.5.4

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**502.5.4. 502.5.4 Operable skylights.** Operable skylights shall be protected by noncombustible corrosion-resistant mesh with openings not to exceed exceeding 1/16 inch (1.6 mm).

#### Reason:

This section is revised to specify that it is the openings in the mesh which cannot exceed 1/16 inch. Metric equivalent also added.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation.

# IS-MHRRC 0-89 ICC 605 Section 502.5.5

Proponent: Kevin Scott, KH Scott & Associates LLC

#### Revise as follows:

**502.5.5. Skylight design criteria.** Skylights shall be designed and constructed to resist ignition from the accumulation of embers. And The entire skylight assembly, including the glazing shall not be plastic be noncombustible or fire-retardant-treated wood.

The roof-to-skylight interface creates an ember accumulation condition. If the skylight frame is combustible, or has exposed combustible materials, the skylight creates a vulnerable spot in the roof covering(e.g., wood), metal flashing can be used to resist ignition from accumulated embers. Skylights are located through roofs, which makes them nearly horizontal surfaces and thus potential ember accumulators. Dome skylights are typically made of plastic material which is susceptible to penetration from embers; therefore plastic components are not allowed.

#### Reason:

This proposal revised Section 502.5.5 and the associated commentary.

First, Section 502.5.5 is revised to separate the 2 criteria into 2 sentences.

- The 1<sup>st</sup> sentence deals with accumulation of embers and is unchanged.
- The 2<sup>nd</sup> sentence is revised to specify the skylight must be of noncombustible materials or fire-retardant-treated wood. The current wording specifies the glazing is cannot be plastic, but ignores the frame. If the frame is plastic, the glazing will survive, but the assembly will fail and the glazing will fall out. This would leave a large hole in the roof. The proposed revisions state the entire assembly must comply.
- Also, the reference to "not plastic" is changed to noncombustible or fire-retardant-treated wood. Noncombustible, or FRTW, address the issue of plastic, but it also allows other materials. This revision is consistent with the commentary language which discusses combustible materials.

Then, the commentary is revised because it states that wood is acceptable for skylights provided it is covered with metal flashing. The standard does not make this same requirement. So, the commentary is creating a requirement that is not found in the standard. The suggested revision is to revise the standard text as indicated above and have the commentary correlate.

The roof covering is required to be a Class A roof assembly. It makes no sense to require Class A and then allow skylights with a plastic frame or combustible frame. Even though the commentary suggests it could be protected with a piece of metal with no minimum thickness.

The better method to accomplish protection is to require the entire skylight to be noncombustible, or use FRTW. Then the issue alluded to in commentary with regard to embers is mitigated, because the skylight dome and the skylight assembly is inherently protected.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Replace as follows:

**502.5.5 Skylight design criteria.** Skylights shall be designed and constructed in accordance with the following:

- 1. <u>Curbs and framing for skylights shall be protected or constructed on the exterior with noncombustible, ignition-resistant, or fire-retardant-treated wood materials.</u>
- 2. External skylight framing members shall be protected or constructed with noncombustible, ignition-resistant, or fire-retardant-treated wood materials.
- 3. Skylight glass glazing shall be in accordance with section 504.5.2.1.
- 4. Skylight glazing other than glass shall comply with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790.

# IS-MHRRC 0-90 ICC 605 Section 503.1

Proponent: Milad Shabanian, IBHS

#### Revise as follows:

#### 503.1 Roof Assembly.

**503.1.1 Rating.** Roofs shall have a Class A rated roof assembly when tested in accordance with ASTM E108 or UL 790. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**503.1.21** Roof valleys. Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

#### Reason:

Fix the issue with format without any technical changes.

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Note:** Will also apply to Sections 504.1 and 505.1.

# IS-MHRRC 0-91

ICC 605 Sections 503.1, 504.1, 505.1

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

503.1 Roof assembly.

**503.1.1. 503.1.1 Rating.** Roofs shall have a Class A rated roof assembly when tested in accordance with ASTM E108 or UL 790. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of flames or embers or have one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**503.1.2 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inchwide (914 mm) underlayment consisting of one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

#### 504.1 Roof assembly.

**504.1.1. 504.1.1 Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire stopped to preclude entry of flames or embers or have one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**504.1.2 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of <del>72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.</del>

#### 505.1 Roof assembly.

**505.1.1. 505.1.1 Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790.

**505.1.1.1 Fire block.** For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of embers or have one layer of <u>mineral-surfaced</u>, <u>nonperforated</u> cap sheet complying with ASTM D3909 installed over the combustible roof deck.

505.1.2 Roof valleys. Where provided, valley flashings shall be not less than 0.019-inch (0.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inchwide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

#### Reason:

This proposal is designed to provide correlation between the roof covering requirements in Class 1, 2 and 3 construction.

Mineral-surfaced non-perforated cap sheet is required for Class 2 and Class 3 construction, but not in Class 1. This is contradictory to the basic concepts of these construction classes, where Class 1 is the highest level of protection. Section 503.1 is revised to bring Class 1 construction up to the same minimum requirement as Class 2 and 3.

The requirement for 72-pound cap sheet is only required for Class 2 and Class 3 construction. Rather than add this criteria to Class 1, the proposal is to remove the 72-pound requirement. The 72-pound requirement has been in the IWUIC for 20 years. When it was added to the IWUIC, it was an appropriate criteria, however, the 72-pound design is no longer an industry standard. The reference to mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 provides the correct nomenclature to provide the desired protection. Therefore, Sections 504.1.2 and 505.1.2 are revised to remove the 72-pound requirement.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

The reference to 72 lbs. is no longer representative of what is used. This is already in process of being removed from other 2027 standards (like IWUIC) so removing it from the ICC 605 draft is reasonable. It is also unnecessary to add this phrase as it is redundant with respect to the definition in ASTM D3909.

#### **Committee Modification:**

**Revise as follows:** 

503.1 Roof assembly.

**503.1.1. 503.1.1 Rating.** Roofs shall have a Class A rated roof assembly when tested in accordance with ASTM E108 or UL 790. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of flames or embers or have one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**503.1.2 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch- wide (914 mm) underlayment consisting of one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

#### 504.1 Roof assembly.

**504.1.1. 504.1.1 Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire stopped to preclude entry of flames or embers or have one layer of mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

504.1.1Roof valleys. Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72- pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

#### 505.1 Roof assembly.

**505.1.1. 505.1.1 Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790.

**505.1.1.1 505.1.1.1 Fire block.** For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of embers or have one layer of mineral surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**505.1.2 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch- wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

# IS-MHRRC 0-92

ICC 605 Sections 503.1.1, 503.1.3 (New), 503.2.3, 504.1.1, 504.1.3 (New), 505.1.1.1

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

#### Revise as follows:

**503.1.1. Rating.** Roofs shall have a Class A rated roof assembly when tested in accordance with ASTM E108 or UL 790.

<u>503.1.3 Flame and ember protection at eaves.</u> For roof assemblies where the <u>roof covering</u> profile <u>creates allows</u> a space between the roof covering and roof deck, the space at the eave ends shall be <u>fire blocked to</u> resist entry of flames or embers <u>by one or more of the following methods:</u> or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

- 1. Fireblocking of the space between the roof covering and the roof deck.
- 2. Installation of one layer of cap sheet complying with ASTM D3909 over the combustible roof deck.
- 3. Installation of an underlayment that is a component of a listed Class A classified roof assembly that includes the roof covering that is to be installed.

**503.2.3** Construction. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be constructed to preclude entry of flames or embers or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**504.1.1. Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering.

<u>504.1.3 Flame and ember protection at eaves.</u> For roof assemblies where the <u>roof covering</u> profile <u>creates allows</u> a space between the roof covering and roof deck, the space at the eave ends shall be <u>fire stopped to preclude resist</u> entry of flames or embers <u>by one or more of the following methods:</u> or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

- 1. Fireblocking of the space between the roof covering and the roof deck.
- 2. Installation of one layer of cap sheet complying with ASTM D3909 over the combustible roof deck.

3. Installation of an underlayment that is a component of a listed Class A classified roof assembly that includes the roof covering that is to be installed.

<u>505.1.3</u> <u>505.1.1.1 Fire block Ember protection at eaves.</u> For roof assemblies where the <u>roof covering profile creates allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to-resist entry of embers by one or more of the following methods: or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.</u>

- 1. Fireblocking of the space between the roof covering and the roof deck.
- 2. Installation of one layer of cap sheet complying with ASTM D3909 over the combustible roof deck.
- 3. Installation of an underlayment that is a component of a listed Class A classified roof assembly that includes the roof covering that is to be installed.

#### Reason:

The comment places requirements for the situation where a roof covering is used which creates a space between the roof covering profile and the roof deck into separate sections. Separating these provisions from the requirement for Class A classified roof assemblies will improve clarity of this section of the standard.

The comment also adds a third option for use in these situations, i.e., use of an underlayment that is included in an ASTM E108 or UL 790 listing as part of a roof assembly which includes the roof covering on the building. The addition of this option will permit alternative tile underlayment systems besides ASTM D3909.

Section 503.2.3 is deleted because it is redundant with the second sentence in 503.1.1 (which is moved into a separate section).

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

This change restates that fire blocking or a one-layer cap sheet will satisfy the requirement for flame and ember protection at eaves, but allows flexibility with other methods that perform similarly. Sections 503, 504, and 505 address the protection of the eaves

from flames and embers, but ICC 605 does not appear to address the protection of roof covering

profiles (tile or similar) in the field of the roof. For example, roofs with barrel-shaped tiles have

openings between the roof covering and roof deck in the field as well as at the eaves (i.e., not

just at the eaves).

#### **Committee Modification:**

#### Revise as follows:

- **503.1.1. Rating.** Roofs shall have a Class A rated roof assembly when tested in accordance with ASTM E108 or UL 790.
- **503.1.3** Flame and ember protection of roof assembly at eaves. For roof assemblies where the <u>roof covering</u> profile <u>creates</u> allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of flames or embers by one or more of the following methods: or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.
  - 1. Fireblocking of the space between the roof covering and the roof deck.
  - 2. Installation of one layer of cap sheet complying with ASTM D3909 over the combustible roof deck.
  - 3. Installation of an underlayment that is a component of a listed Class A classified roof assembly that includes the roof covering that is to be installed.
- **503.2.3 Construction.** For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be constructed to preclude entry of flames or embers or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.
- **504.1.1. Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering.
- 504.1.3 Flame and ember protection of roof assembly at eaves. For roof assemblies where the roof covering profile creates allows a space between the roof covering and roof deck, the space at the eave ends shall be fire stopped to preclude resist entry of flames or embers by one or more of the following methods: or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.
  - 1. Fireblocking of the space between the roof covering and the roof deck.
  - 2. Installation of one layer of cap sheet complying with ASTM D3909 over the combustible roof deck.
  - 3. Installation of an underlayment that is a component of a listed Class

# 202X ICC 605 - Standard Comments and Proposals A classified roof assembly that includes the roof covering that is to be installed.

#### 505.1.3 505.1.1.1 Fire block Ember protection of roof assembly at eaves.

For roof assemblies where the <u>roof covering</u> profile <u>creates</u> allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of embers by one or more of the following methods: or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

- 1. Fireblocking of the space between the roof covering and the roof deck.
- 2. Installation of one layer of cap sheet complying with ASTM D3909 over the combustible roof deck.
- 3. Installation of an underlayment that is a component of a listed Class A classified roof assembly that includes the roof covering that is to be installed.

# IS-MHRRC 0-93

ICC 605 Sections 503.1.1, 504.1.1, and 505.1.1

Proponent: Jason Smart, American Wood Council

#### Revise as follows:

Sections 503.1.1, 504.1.1, and 505.1.1: The title of these sections is "Rating." This should be changed to "Classification" since these sections deal with classifications rather than fire-resistance ratings.

#### Reason:

(See above)

**Committee Action:** No action. This was withdrawn by the proponent based on the action taken on Comment IS-MHRRC 0-90.

# IS-MHRRC 0-94

ICC 605 Sections 503.1.1, 504.1.1, 505.1.1, Table A101.1

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

#### Revise as follows:

503.1.1. Classification Rating. Roofs shall have a roof assembly that complies with a Class A classification rated roof assembly when tested in accordance with ASTM E108 or UL 790. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire blocked to resist entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**504.1.1.** Classification Rating. Roofs shall have a roof assembly that complies with not less than a Class A classification rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be fire stopped to preclude entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**505.1.1.** <u>Classification</u> Rating. Roofs shall have a roof assembly that complies with not less than a Class A <u>classification</u> rating when tested in accordance with ASTM E108 or UL 790.

# Table A101.1 FIRE HAZARD SEVERITY FORM

D. Roofing Material	
Class A Fire Classified Rated	1
Class B Fire Classified Rated	5
Class C Fire Classified Rated	10
Non-classified Rated	20

#### Reason:

ASTM E108 and UL 790 tests are performed on roof assemblies to establish a classification (Class A, B, or C) based on exposure to simulated fire sources originating outside the building. The outcome of the tests is a classification of the roof assembly. In contrast, ASTM E119 or UL 263 tests evaluate the duration for which building elements contain a fire, retain their structural integrity, or exhibit both properties during a predetermined test exposure. The result of these tests is expressed as a fire resistance rating. This comment adjusts language in the standard to clarify the distinction between these important fire tests.

Also, the comment removes the unnecessary mention of "not less than," which implies there is a classification higher than Class A and aligns the language across all three related sections.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Revise as follows:

# **Table A101.1 FIRE HAZARD SEVERITY FORM**

D. Roofing Material		
Class A Fire Classificationed Rated	1	
Class B Fire Classificationed Rated	5	
Class C Fire Classificationed Rated	10	
Non-classified Rated	20	

# IS-MHRRC 0-95

ICC 605 Sections 503.1.2, 504.1.2, 505.1.2

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

#### Revise as follows:

**503.1.2 Roof valley <u>flashing</u>s.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of mineral surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

**504.1.2 Roof valley <u>flashing</u>s.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of <del>72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.</del>

**505.1.2 Roof valley <u>flashing</u>s.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of <del>72-pound (32.4 kg) mineral-surfaced, nonperforated</del> cap sheet complying with ASTM D3909 running the full length of the valley.

#### Reason:

The provisions of these sections are intended to apply only in situations where a metal-lined open valley construction is used. To clarify that point, the section title is changed to align with the content.

There is no need to include "mineral-surfaced" and "nonperforated" in the description of the cap sheet because products manufactured to comply with ASTM D3909 are required to be mineral-surfaced and nonperforated.

There is no technical basis for the 72-pound weight requirement, which conflicts with the minimum weight requirements of ASTM D3909. Therefore, it is removed to permit products which meet the ASTM D3909 standard to be used.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

#### **Committee Modification:**

#### Revise as follows:

**503.1.2** Open roof valleys. Open roof valleys shall be protected by flashings not less than 0.019-inch (0.480.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

**504.1.2** Open roof valleys. Open roof valleys shall be protected by flashings not less than 0.019-inch (0.480.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

505.1.2 Open roof valleys. Open roof valleys shall be protected by flashings not less than 0.019-inch (0.480.44 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

# IS-MHRRC 0-96 ICC 605 Section 503.2.2

**Proponent:** Brad Douglas, American Wood Council

#### Revise as follows:

**503.2.2 Intersections.** Eave and soffit intersections with exterior walls shall meet the requirements of <del>503.7.1</del> 503.7.2.

#### Reason:

Reference to 503.7.1 should be changed to 503.7.2 in this section.

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 3 recommendation.

# IS-MHRRC 0-97 ICC 605 Section 503.2.3

Proponent: Brad Douglas, American Wood Council

#### Revise as follows:

**503.2.3 Construction.** For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be constructed to preclude entry of flames or embers or and have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

#### Reason:

I don't think covering the combustible roof deck with 72-pound cap sheet meets the intent to keep flames out of the spaces between the roof covering and roof deck. It might prevent the combustible roof deck from burning, but it probably wouldn't prevent some combustible roofing materials that meet Class A roof covering assembly tests from burning. I suggest that the "or" be changed to "and".

Committee Action: No action. This was withdrawn by the proponent.

# IS-MHRRC 0-98 ICC 605 Section 503.3

Proponent: Milad Shabanian, IBHS

#### Revise as follows:

- **503.3 Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved <u>noncombustible</u> means <u>such as gutter guards</u> to <u>resist prevent</u> the accumulation of leaves and debris in the gutter.
- **504.3 Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved <u>noncombustible</u> means <u>such as gutter guards</u> to <u>resist prevent</u> the accumulation of leaves and debris in the gutter.
- **505.3 Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved <u>noncombustible</u> means such as gutter guards to resist the accumulation of leaves and debris in the gutter.

#### Reason:

Align it with WHA Class 3 and make some clarification around approved means.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

#### Revise as follows:

- **503.3 Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved noncombustible means that is noncombustible such as gutter guards to resist prevent the accumulation of leaves and debris in the gutter.
- **504.3 Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved noncombustible means such as gutter guards to resist prevent the accumulation of leaves and debris in the gutter.

**505.3 Gutters and downspouts.** Gutters and downspouts shall be constructed of noncombustible material. Gutters shall be provided with an approved noncombustible means such as gutter guards to resist the accumulation of leaves and debris in the gutter.

Approve as modified: Use this for all three sections – "Gutters shall be provided with an approved means to resist the accumulation of combustible debris in the gutter. Gutters, downspouts, and products used to resist the accumulation of combustible debris shall be constructed of noncombustible material."

# IS-MHRRC 0-99 ICC 605 Section 503.4

Proponent: Gary Ehrlich, NAHB

#### Revise as follows:

**503.4 Exterior walls.** Exterior walls shall be in accordance with Sections 503.4.1 through 503.4.3.

**Exception:** Log wall construction shall not be required to comply with 503.4.3 provided joints, intersections, and penetrations are protected in accordance with Section 303 of ICC 400.

#### Reason:

The primary rationale for constructing a log home is the aesthetic benefit of the exposed log wall construction. Requiring the exterior surfaces of log wall construction be covered behind a noncombustible cladding for homes in certain heavily forested, rural areas – which happen to be some of the areas where log homes are the most popular – removes the aesthetic benefit of a log home and significantly increases the cost of constructing one relative to other methods of construction including typical light-frame wood construction.

Log wall construction has inherent fire resistance as it presents a solid face of logs to a fire. Fire can't penetrate a log wall and envelope the individual logs the way it can in a light-frame wall. NAHB is aware of several examples of log wall buildings exposed to interior fires where the light-frame roof structure is destroyed, not to mention the interior contents and partitions, yet the log walls are fully intact and standing, albeit charred. And there are soda blasting method that can clean the char layer off the logs.

The ICC 400 standard for log building construction includes an entire section on fire resistance. In addition to prescriptive, test-based and calculation methods for achieving a minimum 1-hour fire rating (required by ICC 400 for WHA Class 1), Section 303 includes requirements for fire-resistant sealants at joints and intersections, through-penetration firestopping at penetrations, and other fire resistance measures. Further, while ICC 400 prescriptively specifies minimum 6" nominal diameter logs for 1-hour fire ratings, NAHB discussions with member of our Log and Timber Home Council suggest 8" diameter logs are typically used.

The one wildfire assessment NAHB is aware of that mentions log wall construction is IBHS's report on the Black Bear Fire in Tennessee. However, nowhere in the report is exposed log wall construction fingered as a problem that needs to be addressed. Blame is primarily placed on elements of the roofs and light-frame upper stories of the cabins that would not comply with the 2024 IWUIC, let alone other provisions of this standard.

It is noted some log home builders use shop-applied pressure- or dip-treated logs with borate solutions for decay resistance. These borate treatments also increase fire resistance. It is our understanding in some areas fire-retardant treated logs are also available.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation. It aligns with the IWUIC, as both are pending additional data to address concerns of risk in the more extreme exposures.

#### **Committee Modification:**

#### Revise as follows:

**503.4 Exterior walls.** Exterior walls shall be in accordance with Sections 503.4.1 through 503.4.3.

Exception: Log wall construction shall not be required to comply with 503.4.3 provided joints, intersections, and penetrations are protected in accordance with Section 303 of ICC 400.

Exception: Log walls constructed in accordance with Section 303 of ICC 400.

# IS-MHRRC 0-100 ICC 605 Section 503.4

Proponent: Milad Shabanian, IBHS

Revise as follows:

503.4.1 Fire-resistance rating. Exterior wall assembly.

503.4.2 Intersections.

**503.4.3.** Exterior wall coverings shall be constructed using one of the following methods:

1. Components of the exterior wall coverings shall be of noncombustible material in accordance with 502.2.1. Exterior surface of exterior sheathing shall have a flame-spread index no more than 25. Gaps or openings at base of wall covering (such as a rainscreen) shall be protected with noncombustible corrosion-resistant mesh with openings minimum 1/16" and no larger than 1/8" or be designed and approved to prevent flame or ember penetration into the cavity.

**Exception:** Wall coverings where the water-resistive barrier is the only combustible component and has water-resistive barriers having a peak heat release rate of less than 150Kw/m2, a total heat release of less than 20 MJ/m2 and an effective heat of combustion of less than 18MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smokedeveloped index of 450 or less as determined in accordance with ASTM E84 or UL 723.

**505** Exterior wall <u>covering within</u> assemblies <del>that are</del> tested in accordance with and comply with the acceptance criteria of NFPA 285.

#### Reason:

The effort is to address a comment provided during work group discussions.

**Committee Action:** Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Revise as follows:

- 503.4.1 Fire-resistance rating. Exterior wall assembly.
- 503.4.2 Intersections.
- **503.4.3.** Exterior wall coverings shall be constructed using one of the following methods:
  - 1. Components of the exterior wall coverings shall be of noncombustible material in accordance with 502.2.1. Exterior surface of exterior sheathing shall have a flame-spread index no more than 25. Gaps or openings at base of wall covering (such as a rainscreen) shall be protected with noncombustible corrosion-resistant mesh with openings minimum 1/16" and no larger than 1/8" or be designed and approved to prevent flame or ember penetration into the cavity.

**Exception:** Wall coverings where the water-resistive barrier is the only combustible component and has water-resistive barriers having a peak heat release rate of less than 150Kw/m2, a total heat release of less than 20 MJ/m2 and an effective heat of combustion of less than 18MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke developed index of 450 or less as determined in accordance with ASTM E84 or UL 723.

2. Exterior wall <del>covering within assemblies that are tested in accordance with and comply with the acceptance criteria of NFPA 285.</del>

# IS-MHRRC 0-101 ICC 605 Section 503.4.1

Proponent: Jeffrey Munsterteiger, National Association of Homebuilders

#### Revise as follows:

**503.4.1 Fire-resistance rating.** Exterior wall assemblies shall have a fire-resistance rating of not less than 1 hour as determined in accordance with Section 502.3.1. Continuity of the 1-hour fire-resistance rating shall be maintained from the foundation to the eaves and soffits addressed in Section 503.2.

#### Reason:

The last part of the sentence is unnecessary since all eaves and soffits are required to comply.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation. The requirements are already covered, this sentence is about continuity, not requirements; therefore, the pointer is not needed

# IS-MHRRC 0-102 ICC 605 Section 503.4.2

Proponent: Brad Douglas, American Wood Council

#### Revise as follows:

**503.4.2 Intersections.** Exterior wall to eave and soffit intersections shall meet the requirements of Section 503.7.1 503.7.2.

#### Reason:

Reference to 503.7.1 should be changed to 503.7.2 in this section.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Revise as follows:** 

**503.4.2** Intersections, joints and intersections in exterior walls. Exterior wall to eave and soffit intersections shall meet the requirements of Section 503.7.1.

# IS-MHRRC 0-103 ICC 605 Section 503.4.3(1)

Proponent: Jason Smart, American Wood Council

#### Revise as follows:

Section 503.4.3(1): Given the facts that 1) ignition-resistant building materials are required to meet the qualification provisions of 502.2.3 to minimize the spread of flames on said materials, and 2) Section 503.4.1 requires exterior wall assemblies to have a 1-hour fire-resistance rating in addition to the exterior wall covering requirements of Section 503.4.3, it makes sense to add ignition-resistant building materials to the provisions for exterior wall coverings in 503.4.3. Therefore, consider adding the words "or ignition-resistant building materials" to the first sentence of 503.4.3(1), such that it reads "Components of the exterior wall coverings shall be of noncombustible materials or ignition-resistant building materials in accordance with Section 502.2.1."

#### Reason:

(See above)

Committee Action: Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation. This comment is resolved by the approval of IS-MHRRC 0-105.

# IS-MHRRC 0-104 ICC 605 Section 503.4.3(2)

Proponent: Jason Smart, American Wood Council

#### Add new text as follows:

Section 503.4.3(2): Commentary should be added for Section 503.4.3(2) to acknowledge that this NFPA 285 reference serves as somewhat of a placeholder in the absence of a more appropriate standard, and that the reference should be replaced once a more relevant standard (simulating a WUI-type fire exposure) has been developed. The committee acknowledged this during the development of this provision, but it was decided that the reference to NFPA 285 should be included (at least in this first draft) for lack of a better standard at the time of its work.

#### Reason:

(See above)

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation. This is a clarification that existing assemblies listed to NFPA 285 satisfy the intent of this section as well and offer designers additional options as new test methods and acceptance criteria are being developed.

#### **Committee Modification:**

Add commentary after 503.4.3(2):

"Option 2 provides an alternative for designers to specify assemblies which meet the intent of this section without requiring all components of the exterior wall coverings to test to ignition-resistance, Fire-retardant treated wood, or noncombustibility."

# IS-MHRRC 0-105 ICC 605 Section 503.4.3, Option 1

**Proponent:** Brad Douglas, American Wood Council

#### Revise as follows:

**503.4.3** Coverings. Exterior wall coverings shall be constructed using one of the following methods:

1. Components of the exterior wall coverings shall be of noncombustible material in accordance with Section 502.2.1, fire-retardant-treated wood in accordance with 502.2.2, or ignition-resistant building materials in accordance with 502.2.3. Exterior surface of exterior sheathing shall have a flame-spread index not more than 25. Gaps or openings at base of wall covering (such as a rainscreen) shall be protected with noncombustible corrosion-resistant mesh with openings a minimum of 1/16 inch (1.6 mm) and not larger than 1/8 inch (3.2 mm) or be designed and approved to prevent flame or ember penetration into the cavity.

#### Reason:

In Class 1, exterior wall assemblies are required to have a fire-resistance rating of at least 1-hour in 503.4.1. There was a lot of discussion within the Working Group about an additional desire to limit "flame propagation" in Class 1 where flames could be impinging on the exterior side of the primary structure. While full-size testing of a wall with soffits and modified E2957 testing conducted by AWC indicated that proper detailing of intersections could prevent flame penetration through the hardening layer of the exterior wall even with "flame propagation" to the soffit, the requirement for limiting "flame propagation" was never completely resolved by the Working Group. Option 1 was added to allow the use of noncombustible materials in the exterior wall coverings where the Flame-spread Index (FSI) is limited to 25 or less. In reviewing Option 1, it seems reasonable that fire-retardant-treated wood and ignition-resistant materials, which are required to have a FSI of 25 or less, be permitted as well.

**Committee Action:** Disapproved

**Committee Reason:** There was disagreement over whether the additional proposed text should be added. All three materials satisfy the intent of limited flame-spread and similar sections of should be harmonized.

# **IS-MHRRC 0-106**

ICC 605 Section 503.4.3, Option 2

Proponent: Brad Douglas, American Wood Council

#### Revise as follows:

**503.4.3 Coverings.** Exterior wall coverings shall be constructed using one of the following methods:

2. Exterior wall assemblies that are tested in accordance with and comply with the acceptance criteria of NFPA 285.

#### Reason:

The inclusion of NFPA 285 was added as a placeholder to address "flame propagation" in Class 1 exterior walls in dwellings built in accordance with this standard. However, NFPA 285 has not been used to regulate "flame propagation" in low-rise buildings or dwellings and its inclusion in the standard without further investigation is a concern since it is not related to WUI exposures. If the changes I proposed to Option 1 (which would permit exterior wall coverings to include FRT or IR materials) are adopted, I recommend this option be dropped.

Committee Action: Disapproved

Committee Reason: This comment was resolved by approval of IS-MHRRC 0-100.

# IS-MHRRC 0-107 ICC 605 Section 503.5

Proponent: Milad Shabanian, IBHS

#### Revise as follows:

# 503.56 Exterior Opening Protection 503.56.1. Doors

**503.5.1.1** Exterior doors shall have a fire protection rating of not less than 45- minutes. Windows within doors and glazed doors shall be in accordance with Section 503.56.2.

#### **Exceptions:**

- 1. Vehicle access doors.
- 2. Doors protected by *approved* fire-resistant-rated shutters. The fire-resistant shutter shall be not less than 45-minute rated and meet all the following requirements:
  - 2.1. Protect the entire window or door assembly including framing and glazing;
  - 2.2. Consist of Constructed with noncombustible material; and
  - 2.3. Be fixed to the building and be non-removable; and
  - 2.4. Be <u>operable</u> <u>eapable of being closed</u> manually from either inside or outside or motorized shutter systems, where they are not reliant on main power to close; and [Note: if power-assisted shutter systems are used then that system is powered with continuous back-up energy such as a battery system.]
  - 2.5. When in the closed position, have no gap greater than 1/8-in
  - (3.2 mm) between the shutter and the wall, frame, or sill; and
  - 2.6. Where mesh screen used within the assembly, mesh openings shall not exceeding 1/8 inch. Perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch and a perforated area no greater than 20% of the shutter.

#### 503.-56.2. Windows

**503.5.2.1** Exterior windows, window walls, glazed doors, windows within exterior doors, and skylights shall have a fire protection rating of not less than 45- minutes.

#### **Exception:**

Windows protected by *approved* fire-resistant-rated shutters. The fire-resistant shutter shall be not less than 45-minute rated and meet all the following requirements:

- 1. Protect the entire window or door assembly including framing and glazing;
- 2. Consist of Constructed with noncombustible material; and
- 3. Be fixed to the building and be non-removable; and
- 4. Be <u>operable eapable of being closed</u> manually from either inside or outside or motorized shutter systems, where they are not reliant on main power to close; and [Note: if power-assisted shutter systems are used then that system is powered with continuous back up energy such as a battery system.]
- 5. When in the closed position, have no gap greater than 1/8-in (3.2 mm) between the shutter and the wall, frame, or sill; and
- 6. Where mesh screen used within the assembly, mesh openings shall not exceeding 1/8-in (3.2 mm). perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch and a perforated area no greater than 20% of the shutter.
- **503.56.3**. **Ventilation Opening Protection.** Attic, foundation, or underfloor ventilation openings shall be protected and constructed in accordance with 503.56.3.1 and 503.56.3.2.
  - **503.56.3.1 Vents.** Attic, foundation, or underfloor ventilation openings shall be fully covered with approved vents tested in accordance with ASTM E2886 and shall demonstrate compliance with all the following requirements:
    - 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
    - 2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
    - 3. The maximum temperature of the unexposed side of the vent shall not exceed 662-degree F (350 degrees C).

Exception: Roof ridge and off-ridge (field) vents shall be constructed with noncombustible corrosion resistant material covered with noncombustible corrosion-resistant mesh with openings not less than 1/16-inch and not greater than 1/8-inch.

**503.56.3.2 Ventilation opening locations.** Ventilation openings shall be located in accordance with the following:

1. Attic ventilation openings located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas shall comply

- with the performance requirements in Section 503.5.3.1 and shall have a minimum 1-hour fire resistance rating when tested in accordance with ASTM E119 or UL 263.
- 2. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines or shall have a minimum 1-hour fire resistance rating when tested in accordance with ASTM E119 or UL 263.
- 3. Underfloor ventilation openings shall be located as close to grade as practical.

### **503.-56.4 Intersections**

**503. 56.4.1** Intersections of exterior openings with exterior walls shall meet the requirements of 503.7.

**Reason:** These are some changes intended to provide more clarity to the requirements and some of them intended to address issues with the current language.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

### **Committee Modification:**

### Revise as follows:

# **503.56 Exterior Opening Protection 503.56.1. Doors**

**503.5.1.1** Exterior doors shall have a fire protection rating of not less than 45- minutes. Windows within doors and glazed doors shall be in accordance with Section 503.56.2.

### **Exceptions:**

- 1. Vehicle access doors.
- 2. Doors protected by *approved* fire-resistant-rated shutters. The fire- resistant shutter shall be not less than 45-minute rated and meet all the following requirements:
  - 2.1. Protect the entire window or door assembly including framing and glazing;
  - 2.2. Consist of Constructed with noncombustible material; and
  - 2.3. Be fixed to the building and be non-removable; and

2.4. Be <u>operable</u> capable of being closed manually from either inside or outside or motorized shutter systems, where they are not reliant on main power to close; and [Note: if power-assisted shutter systems are used then that system is powered with continuous

back-up energy such as a battery system.]

- 2.5. When in the closed position, have no gap greater than 1/8-in (3.2 mm) between the shutter and the wall, frame, or sill; and
- 2.6. Where mesh screen used within the assembly, mesh openings shall not exceeding 1/8 inch.

  Perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch and a perforated area no greater than 20% of the shutter.

### 503.-56.2. Windows

**503.5.2.1** Exterior windows, window walls, glazed doors, windows within exterior doors, and skylights shall have a fire protection rating of not less than 45- minutes.

### **Exception:**

Windows protected by *approved* fire-resistant-rated shutters. The fire- resistant shutter shall be not less than 45-minute rated and meet all the following requirements:

- 1. Protect the entire window or door assembly including framing and glazing;
- 2. Consist of Constructed with noncombustible material; and
- 3. Be fixed to the building and be non-removable; and
- 4. Be <u>operable</u> capable of being closed manually from either inside or outside or motorized shutter systems, where they are not reliant on main power to close; and [Note: if power-assisted shutter systems are used then that system is powered with continuous back-up energy such as a battery system.]
- 5. When in the closed position, have no gap greater than 1/8-in (3.2 mm) between the shutter and the wall, frame, or sill; and
- 6. Where mesh screen used within the assembly,

mesh openings shall not exceeding 1/8-in (3.2 mm). perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch and a perforated area no greater than 20% of the shutter.

**503.56.3. Ventilation Opening Protection.** Attic, foundation, or underfloor ventilation openings shall be protected and constructed in accordance with 503.56.3.1 and 503.56.3.2.

**503.56.3.1 Vents.** Attic, foundation, or underfloor ventilation openings shall be fully covered with approved vents tested in accordance with ASTM E2886 and shall demonstrate compliance with all the following requirements:

- 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662-degree F (350 degrees C).

Exception: Vents excluded from the scope of ASTM E 2886 Roof ridge and off-ridge (field) vents-shall be constructed with noncombustible corrosion resistant material covered with noncombustible corrosion-resistant mesh with openings not less than 1/16-inch and not greater than 1/8-inch.

Commentary: Examples of locations where this may be used are roof ridge and off-ridge

**503.56.3.2 Ventilation opening locations.** Ventilation openings shall be located in accordance with the following:

1. Attic ventilation openings located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas shall comply with the performance requirements in Section 503.5.3.1 and shall have a minimum 1-hour fire resistance rating when tested in accordance with ASTM E119 or UL 263.

- 2. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines or shall have a minimum 1-hour fire resistance rating when tested in accordance with ASTM E119 or UL 263.
- 3. Underfloor ventilation openings shall be located as close to grade as practical.

### **503.-56.4** Intersections

**503.56.4.1** Intersections of exterior openings with exterior walls shall meet the requirements of 503.7.

# **IS-MHRRC 0-108**

### ICC 605 Section 503.5.1

Proponent: Jeffrey Munsterteiger, National Association of Homebuilders

### Revise as follows:

**503.5.1 Doors.** Exterior doors shall have a fire protection rating of not less than 45 minutes. Windows within doors and glazed doors shall be in accordance with Section 503.5.2.

### **Exceptions:**

- 1. Vehicle access doors.
- 2. Doors protected by approved fire-resistant-rated shutters. The fire-resistant shutter shall be not less than 45-minute rated and meet all the following requirements:
  - 2.1. Protect the entire window or door assembly including framing and glazing.
  - 2.2. Consist of noncombustible material.
  - 2.3. Be fixed to the building and be nonremovable.
  - 2.4. Be capable of being closed manually from either inside or outside or be motorized shutter systems that are not reliant on main power to close (note: if power-assisted shutter systems are used, that system must be powered with continuous backup energy, such as a battery system).
  - 2.5. When in the closed position, have gaps not greater than 1/8 inch (3.2 mm) between the shutter and the wall, frame and sill.
  - 2.6. Where perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch (3.2 mm) and a perforated area not greater than 20 percent of the shutter.

### Reason:

Exception 2.4 contained a note which was requiring a back-up power system without any additional requirements. The standard must be written in mandatory language, so burying such a significant requirement in a note is poor code language, it isn't requiring it and it's there for deleted. Second, requiring a backup power system in a one- or two-family homes is a significant departure from the IRC. Such a requirement would need far more details on size, location, and testing requirements.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation. It Aligns with Comment IS-MHRRC 0-107.

### **IS-MHRRC 0-109**

ICC 605 Sections 503.5.1, 503.5.2

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**503.5.1 Doors.** Exterior doors shall have a fire protection rating of not less than 45 minutes. Windows within doors and glazed doors shall be in accordance with Section 503.5.2.

### **Exceptions:**

- 1. Vehicle access doors.
- 2. Doors protected by approved <u>listed</u> fire-resistant-rated shutters. The <u>fF</u>ire-resistant shutters shall be not less than 45-minute rated and meet all the following requirements:
  - 2.1. Protect the entire window or door assembly including framing and glazing.
  - 2.2. Consist of noncombustible material.
  - 2.3. Be fixed to the building and be nonremovable.
  - 2.4. Be capable of being closed manually from either inside or outside or be motorized shutter systems that are not reliant on main power to close (note: if
  - <u>2.5.</u> <u>pP</u>ower-assisted shutter systems <del>are used, that system must shall</del> be <del>powered</del> provided with <del>continuous</del> backup powerenergy, such as a battery system).
  - 2.5. 2.6. When in the closed position, have gaps shall not greater than exceed 1/8 inch (3.2 mm) between the shutter and the wall, frame and sill.
  - 2.6. Where perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch (3.2 mm) and a perforated area not greater than 20 percent of the shutter.
- **503.5.2 Windows.** Exterior windows, window walls, glazed doors, windows within exterior doors and skylights shall have a fire protection rating of not less than 45 minutes.

**Exception:** Windows protected by approved <u>listed</u> fire-resistant-rated shutters. The fire-resistant shutter shall be not less than 45-minute rated and meet the following requirements:

- 1. Protect the entire window or door assembly including framing and glazing.
- 2. Consist of noncombustible material.
- 3. Be fixed to the building and be nonremovable.
- 4. Be capable of being closed manually from either inside or outside or be motorized shutter systems that are not reliant on main power to close (note: if
- <u>5.</u> <u>pPower-assisted shutter systems are used, that system must shall</u> be <u>powered provided</u> with <u>continuous</u> backup <u>powerenergy</u>, <u>such as a battery system</u>].
- 5. 6. When in the closed position, have gaps shall not greater than exceed 1/8 inch (3.2 mm) between the shutter and the wall, frame or sill.
- 6. Where perforated, have uniformly distributed perforations with a maximum aperture of 1/8 inch (3.2 mm) and a perforated area not greater than 20 percent of the shutter.

### Reason:

This proposal makes several revisions to the sections for protection of doors and windows.

- Sections 503.5.1 Exc 2 & 503.5.2 Exc are revised to change the word "approved" to "listed". If the shutters are to provide 45-minute protection, they need to be tested and listed, rather than approved by the code official.
- Section 503.5.1 Exc 2 #4 is split into 2.4 and 2.5. The new 2.5 addresses secondary power for power-assisted systems. This revision eliminates the "note", and is worded so that it requires backup power. The backup power may be provided by battery or generator. The same revision occurs in Section 503.5.2 Exc #4.
- Section 503.5.1 Exc 2 #5 (new #6) & 503.5.2 Exc #5 (new #6) are grammatically revised.
- Section 503.5.1 Exc 2 #6 & 503.5.2 Exc #6 are deleted. The shutters in both sections must have a 45-minute rating. If the shutter has perforations and a 45-minute rating, then it passed the text with the perforations.

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation. The necessary changes were made by IS-MHRRC 0-107, and the committee did not want to change the approved to listed as it will limit the options available to the AHJ.

### **IS-MHRRC 0-110**

ICC 605 Sections 503.5.3, 503.5.3.1, 503.5.3.2 (New), 503.5.3.3, 504.5.3, 504.5.3.1, 504.5.3.2 (New), 504.5.3.3, 505.5.3.1

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

### Revise as follows:

- **503.5.3 Ventilation opening protection.** Attic, foundation or underfloor ventilation openings shall be protected and constructed in accordance with Sections 503.5.3.1 or and 503.5.3.2.
- **503.5.3.1** <u>Performance requirements Vents.</u> Attic, foundation or underfloor ventilation openings shall be fully covered with <u>listed approved vents</u>, tested in accordance with ASTM E2886 to <del>and shall</del> demonstrate compliance with all the following requirements:
- 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
- 503.5.3.2 Prescriptive requirements. Ventilation openings shall be fully covered with noncombustible, corrosion-resistant mesh with openings not exceeding 1/8 inch (3.2 mm), or with vents designed and approved to prevent flame and ember penetration into the structure. Additionally, vents protecting ventilation openings into attics and enclosed rafter spaces shall be constructed entirely of noncombustible, corrosion-resistant materials.
- <u>503.5.3.3</u> <u>503.5.3.2</u> **Ventilation opening locations.** Ventilation openings shall be located in accordance with the following:
  - 1. Attic ventilation openings located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas shall comply with the performance requirements in Section 503.5.3.1 and shall have a minimum 1-hour fire-resistance rating when tested in accordance with ASTM E119 or UL 263.
  - 2. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines or shall have a minimum 1-hour fire-resistance rating when tested in accordance with ASTM E119 or UL 263.
  - 3. Underfloor ventilation openings shall be located as close to grade as practical.
- **504.5.3 Ventilation opening protection.** Attic, foundation or underfloor ventilation openings shall be protected in accordance with Section 504.5.3.1 or 504.5.3.2.
- **504.5.3.1** <u>Performance requirements Vents.</u> Attic, foundation or underfloor ventilation openings shall be fully covered with <u>listed approved</u> vents, tested in accordance with ASTM E2886 <u>to and shall</u> demonstrate compliance with the following requirements:

- 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).
- <u>504.5.3.2 Prescriptive requirements.</u> Ventilation openings shall be fully covered with noncombustible, corrosion-resistant mesh with openings not exceeding 1/8 inch (3.2 mm), or with vents designed and approved to prevent flame and ember penetration into the structure.
- <u>504.5.3.3</u> 504.5.3.2 Ventilation opening locations. Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to grade as practical.
- **505.5.3 Ventilation opening protection.** Attic, foundation or underfloor ventilation openings shall be protected in accordance with Section 504.5.3.1.
- **505.5.3.1** Vents. Attic, foundation or underfloor ventilation openings shall be fully covered with in accordance with one of the following:
  - 1. Listed vents tested in accordance with <u>the ASTM E2886 Ember Intrusion Test to resist</u> the intrusion of embers, and there shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
  - 2. Noncombustible, corrosion-resistant vents with mesh with openings not to exceed 1/8 inch (3.2 mm).

#### Reason:

The comment revises the ventilation opening protection sections to:

- Change "approved" to "listed," which creates greater oversight for vents which comply via the ASTM E2886 test.
- Provide a prescriptive compliance option for rooftop vents for Class 1, because ASTM E2886 does not allow evaluation of rooftop vents. For Class 1, vents complying via the prescriptive option are also required to be fully noncombustible, because Class 1 represents the situation where direct flame exposure is most likely.
- Provide a prescriptive compliance option for rooftop vents for Class 2. Vents complying via the prescriptive option are not required to be fully noncombustible because the associated perils are radiant heat and ember intrusion.
- Simplify the Class 3 section and provide an alternative which permits noncombustible, corrosion-resistant mesh instead of noncombustible vents because the peril in Class 3 is ember

intrusion, and research indicates that embers which pass through 1/8-inch mesh have limited ignition energy.

• Remove the Class 2 limitation which precludes attic vents in overhang areas, which makes Class 2 more stringent than Class 1.

**Committee Action:** Disapproved

Committee Reason: Based on the Task Group 3 recommendation.

### **IS-MHRRC 0-111**

ICC 605 Sections 503.5.3, 504.5.3

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**503.5.3 Ventilation openings** protection. Attic, foundation or underfloor ventilation openings shall be protected designed and constructed in accordance with Sections 503.5.3.1 and 503.5.3.2.

**503.5.3.1 Vents.** Attic, foundation or underfloor ventilation openings shall be fully covered with approved-vents tested in accordance with ASTM E2886 and shall demonstrate compliance complying with all the following requirements:

- 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test.
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

**504.5.3 Ventilation openings protection.** Attic, foundation or underfloor ventilation openings shall be protected designed and constructed in accordance with Sections 504.5.3.1 and 504.5.3.2.

**504.5.3.1 Vents.** Attic, foundation or underfloor ventilation openings shall be fully covered with approved-vents tested in accordance with ASTM E2886 and shall demonstrate compliance complying with the following requirements:

- 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion
  Test
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F (350°C).

### Reason:

This proposal makes the following revisions:

- The title of Sections 503.5.3 and 504.5.3 are revised to "ventilation openings". The subsections address location and protection, not just protection.
- Sections 503.5.3 and 504.5.3 are revised to state the openings shall be designed and constructed in accordance with the subsequent sections. The subsections address vent location and design criteria to pass the test standard.
- Sections 503.5.3.1 and 504.5.3.1 are revised to eliminate "approved". If the vents pass the test, then they are approved. There is no additional approval by the code official required.

• Sections 503.5.3.1 and 504.5.3.1 are revised to specify the vent must comply with all the 3 test criteria.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Delete Section 503.5.3, 504.5.3 and 505.5.3 and add the following sections:

503.5.3 Ventilation openings. Attic, foundation, or underfloor ventilation openings shall be fully covered with listed corrosion-resistant vents tested in accordance with ASTM E2886 that comply with the following requirements:

- 1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. The Integrity Test portion of the Flame Intrusion Test shall be conducted in both horizontal and vertical orientation and there shall be no flaming ignition of the cotton material during either test.
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F 350°C).

Exception: Ventilation openings on a sloped roof or roof ridge shall be fully covered with noncombustible, corrosion-resistant vents with openings not greater than 1/8 inch (3.2 mm).

503.5.3.1 Ventilation opening locations. Gable end and dormer vents covering openings located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas shall comply with Section 503.5.3 and shall also have a minimum 1-hour fire-resistance rating when tested in accordance with ASTM E119 or UL 263.

504.5.3 Ventilation openings. Attic, foundation, or underfloor ventilation openings shall be fully covered with listed corrosion-resistant vents tested in accordance with ASTM E2886 that comply with the following requirements:

1. There shall be no flaming ignition of the cotton material during the Ember Intrusion Test.

- 2. The Integrity Test portion of the Flame Intrusion Test shall be conducted in both horizontal and vertical orientation and there shall be no flaming ignition of the cotton material during either test.
- 3. The maximum temperature of the unexposed side of the vent shall not exceed 662°F 350°C).

Exception: Ventilation openings on a sloped roof or roof ridge shall be fully covered with noncombustible, corrosion-resistant vents with openings not greater than 1/8 inch (3.2 mm).

<u>505.5.3 Ventilation openings</u>. Attic, foundation, or underfloor ventilation openings shall be fully covered with one of the following:

- 1. <u>Listed vents tested in accordance with the Ember Intrusion Test of ASTM E2886 that comply with no flaming ignition of the cotton material during the Ember Intrusion Test.</u>
- 2. Fully noncombustible, corrosion-resistant vents with openings not exceeding 1/8 inch (3.2 mm).

# IS-MHRRC 0-112 ICC 605 Section 503.6

Proponent: Milad Shabanian, IBHS

### Revise as follows:

**503.65** Underfloor Areas. Underfloor areas of buildings and structures shall be enclosed to the ground with exterior walls in accordance with Section 503.4.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected in accordance with 503.4.

### Reason:

Aligns ICC 605 with the 2024 ICC Group A changes.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

It correlates with CAH #2 actions for the IWUIC.

Committee Modification: The section was not relocated.

### **IS-MHRRC 0-113**

ICC 605 Sections 503.6, 503.8.2, 504.6, 504.8.2

Proponent: Gary Ehrlich, NAHB

### Revise as follows:

**503.6 Underfloor areas.** Underfloor areas of buildings and structures shall be enclosed to the ground with <u>materials permitted for</u> exterior walls in accordance with Section 503.4.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected in accordance with Section 503.4.

**503.8.2** Underfloor areas. Where the attached structure Is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with <u>materials permitted for</u> exterior wall construction in accordance with Section 504.4.

**504.6 Underfloor areas.** Buildings or structures shall have underfloor areas enclosed to the ground, with <u>materials permitted for exterior walls</u> in accordance with Section 504.4.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected in accordance with Section 504.4.

**504.8.2** Underfloor areas. Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with <u>materials permitted for</u> exterior wall construction in accordance with Section 504.4.

#### Reason:

The use of the terms "exterior wall" or "exterior wall construction" can be taken literally to mean the underfloor space shall be enclosed with exterior wall assemblies that not only comply with the IWUIC's requirements for using materials or methods of construction that provide ignition and fire resistance, but also need to meet structural requirements for out-of-plane wind loads and lateral wind and seismic resistance through shear walls or wall bracing, weather protection requirements (i.e., water-resistive barriers and flashing), and energy code requirements for insulation and air barriers. The cost and design implications of providing a complete enclosure for these underfloor areas that essentially makes them occupiable or habitable spaces is considerable. NAHB submitted a committee comment to implement similar language in proposal

WUIC44-24 from IBHS on enclosure of underfloor spaces. The IFC/IWUIC Committee approved NAHB's comment.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation. It correlates with CAH #2 actions for the IWUIC.

# IS-MHRRC 0-114 ICC 605 Sections 503.6, 504.6

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**503.6 Underfloor areas.** Underfloor areas of buildings and structures shall be enclosed to the ground with exterior walls in accordance with Section 503.4.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected constructed in accordance with Section 503.4.

**504.6 Underfloor areas.** Buildings or structures shall have underfloor areas enclosed to the ground, with exterior walls in accordance with Section 504.4.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected constructed in accordance with Section 504.4.

### Reason:

This proposal makes a revision to each of these similar sections. In the exception, the term "protected" is replaced with "construction". The referenced sections address construction of exterior walls, so this is the appropriate term.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

### **Committee Modification:**

Revise the two exceptions to read, "Complete enclosure shall not be required where the underside of exposed floor assembly, columns and beams have a 1-hour fire resistance rating." Revise 504.6 to match 503.6, i.e., start 504.6 "Underfloor areas of buildings and structures shall be..."

# IS-MHRRC 0-115 ICC 605 Section 503.7.2

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**503.7.2. 503.7.2 Intersections.** Intersections of exterior horizontal assemblies to exterior vertical assemblies, such as soffits to exterior walls, eaves to exterior walls or floor projections to exterior walls, shall be tested in accordance with ASTM E2957. Fire penetration through the exterior horizontal surfaces, exterior vertical surfaces or intersections shall not occur during the test and sustained combustion beyond the exterior surfaces shall not be present at the end of the test. The test specimen, including the exterior horizontal assembly, the exterior vertical assembly and the intersection, shall be representative of the construction that the test is intended to assess as to materials, workmanship and details such as dimensions of parts, and shall be built under conditions representative of those applied in building construction and operation. The physical properties of the materials and components used in the test specimen shall be determined and recorded.

### Reason:

The last sentence is deleted. This sentence requires that the physical properties of the materials used in the test specimen be "determined." This is unclear and vague. Does it require a lab test to determine the chemical materials in the product? Does it mean that the manufacturer is identified?

The section requires the test to represent the actual installation. As with any other test the installation must meet the testing parameters. The materials will have passed the test under ASTM E2957 and the installation must match the test.

This sentence will only create confusion in application of this section.

**Committee Action:** Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation.

### **IS-MHRRC 0-116**

ICC 605 Sections 503.7.3, 504.7.4,505.7.2

Proponent: Aaron R. Phillips, Asphalt Roofing Manufacturers Association

### Revise as follows:

- **503.7.3. Gaps around vents.** Gaps around vents shall be sealed with sealants in accordance with vent manufacturer's installation instructions to avoid flame intrusion through the gaps.
- **504.7.4. Gaps around vents.** Gaps around vents shall be sealed with sealants in accordance with vent manufacturer's installation instructions to avoid flame intrusion through the gaps.
- **505.7.2. Gaps around vents.** Gaps around vents shall be sealed with sealants in accordance with vent manufacturer's installation instructions to avoid flame intrusion through the gaps.

#### Reason:

Materials used to seal the gap around vents may not always be properly characterized as a sealant. Removal of the phrase "with sealants" from the referenced section permits the manufacturer instructions to be followed without unnecessarily prescribing the nature of the sealing material.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

### **Committee Modification:**

### **Revise as follows:**

- **503.7.3. Gaps around vents.** Gaps around vents shall be sealed with sealants in accordance with vent manufacturer's installation instructions to avoid ember and flame intrusion through the gaps.
- **504.7.4. Gaps around vents.** Gaps around vents shall be sealed with sealants in accordance with vent manufacturer's installation instructions to avoid ember flame intrusion through the gaps.
- **505.7.2. Gaps around vents.** Gaps around vents shall be sealed with sealants in accordance with vent manufacturer's installation instructions to avoid ember flame intrusion through the gaps.

# IS-MHRRC 0-117 ICC 605 Section 503.8

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

### Revise as follows:

**503.8 Attached accessory structures.** <u>Attached accessory structures in Wildfire Hazard Class 1</u> shall comply with this section.

### Reason:

Throughout the standard there are many titles without section text. The ICC style guide for codes and standards requires that every section contain text, which often following a section title is scoping or charging language. This sort of text should be added throughout the standard whenever this occurs.

**Committee Action:** Disapproved

# IS-MHRRC 0-118 ICC 605 Section 503.8

Proponent: Reid Williams, Pacific Woodtech Corp

### Revise as follows:

### 503.8 Attached accessory structures.

❖ Examples of unenclosed attached accessory structures include decks and pergolas. Accessory structures have the same/similar vulnerability to direct embers as a primary structure, and so should resist ignition in the same manner to reduce the potential of generating additional exposure.

**503.8.1. Rating.** Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, are not restricted due to the protection of the structure provided by this section. shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction or constructed of one of the following:

- 1. Approved noncombustible materials.
- 2. Fire retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code.
- 3. Ignition-resistant building materials in accordance with Section 503.2. **Exception:** Coated materials shall not be used as the walking surface of decks.

**503.8.2** Underfloor areas. Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4.

### Reason:

Committee Action: Disapproved

# IS-MHRRC 0-119 ICC 605 Section 503.8

Proponent: Milad Shabanian, IBHS

### Revise as follows:

### **503.8** Attached Accessory Structures

503.8.1. Rating. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction, or constructed with 1-hour fire-resistance-rated construction on the exterior side in accordance with Section 502.3.1. The exterior side of such assembly shall be constructed with noncombustible materials in accordance with Section 502.2.1.

Exception: 1. Construction with log members that meet the requirements of a 1-hour fire-resistant rating in accordance with Section 303 of ICC-400. of one of the following:

- 1. Approved noncombustible materials.
- 2.Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code.
- 3. Ignition-resistant building materials in accordance with Section 503.2.

Exception: 2. Coated materials shall not be used as the walking surface of decks.

- 503.8.2 <u>503.8.1.</u> Underfloor areas. <u>Unenclosed accessory structures and projections attached to buildings with habitable spaces shall have underfloor areas enclosed to the ground with materials permitted for exterior wall construction in accordance with Section 503.4.</u>
  - Exception: Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are constructed in accordance with Section 503.8 and a minimum of 6 inches of noncombustible material or metal flashing extending vertically from grade on the exterior of supporting columns and walls.
- **503.8.2.1** Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4.
- \* Examples of unenclosed attached accessory structures include decks and pergolas. Accessory structures have the same/similar vulnerability to direct ember, radiant heat and flame as a primary structure, and so should resist ignition in the same manner to reduce the potential of generating additional exposure.

### Reason:

Aligning ICC 605 with WUIC44-24 for underfloor areas and also aligning attached accessory structures with exterior wall requirement of section 503.4 and design criteria of ICC 605 and Chapter 3.

**Committee Action:** Disapproved

# IS-MHRRC 0-120 ICC 605 Section 503.8.1

Proponent: Jason Smart, American Wood Council

### Revise as follows:

a. Suggest deleting the word "projections" since Section 503.8 deals with attached accessory structures. Projections are different from attached accessory structures. Attached decks are considered attached accessory structures, rather than projections: "Unenclosed accessory structures attached to buildings with habitable spaces—and projections, such as decks, shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction or constructed of one of the following:"

b. These requirements for attached unenclosed accessory structures do not make sense when attached to the side of a dwelling that complies with Section 503 (WHA Construction Class 1). The intent of the provisions for WHA Construction Class 1 is to harden the dwelling against not only embers, but also radiation and direct flame impingement, such as the exposure that could be generated by a burning deck. To account for cases in which the unenclosed accessory structure complies with Section 503, consider adding a fourth option, reading as follows: "4. Any materials permitted by code where all sides of the dwelling extending to within 5 feet of any portion of the unenclosed accessory structure comply with Section 503."

### Reason:

(See above)

**Committee Action:** Disapproved

# IS-MHRRC 0-121 ICC 605 Section 503.8.1

Proponent: Brad Douglas, American Wood Council

### Revise as follows:

503.8.1 <u>Construction requirements.</u> An attached accessory structure attached to the side of a primary structure built in accordance with 503 shall be permitted to be built in accordance with 505.

Rating. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fire resistance rated construction, heavy timber construction or constructed of one of the following:

- 1. Approved noncombustible materials.
- 2. Fire retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code.
- 3. Ignition-resistant building materials in accordance with Section 503.2.

Exception: Coated materials shall not be used as the walking surface of decks.

#### Reason:

These provisions appear to be in conflict with the provisions for Zone X in Chapters 3 and 4 since it allows combustibles within Zone X and is inconsistent with Table 301.2.1. However, as mentioned earlier in comments to Table 301.2.1, the requirements in Table 301.2.1 are inconsistent with the requirements of Table 301.2.2 for detached accessory structures where a detached accessory structure can be built to 505 if the adjacent side of the primary structure is built to Class 1. If the exterior side of the primary structure is designed to resist direct flame impingement, why are we requiring anything here? Can't the unenclosed attached accessory structure be built of the same materials that we allow in Zone X for detached accessory structures? Since Section 503 assumes that the side of the building is built in accordance with Class 1, I would suggest this section be revised to match 506.2 for detached accessory structures.

Committee Action: Disapproved

# IS-MHRRC 0-122 ICC 605 Section 503.8.2

Proponent: Jason Smart, American Wood Council

### Revise as follows:

Suggest modifying 503.8.2 so it does not imply that attached accessory structures are required to have underfloor areas: "Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area underfloor areas below the structure shall have underfloor areas be enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4."

#### Reason:

(See above)

**Committee Action:** Disapproved

# IS-MHRRC 0-123 ICC 605 Sections 503.8.2, 504.8.2

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**503.8.2 Underfloor areas.** Where the attached <u>accessory</u> structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section <u>504.4</u> <u>503.4</u>.

**504.8.2** Underfloor areas. Where the attached <u>accessory</u> structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4.

#### Reason:

Two revisions are proposed for Section 503.8.2.

- The term "accessory" is added to the 1<sup>st</sup> line. This section deals with attached accessory structures, so this revision clarifies the application of this section.
- The reference to Section 504.4 is revised to 503.4. Section 504.4 deals with construction of the underfloor area in Class 2 construction. Section 503.8.2 is dealing with Class 1 construction. The appropriate reference for underfloor areas is Section 503.4, which is the same referenced section in Section 503.6.

One revision is proposed for Section 504.8.2.

• The term "accessory" is added to the 1<sup>st</sup> line. This section deals with attached accessory structures, so this revision clarifies the application of this section.

These revisions provide consistency with the two sections.

**Committee Action:** Disapproved

# IS-MHRRC 0-124 ICC 605 Section 504.1

Proponent: Milad Shabanian, IBHS

Revise as follows:

504.1 Roof Assembly

**504.1.1. Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be firestopped to preclude entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**504.1.12 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

#### Reason:

Editorial

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation.

# IS-MHRRC 0-125 ICC 605 Section 504.2

Proponent: Brad Douglas, American Wood Council

### Revise as follows:

**504.2 Eaves and soffits.** Combustible eaves, facias and soffits shall be enclosed with solid materials with a minimum thickness of 3/4 inch (19 mm). Exposed rafter tails shall not be permitted unless constructed of heavy timber materials.

### Reason:

It is unclear what is meant by "solid materials with a minimum thickness of ¾ inch". Would ¾" EPS be acceptable? Recommend clarification.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

### **Committee Modification:**

#### Revise as follows:

**504.2 Eaves and soffits.** Combustible eaves, facias and soffits shall be enclosed protected with solid noncombustible or ignition-resistant materials, or fire retardant-treated wood with a minimum thickness of 3/4 inch (19 mm). Exposed rafter tails shall not be permitted unless constructed of heavy timber materials in accordance with IBC 2304.11.

# IS-MHRRC 0-126 ICC 605 Section 504.4

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**504.4 Exterior Walls.** Exterior walls shall be constructed with one of the exterior wall assemblies described in Sections 504.4.1 through 504.4.3. Such assemblies shall extend from the top of the foundation to the underside of the roof sheathing, or eaves or soffits-compliant with Section 504.2:.

### Reason:

This proposal removes the superfluous language and the colon from the section. The manner in which it is written implies that the roof sheathing must comply with Section 504.2. Section 504.2 only applies to eaves or soffits. However, if eaves or soffits are provided, the standard already requires that they comply with Section 504.2, so this wording is redundant.

Removing the phrase eliminates the confusion, but does not eliminate the requirement for eaves and soffits to comply with Section 504.2.

**Committee Action:** Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation. The pointer is not needed and the action is consistent with the approval of IS-MHRRC 0-101.

# IS-MHRRC 0-127 ICC 605 Section 504.4

Proponent: Jason Smart, American Wood Council

### Revise as follows:

Suggest revising the first sentence as follows to allow for compliance with more than one of the options, where desired: "Exterior walls shall be constructed with one <u>or more</u> of the exterior wall assemblies described in Sections 504.4.1 through 504.4.3."

### Reason:

(See above)

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation.

# IS-MHRRC 0-128 ICC 605 Section 504.4

Proponent: Milad Shabanian, IBHS

### Revise as follows:

**504.4 Exterior Walls.** Exterior walls shall be constructed with one of the exterior wall assemblies described in Section 504.4.1 through 504.4.3. following methods. Such assemblies shall extend from the top of the foundation to the underside of the roof sheathing or eaves or soffits compliant with 504.2:

**504.4.1. Acceptance criteria.** Exterior wall assemblies that pass the following acceptance criteria when tested in accordance with ASTM E2707:

The ASTM E2707 test shall be conducted on a minimum of three test specimens and meet the conditions of acceptance in Items 1 and 2 below. If either one of the three tests do not meet the conditions of acceptance, three additional tests shall be performed. All three additional tests must meet the conditions of acceptance.

- 3. Absence of flame penetration through the wall assembly at any time.
- 4. Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70-minute test.

**504.4.2. Rating** Exterior wall assemblies with a minimum of 1-hour fire-resistance rating, rated for exposure on the exterior side, and protected with one of the following exterior wall coverings:

- 1. Noncombustible materials.
- 2. Fire-retardant-treated wood.
- 3. Ignition-resistant building materials.

**504.4.3.** Log wall rating. Log walls that meet the requirements of a 1-hour fire-resistant rating in accordance with Section 303 of ICC-400

#### Reason:

**Committee Action:** Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation.

# IS-MHRRC 0-129 ICC 605 Section 504.4

Proponent: Brad Douglas, American Wood Council

### Revise as follows:

**504.4 Exterior Walls.** Exterior walls shall be constructed with one of the exterior wall assemblies described in Sections 504.4.1 through 504.4.3 meeting the requirements of 504.4.1, 504.4.2, or 504.4.3. Such assemblies shall extend from the top of the foundation to the underside of the roof sheathing or eaves or soffits compliant with Section 504.2.

### Reason:

Clarifying the intent.

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation. They did not see a need for the change.

# IS-MHRRC 0-130 ICC 605 Sections 504.4, 504.4.1

Proponent: Kevin Scott, KH Scott & Associates LLC

### Add new text as follows:

**504.4 Exterior Walls.** Exterior walls shall be constructed with one of the exterior wall assemblies described in Sections 504.4.1 through 504.4.3 504.4.4. Such assemblies shall extend from the top of the foundation to the underside of the roof sheathing or eaves or soffits compliant with Section 504.2÷.

**504.4.1 Class 1 construction.** Exterior walls assemblies constructed in accordance with Section 503.4.

#### Reason:

This proposal adds a new Section 504.4.1 to permit the use of any construction method allowed under Class 1 construction. If wall construction in accordance with Section 503.4 is acceptable for Class 1 construction, then it should also be acceptable for Class 2 construction.

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation. The logic is sound, but it could be resolved with the charging language for each class section as well. Further, it may cause confusion and a general assumption with any code is that applying more stringent requirements is always allowed.

# IS-MHRRC 0-131 ICC 605 Section 504.4.2

Proponent: Mark Cofer, LP Building Solutions

### Revise as follows:

**504.4.2 Rating.** Exterior wall assemblies with a minimum fire-resistance rating of 1 hour 30 min., rated for exposure on the exterior side and protected with one of the following exterior wall coverings:

- 1. Noncombustible materials.
- 2. Fire-retardant-treated wood.
- 3. Ignition-resistant building materials.

### Reason:

Committee Action: No action. This was withdrawn by the proponent.

# IS-MHRRC 0-132 ICC 605 Section 504.5

Proponent: Milad Shabanian, IBHS

### Revise as follows:

**504.5.3.1 Vents.** Attic, foundation, or underfloor ventilation openings shall be fully covered with approved vents tested in accordance with ASTM E2886 and shall demonstrate compliance with all the following requirements:

There shall be no flaming ignition of the cotton material during the Ember Intrusion Test. There shall be no flaming ignition during the Integrity Test portion of the Flame Intrusion Test. The maximum temperature of the unexposed side of the vent shall not exceed 662-degree F (350 degrees C).

Exception: Roof ridge and off-ridge (field) vents shall be constructed with noncombustible corrosion resistant material covered with noncombustible corrosion-resistant mesh with openings not less than 1/16-inch and not greater than 1/8-inch.

**504.5.3.2 Ventilation opening locations.** Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines. <del>Underfloor ventilation openings shall be located as close to grade as practical.</del>

### Reason:

Mostly editorial with some changes to align it with other WUI codes.

Committee Action: Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation.

# IS-MHRRC 0-133 ICC 605 Section 504.5.1, Chapter 7

Proponent: Kelly Nicolello, UL Solutions

## Revise as follows:

**504.5.1 Doors.** Exterior doors shall be approved noncombustible construction, solid core wood not less than 1 3/4 inches thick (45 mm), or have a fire protection rating of not less than 20 minutes and be listed and labeled in accordance with UL 10C. Win–dows within doors and glazed doors shall be in accordance with Section 504.5.2.

### Reason:

UL 10C is added as a test standard for the fire resistivity of the exterior doors in 504.5.1 and if accepted should be added to the reference standards page.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Modification:** 

## Replace as follows:

**504.5.1 Doors.** Exterior doors shall be approved noncombustible construction, solid core wood not less than 1 3/4 inches thick (45 mm) or have a fire protection rating of not less than 20 minutes when tested in accordance with NFPA 252, UL 10B, or UL 10C". Will also add this language to windows sections that require 20-minute rating "when tested in accordance with NFPA 257 or UL9, as appropriate. Windows within doors and glazed doors shall be in accordance with Section 504.5.2.

# IS-MHRRC 0-134 ICC 605 Section 504.6

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Suggest modifying 504.6 so it does not imply that attached accessory structures are required to have underfloor areas: "<u>Underfloor areas below</u> buildings or structures shall have underfloor areas-be enclosed to the ground, with exterior walls in accordance with Section 504.4."

### Reason:

(See above)

Committee Action: Approved as Submitted

# IS-MHRRC 0-135 ICC 605 Section 504.6

Proponent: Milad Shabanian, IBHS

Revise as follows:

**Replace Section 504.6 with following:** 

**504.5** Underfloor Areas. Underfloor areas of buildings and structures shall be enclosed to the ground with exterior walls in accordance with Section 504.4.

Exception: Complete enclosure shall not be required where the underside of exposed floors and exposed columns, beams and walls are protected in accordance with 504.4 and a minimum of 6 inches of noncombustible material or metal flashing extending vertically from grade on the exterior of supporting columns and walls.

### Reason:

Aligns ICC605 with 2024 ICC Group A changes.

**Committee Action:** Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Modification:** 

### Replace as follows:

<u>503.6 Underfloor Areas.</u> Underfloor areas of buildings and structures shall be enclosed to the ground with exterior walls in accordance with Section 503.4.

Exception: Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected in accordance with 503.4

503.8.2 Underfloor Areas. Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4.

<u>504.6 Underfloor Areas.</u> Underfloor areas of buildings and structures shall be enclosed to the ground with exterior walls in accordance with Section 504.4.

Exception: Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected in accordance with 504.4

504.8.2 Underfloor Areas. Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4.

505.6 Underfloor enclosure. Buildings or structures, appendages and projections shall have underfloor areas enclosed to the ground with exterior walls in accordance with Section 506.4 or with noncombustible corrosion-resistant mesh with openings not to exceed 18 inch (3.2 mm).

Exception: Complete enclosure shall not be required where a minimum of 6 inches (152 mm) of metal flashing or noncombustible material is applied vertically on the exterior of the vertically aligned structural elements such as columns and supporting walls at the ground.

<u>503.8 Attached accessory structures.</u> Unenclosed accessory structures and projections attached to the building shall have underfloor areas enclosed to the ground in a manner that complies with Section 506.5.

# IS-MHRRC 0-136 ICC 605 Section 504.7

**Proponent:** Brad Douglas, American Wood Council

Revise as follows:

504.7 Joints and intersections.

**504.7.1 Protection.** For assemblies that meet Section 504.4.1, no additional joint protection is required if the assembly tested in accordance with ASTM E2707 includes joints and intersections as used in the construction. If joints were not provided in tested assemblies, joints and intersections shall comply with Section 503.7.1 503.7.

**504.7.2 Exterior walls.** For exterior walls meeting Section 504.4.2, joints and intersections shall comply with Section 503.7.1-503.7.

### Reason:

Both of these provisions appear to be dealing with exterior wall joints and intersections. To be inclusive, I'm suggesting that reference to 503.7.1 should be changed to 503.7 in this section.

Committee Action: Approved as Submitted

# IS-MHRRC 0-137 ICC 605 Section 504.8

Proponent: Milad Shabanian, IBHS

Revise as follows:

## **504.8** Attached Accessory Structures

❖ Examples of unenclosed attached accessory structures include decks and pergolas. Accessory structures have the same/similar vulnerability to direct ember, and radiant heat as a primary structure, and so should resist ignition in the same manner to reduce the potential of generating additional exposure.

**504.8.1. Rating.** Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction, or constructed with 1-hour fire-resistance-rated construction on the exterior side in accordance with Section 502.3.1. The exterior side of such assembly shall be constructed with one of the followings:

- 1. Noncombustible materials in accordance with Section 502.2.1.
- 2. Fire-retardant-treated wood in accordance with Section 502.2.2.
- 3. Ignition-resistant building materials in accordance with Section 502.2.3.

Exception: Construction with log members that meet the requirements of a 1-hour fire-resistant rating in accordance with Section 303 of ICC-400

### of one of the following:

- 1. Approved noncombustible materials.
- 2.Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code.
- 3. Ignition-resistant building materials in accordance with Section 503.2.

**Exception:** Coated materials shall not be used as the walking surface of decks.

- 504.8.2 <u>504.8.1.</u> Underfloor areas. <u>Unenclosed accessory structures and projections</u> attached to buildings with habitable spaces shall have underfloor areas enclosed to the ground with one of the following methods:
- 1. Materials permitted for exterior wall construction in accordance with Section 504.4.
- 2. Noncombustible corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm). Exception: Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are constructed in accordance with Section 504.8 and a minimum of 6 inches of noncombustible material or metal flashing extending vertically from grade on the exterior of supporting columns and walls.

**504.8.2.1** Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below

the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4.

### Reason:

**Committee Action:** Disapproved

# IS-MHRRC 0-138 ICC 605 Section 504.8.1

Proponent: Jason Smart, American Wood Council

## Revise as follows:

a. Suggest deleting the word "projections" since Section 504.8 deals with attached accessory structures. Projections are different from attached accessory structures. Attached decks are considered attached accessory structures, rather than projections: "Unenclosed accessory structures attached to buildings with habitable spaces—and projections, such as decks, shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction or constructed of one of the following:"

b. These requirements for attached unenclosed accessory structures do not make sense when attached to the side of a dwelling that complies with Section 503 (WHA Construction Class 1). The intent of the provisions for WHA Construction Class 1 is to harden the dwelling against not only embers, but also radiation and direct flame impingement, such as the exposure that could be generated by a burning deck. To account for cases in which the unenclosed accessory structure complies with Section 503, consider adding a fourth option, reading as follows: "4. Any materials permitted by code where all sides of the dwelling extending to within 5 feet of any portion of the unenclosed accessory structure comply with Section 503."

#### Reason:

(See above)

Committee Action: Disapproved

# IS-MHRRC 0-139 ICC 605 Section 504.8.1

Proponent: Brad Douglas, American Wood Council

## Revise as follows:

**504.8.1** Construction requirements. The side of a primary structure within 5 feet of an attached accessory structure shall be built in accordance with 503.

Rating. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction or constructed of one of the following:

- 1. Approved noncombustible materials.
- 2. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code.
- 5. Ignition resistant building materials in accordance with Section 503.2. **Exception:** Coated materials shall not be used as the walking surface of decks.

### Reason:

These requirements won't prevent fire on the exterior of the primary structure. It is also in conflict with Tables 301.2.1 and 301.2.2. It would seem more appropriate to require that the side of the primary structure within 5' of the attached accessory structure be built in accordance with 503 and drop these requirements.

Committee Action: Disapproved

# IS-MHRRC 0-140 ICC 605 Section 504.8.2

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Suggest modifying 504.8.2 so it does not imply that attached accessory structures are required to have underfloor areas: "Where the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area underfloor areas below the structure shall have underfloor areas be enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 504.4."

### Reason:

(See above)

**Committee Action:** Disapproved

# IS-MHRRC 0-141 ICC 605 Section 505 Commentary

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

## SECTION 505 WILDFIRE HAZARD AREA (WHA) CLASS 3

Assumed exposure based on Chapter 3. Direct ember ignitions are those when an ember ignites a building material and contents via conduction and/or radiation. Direct Ember-Resistance classification assumes no radiant heat or direct flame exposure from exterior fire, and "perfectly" maintained defensible space (including on building). These are the base requirements for all buildings being designed to resist wildland-urban wildland fire exposures.

### Reason:

The commentary is revised in two locations.

The term "perfectly" is deleted. There will never be a perfectly maintained defensible space. The concept is understandable, but it is too subjective. Every code user will have a different concept of "perfect".

Additionally, "wildland-urban fire exposures" is revised to "wildland fire exposures". This standard refers to wildland fires, not wildland-urban fires.

Committee Action: Approved as Submitted

# IS-MHRRC 0-142 ICC 605 Section 505.1

Proponent: Milad Shabanian, IBHS

Revise as follows:

## 505.1 Roof Assembly

**505.1.1. Rating.** Roofs shall have a roof assembly that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an approved noncombustible roof covering.

**505.1.1.1** Fire Block. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be firestopped to preclude entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible roof deck.

**505.1.12** Roof valleys. Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inchwide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

### Reason:

**Editorial** 

Committee Action: Approved as Submitted

# IS-MHRRC 0-143 ICC 605 Section 505.2

Proponent: Milad Shabanian, IBHS

Revise as follows:

505.2 Eaves and soffits.

**505.2.1.** Construction. Eaves and soffits shall be designed and constructed to resist the accumulation of embers in gaps between construction materials (e.g., rafters and blocking) that can lead to ignition.

**505.2.2. Openings.** Ventilation openings in eaves and soffits shall comply with Section 505.5506.6.3.

### Reason:

Editorial

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Revise as follows:

505.3 Eaves and soffits.

**505.2.1.** Construction. Eaves and soffits shall be designed and constructed to resist the accumulation of embers in gaps between construction materials (e.g., rafters and blocking) that can lead to ignition.

**505.2.2. Openings.** Ventilation openings in eaves and soffits shall comply with Section 505.5 506.6.3.

# IS-MHRRC 0-144 ICC 605 Section 505.2.1

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

**505.2.1. 505.2.1 Construction.** Eaves Gaps greater than 1/8 inch (3.2 mm) in eaves and soffits shall be designed and constructed sealed or covered with metal flashing to resist the accumulation of embers in gaps between construction materials (e.g., rafters and blocking) that can lead to ignition.

### Reason:

The current language provides no guidance as to how to accomplish the intent. The requirement to construct "to resist the accumulation of embers in gaps" could easily be interpreted that there shall be no gaps at all. While that would work, it does not seem like that was the intent.

The section has been revised to require that gaps larger than 1/8" shall be treated. The treatment can be either to fill the gap or cover the gap with metal flashing.

**Committee Action:** Approved as Submitted

# IS-MHRRC 0-145 ICC 605 Section 505.2.2

**Proponent:** Aaron R. Phillips, Asphalt Roofing Manufacturers Association

## Revise as follows:

**505.2.2. Openings.** Ventilation openings in eaves and soffits shall comply with Section  $\underline{505.5.3}$   $\underline{506.6.3}$ .

### Reason:

The current reference to 506.6.3 points to a nonexistent section. The correct reference is believed to be to 505.5.3, as is suggested in this comment.

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 3 recommendation.

Committee Note: Section numbering to be reviewed.

# **IS-MHRRC 0-146**

# ICC 605 Section 505.4 + Commentary Table

**Proponent:** Mark Cofer, LP Building Solutions

## Revise as follows:

### 505.4 Exterior walls.

Exterior walls at the intersection with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:

- 1. Weather-exposed surface of noncombustible materials, or fire-retardant-treated material, or ignition resistant material, or a solid material with a min. of 3/4 inch (19 mm) nominal thickness, or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
- 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather exposed surfaces shall be maintained.

	1	Г
WUL 1 WHA - Class 1	WUI WHA - Class 2	WUI 3 WHA - Class 3
Ember Protection as required in 503	ASTM E2707- compliant assembly	Ember Protection: 6" min
<u>AND</u>	Ember Protection as required in 504	Ember protection as required in
1-hour rated <u>exterior wall</u> assembly	AND	<u>505</u>
AND	30 min. rated exterior wall assembly	AND
1. NC-Noncombustible Wall	AND	Protection of rainscreen openings
Coverings	1. Noncombustible Wall Covering	
(with WRB exception)	(with WRB exception)	
OR	OR	
2. Fire-Retardant-Treated Wood	2. Fire-Retardant-Treated Wood	
<u>Wall Covering</u>	<u>Wall Covering</u>	
<u>OR</u>	OR	
3. Ignition Resistant Wall Covering	3. Ignition Resistant Wall Covering	
<u>AND</u>	AND	
Protection of rainscreens openings	Protection of rainscreens openings	
OR	OR	
NFPA 285-compliant assembly	ASTM E2707 - compliant assembly	
ASTM E2707 compliant assembly	AND	
<u>AND</u>	ASTM E2957 compliant eave, soffit	
ASTM E2957 compliant eave, soffit	assembly	
<u>assembly</u>		
	OR	
	Log walls per Section 303 of ICC-400	

NC = noncombustible, FRTW = fire-retardant-treated wood, IR = ignition resistant

### Reason:

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation. The table was not in the final draft that was submitted and was not intended to be presented within the standard. If the TG deems the table useful, then approve after review and potential modification recommendations from workgroup

# IS-MHRRC 0-147 ICC 605 Section 505.4 Commentary

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Table of Classes and Requirements (Commentary to Section 505.4):

a. Change "WUI 1" "WUI 2" and "WUI 3" to "WHA Construction Class 1" "WHA Construction Class 2" and "WHA Construction Class 3" in the column headings.

b. In the 4th cell down on the left, the words "1-hour rated assembly AND" should be added directly above the words "NFPA 285-compliant assembly." When the NFPA-285 compliance path is taken in accordance with Section 503.4.3(2), the wall is also required to have a fire-resistance rating of not less than 1 hour in accordance with Section 503.4.1.

### Reason:

(See above)

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** Delete entire table.

# IS-MHRRC 0-148 ICC 605 Sections 505.5, 505.6

Proponent: Milad Shabanian, IBHS

Revise as follows:

Change the order of Section 505.6 and 505.5. underfloor areas should be after exterior walls.

Reason:

**Committee Action:** Disapproved

Committee Reason: Based on the Task Group 3 recommendation. The WG likes the

current arrangement.

# IS-MHRRC 0-149 ICC 605 Section 505.5.2 Commentary

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

### 505.5.2 Windows.

❖ This section covers all exterior windows, including casement, hung and louvered. Gaps around windows, which are vulnerable to embers, are addressed for other performance reasons (e.g., energy code).

### Reason:

The 2<sup>nd</sup> sentence is contradictory to the requirements in Section 505.7.3. Gaps around windows and doors are required to be protected in Section 505.7.3. Even though another code may require caulking for other reasons, the caulking will be beneficial for ember protection. Class 3 construction is intended to mitigate the entrance of embers according to Table 301.2.1. It provides an increased level of protection from embers, and the commentary should not state otherwise.

Committee Action: Approved as Submitted

# IS-MHRRC 0-150 ICC 605 Sections 505.5.3, 505.5.3.1

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

505.5.3 Ventilation openings. protection. Attic, foundation or underfloor ventilation openings shall be protected in accordance with Section 504.5.3.1.

**505.5.3.1** Vents. Attic, foundation or underfloor ventilation openings shall be fully covered with in accordance with one of the following:

- 1. Listed vents tested in accordance with ASTM E2886 to resist the intrusion of embers, and there shall be no flaming ignition of the cotton material during the Ember Intrusion Test.
- 2. Noncombustible, corrosion-resistant vents with mesh openings not to exceed 1/8 inch (3.2 mm).

### Reason:

Section 505.5.3 only provides a reference to Section 505.5.3.1, and it provides an incorrect reference to Section 504.5.3.1. Therefore, the text in Section 505.3.1 is deleted and the two sections are combined into Section 505.5.3.

The new Section 505.5.3 is retitled to "ventilation openings" to match the titles in Sections 504.5.3 and 503.5.3.

Committee Action: Approved as Submitted

# IS-MHRRC 0-151 ICC 605 Sections 505.6

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

**505.6 Underfloor enclosure.** Buildings or structures, appendages and projections shall have underfloor areas enclosed to the ground with exterior walls in accordance with section 506.4 Section 504.4 or with noncombustible corrosion-resistant mesh with openings not to exceed exceeding 1/8 inch (3.2 mm).

**Exception:** Complete The enclosure shall not be required to extend to the ground where a minimum of 6 inches (152 mm) of metal flashing or noncombustible material is applied vertically on the exterior of the vertically aligned structural elements such as columns and supporting walls at the ground.

### Reason:

This proposal makes the following revisions:

- This section references Section 506.4 which is for accessory structures. This reference is revised to Section 504.4 which addresses exterior wall construction.
- The exception is revised to clarify that the exemption is only for enclosure to the ground. The enclosure is required, but it does not need to extend to the ground where a noncombustible flashing is provided for the bottom 6 inches.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation. The clarifications make sense; the revised section reference should actually be Section 505.4. Match the changes to the exception in 503.6 and 504.6 as well.

# IS-MHRRC 0-152 ICC 605 Section 505.6

Proponent: Jason Smart, American Wood Council

## Revise as follows:

Suggest modifying 505.6 so it does not imply that structures are required to have underfloor areas: "<u>Underfloor areas below</u> buildings or structures, appendages and projections shall have underfloor areas be enclosed to the ground with exterior walls in accordance with section 506.4 or with noncombustible corrosion-resistant mesh with openings not to exceed 1/8 inch (3.2 mm)."

### Reason:

(See above)

**Committee Action:** Disapproved

# IS-MHRRC 0-153 ICC 605 Section 505.7.1

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

**505.7.1** Ember protection. Joints and intersections that would be susceptible to accumulation of embers shall be protected per Section 503.7. For assemblies that meet Section 504.4.1, no additional joint protection is required if the assembly tested in accordance with ASTM E2707 includes joints and intersections as used in the construction. If joints were not provided in tested assemblies, joints and intersections shall comply with Section 503.7.1.

### Reason:

The requirement for protection of joints and intersections in Class 3 construction is more restrictive than Class 2. This proposal revises Section 505.7.1 for Class 3 to duplicate the requirement for Class 2 joints and intersections.

Class 3 construction is designed to resist embers. Protection of the joints and intersections is important, so equivalency to Class 2 is appropriate for ember protection.

Committee Action: Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Note:** Modify as follows: **505.7.1 Ember protection.** Joints and intersections that would be susceptible to accumulation of embers shall be protected per Section <del>503.7</del> 502.5.

# IS-MHRRC 0-154 ICC 605 Section 505.8

Proponent: Jason Smart, American Wood Council

## Revise as follows:

a. Suggest modifying 505.8 so it does not imply that attached accessory structures are required to have underfloor areas. Also, delete the words "and projections" because projections are addressed in 505.6. Attached accessory structures are different from projections. Suggested modifications to address these comments are as follows: "Underfloor areas of unenclosed accessory structures and projections attached to the building shall have underfloor areas be enclosed to the ground in a manner that complies with Section 506.5."

b. Suggest adding the following sentence to the end of 505.8 to clarify that the minimum ember protection provisions of 502.5 also apply: "Minimum ember protection shall be provided in accordance with 502.5."

### Reason:

(See above)

**Committee Action:** Disapproved

# IS-MHRRC 0-155 ICC 605 Section 506, Table 301.2.2

Proponent: Milad Shabanian, IBHS

## Revise as follows:

Section 506 and Table 301.2.2 need to be aligned. Type A, B, C Detached accessory structures.

### Reason:

Committee Action: Disapproved

# IS-MHRRC 0-156 ICC 605 Sections 506.2, 506.3, 506.4

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

506.2 Class 1 detached accessory structures.

**506.2.1.** Floor area not exceeding 200 square feet. Class 1 detached accessory structures with a floor area not exceeding 200 square feet (19 m<sup>2</sup>) shall be have the roof and exterior walls constructed on all sides in accordance with Section 503.

506.2.2. Floor area exceeding 200 square feet. Class 1 detached accessory structures with a floor area greater than 200 square feet (19 m²) shall be have the roof and exterior walls constructed on the sides adjacent to facing the building containing habitable space constructed in accordance with Section 503.

506.3 Class 2 detached accessory structures.

**506.3.1.** Floor area not exceeding **200** square feet. Class 2 detached accessory structures with a floor area not exceeding 200 square feet (19 m<sup>2</sup>) shall be have the roof and exterior walls constructed on all sides in accordance with Section 504.

**506.3.2.** Floor area exceeding **200** square feet. Class 2 detached accessory structures with a floor area greater than 200 square feet (19 m²) shall be have the roof and exterior walls eonstructed on the sides adjacent to facing the building containing habitable space constructed in accordance with Section 504.

506.4 Class 3 detached accessory structures located 50 feet or more from main structure.

**506.4.1.** Floor area not exceeding 200 square feet. Class 3 detached accessory structures with a floor area not exceeding 200 square feet (19 m<sup>2</sup>) shall be have the roof and exterior walls constructed on all sides in accordance with Section 505.

**506.4.2.** Floor area exceeding **200** square feet. Class 3 detached accessory structures with a floor area greater than 200 square feet (19 m²) shall be have the roof and exterior walls eonstructed on the sides adjacent to facing the building containing habitable space constructed in accordance with section 505.

### Reason:

This proposal makes similar requirements to each of the sections.

In Sections 506.2.1, 506.3.1 and 506.4.1 the wording is revised to include the roof assembly in addition to the exterior walls. It does not make sense to protect the exterior walls without protecting the roof.

In Sections 506.2.2, 506.3.2 and 506.4.2 the wording is also revised to include the roof assembly. These three sections are slightly different in that only the walls which need to comply are the walls facing the primary building.

The title of Section 506.4 is also revised. The section does not include this requirement, so it does not belong in the title.

Committee Action: Disapproved

# IS-MHRRC 0-157 ICC 605 Section 506

**Proponent:** Brad Douglas, American Wood Council

## Revise as follows:

506.2 Class 1-Type A detached accessory structures.

506.3 Class 2 Type B detached accessory structures.

506.4 Class 3 Type C detached accessory structures.

### Reason:

The class names for the Detached Accessory Structures need to be coordinated with Table 301.2.2. As shown in Table 301.2.2, Class 1 would be Type A, Class 2 would be Type B, and Class 3 would be Type C.

Committee Action: Disapproved

# IS-MHRRC 0-158 ICC 605 Section 506.2

Proponent: Jeffrey Munsterteiger, National Association of Homebuilders

### Revise as follows:

506.2 Class 1 detached accessory structures.

**506.2.1. Floor area not exceeding 200 square feet.** Class 1 detached accessory structures with a floor area not exceeding 200 square feet (19 m2) shall be constructed on all sides in accordance with Section 503.

**506.2.2. Floor area exceeding 200 square feet.** Class 1 detached accessory structures with a floor area greater than 200 square feet (19 m2) shall be constructed on the <u>have</u> sides adjacent to the <u>facing a building containing habitable space constructed</u> in accordance with Section 503.

### Reason:

First in this section is the need for clarification. It refers to accessory structures as Class 1. No change is proposed because its not understood what this is referring to. Is the structure a class 1, or is it in a class 1 WHA? Or is it the type of accessory structure Table 301.2.2 was calling Type A, B and C which was commented on separately.

The second is the added text to 506.2.2 which is clarifying that it's the sides of the accessory building that face the building containing habitable space that need to be constructed in accordance with 503.

Committee Action: Disapproved

# IS-MHRRC 0-159 ICC 605 Chapter 5

**Proponent:** Larry Stevig, State Farm

## Revise as follows:

- 1. In Section 502.4.1, a reference is made to the IWUI Code and is associated with Section 301 of ICC605. Section 301 does not contain a reference to IWUI Code.
- 2. In 502.5.3, should this section require "ignition resistant material" instead of language requiring doors and frames to resist ignition from embers?
- 3. Protection of vent openings from embers is not included in Section 502.5. Consider adding 502.5.6 Vent openings to include language requiring covers resistant to embers, heat and flame and comply with ASTM E2886, or point to the requirements of 503.5.3 and 504.5.3 and 505.5.3.
- 4. In Section 506, will users be looking for Detached Accessory Dwelling Units? Consider a pointer to 501 505 or adding clarification that ADU's are considered a building.

### Reason:

Committee Action: Disapproved

Committee Reason: Based on the Task Group 3 recommendation. Disapprove Items 1, 3 and 4 and agree in concept with Item 2, but take no action on it. Item 1 is addressed with other comments removing IWUIC references and moving towards Wildfire Hazard Area. In response to Item 2, this section was removed with comment IS-MHRRC 0-87. There is a need to provide information on how to meet these requirements. Perhaps it can be addressed in several locations (anywhere "accumulation of embers" is used). It may have addressed in other comments and review for that as well. There may be a problem finding residential products to meet the door and window requirements in Section 503. There is a need to make the TG and maybe Committee aware. Item 3 vent opening protection is addressed appropriately in each class of construction, so adding this requirement is not necessary. Again, 502.5 may need further review as it has caused a lot of confusion. Maybe "At a minimum, ember protection shall be provided for all classes of construction in accordance with section 505." Item 4 the standard already

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addresses this in Chapter 1.			
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# Chapter 6 EXISTING BUILDINGS

# **IS-MHRRC 0-160**

ICC 605 Chapter 6, Sections 601.1, 602.2, 603.1, 604.1, 608.1

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

# CHAPTER 6 **EXISTING REPAIR AND MAINTENANCE OF BUILDINGS**

- **601.1 Scope.** The provisions of this chapter shall apply to the repair, alteration, addition to, change of occupancy or maintenance of existing buildings located within or relocated to wildfire hazard areas.
- **602.2 Classification of work.** For purposes of this standard, work in existing buildings shall be classified into the categories of repair, alteration, addition, change of occupancy, relocation or maintenance. Specific requirements are established for each category of work in these provisions.
- **603.1 General.** Repairs to existing structures shall comply with the requirements of this section.
- **604.1 General.** Alterations to existing buildings shall comply with the provisions of this standard for new construction, except as permitted by Sections 604.2 through 604.5. Alterations shall not cause the existing building to become less compliant with the provisions of this standard for new construction than the existing building was prior to the work.
- **608.1 General.** Inspection of existing structures shall be performed regularly in accordance to this section. Any repairs that become necessary shall become compliant with the requirements outlined in Section 603.

### Reason:

Existing buildings are defined in Chapter 2 to specify that those buildings are in existence at the time the standard is adopted. Since existing buildings is defined, this entire chapter would only apply to buildings already permitted or constructed when this standard is adopted. This entire chapter would have no effect on buildings constructed in accordance with this standard which certainly is not the intent. Since these provisions are intended to apply to buildings which are constructed both before and after adoption, the following revisions are made:

- Chapter 6 title is revised to remove "existing". The title is changed to "repair and maintenance of buildings." For example, this chapter covers repair of buildings in Section 602, modification of buildings in Sections 603 through 606 and maintenance of buildings in Section 608.
- Section 601.1 is revised to remove "existing" and make it applicable to all buildings within the wildfire hazard areas.
- Section 601.1 is further revised to remove "relocate to". This Chapter will apply to any building located in the wildfire hazard area, regardless of whether it was constructed there or moved there, it makes no difference whether the building was constructed onsite, or it was assembled elsewhere and then moved into the wildfire hazard area.
- Section 601.1 is further revised to reformat the sentence structure to match ICC format for scope language.
- Section 602.2 is revised to remove the "existing".
- Section 603.1 is revised to remove the "existing".
- Section 604.1 is revised to remove the "existing".
- Section 608.1 is revised to remove the "existing".

Committee Action: No action. This was withdrawn by the proponent.

# IS-MHRRC 0-161 ICC 605 Section 602

Proponent: Kevin Scott, KH Scott & Associates LLC

## Revise as follows:

**602.1 General.** The provisions of this chapter are intended to permit work in modifications to existing buildings that is-are consistent with the purpose of this standard. Compliance with these provisions this chapter shall be deemed to meet the requirements of comply with this standard for modifications to existing buildings.

**602.2 Classification of work modifications.** For purposes of this standard, work in modification to existing buildings shall be classified into the categories of repair, alteration, addition, change of occupancy, relocation or maintenance. Specific requirements are established for each category of work in these provisions.

### 602.3 Compliance.

602.3.1. 602.3.1 Scope. Regardless of the category of work being performed, the work shall cause the relevant building element or assembly to be compliant, with the provisions of be completed in a manner which results in the element or assembly complying with this standard.

602.3.2. 602.3.2 Requirements. The completed work shall comply with the requirements of Chapter 3.

### Reason:

This proposal revises several portions of Section 602.

- 602.1: The term "work in existing buildings" is unclear. It is proposed to be replaced with "modification to existing buildings". The term "modification" covers the processes included in the scope of this chapter in Section 601. These modifications are "repair, alteration, addition to, change of occupancy and maintenance. This revision is also applied Section 602.2.
- 602.1: "Compliance with these provisions" is replaced with "compliance with this chapter" to specify which provisions are referenced.
- 602.1: the phrase "shall be deemed to comply" is used in numerous locations in the I-Codes and the wording is revised to correlate with that format.
- 602.3.1: this section is revised to clarify that once the work is completed to an existing building, the finished product must comply with the standard.
- 602.3.2: this section is revised to specify the finished job, or the "completed work" must comply with Chapter 3. There are many construction materials that may be used during construction which do not meet the requirements of the standard, but when the project is

completed, it must comply.

• All: Section numbers are not changed, but the format of the section numbers is revised to be consistent throughout the standard.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

#### Committee Modification:

### **Revise as follows:**

**602.1 General.** The provisions of this chapter are intended to permit work performed on modifications to existing buildings that is is are consistent with the purpose of this standard. Compliance with these provisions this chapter shall be deemed to meet the requirements of comply with this standard. For modifications to existing buildings.

602.2 Classification of work work modifications. For purposes of this standard, work performed on in work in modification to existing buildings shall be classified into the categories of repair, alteration, addition, change of occupancy, or relocation or maintenance. Specific requirements are established for each category of work in these provisions.

## 602.3 Compliance.

602.3.1. Scope. Regardless of the category of work being performed, the work shall eause the relevant building element or assembly to be compliant, with the provisions of be completed in a manner which results in the element or assembly complying with this standard.

<u>602.3.2.</u> <u>602.3.2</u> **Requirements.** The <u>completed</u> work shall comply with the requirements of Chapter 3.

### IS-MHRRC 0-162 ICC 605 Section 603.2

**Proponent:** Mark Cofer, LP Building Solutions

Revise as follows:

603.2 Building elements and materials.

**603.2.2.3 Replacement.** For exterior wall covering replacement for walls needing to comply with Section 505.4, the intersections with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:

- 1. Weather-exposed surface of noncombustible materials, or fire-retardant-treated material, or ignition resistant material, or a solid material with a min. of 3/4 inch (19 mm) nominal thickness, or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
- 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather exposed surfaces shall be maintained.

#### Reason:

**Committee Action:** Disapproved

**Committee Reason:** Based on the Task Group 3 recommendation. It is consistent with the action taken on IS-MHRRC 0-146.

### **IS-MHRRC 0-163**

ICC 605 Section 603.2.1

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

603.2.1. 603.2.1 General. Materials used during repairs shall comply with this section Sections 603.2.1 through 603.2.2.3.

### Reason:

This proposal clarifies which "section" or sections are referenced. The current text states "this section", and it is unclear whether it is specifying Section 603.2.1 or the entirety of Section 603.2. This revision will specify which sections are to be applicable.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

### **Committee Modification:**

#### **Revise as follows:**

603.2.1. 603.2.1 General. Materials used during *repairs* shall comply with this section Sections 603.2.1 through 603.2.2.3. 603.2.1.1 or 603.2.1.2

### **IS-MHRRC 0-164**

ICC 605 Section 603.2.2

**Proponent:** Brad Douglas, American Wood Council

Revise as follows:

603.2.2.1-Removal Class 1 exterior wall coverings.

603.2.2.2 Removal of assembly Class 2 exterior wall coverings.

603.2.2.3 Replacement Class 3 exterior wall coverings.

### Reason:

The titles in this Chapter for evaluating the exterior walls are inconsistent. Recommend they be replaced.

**Committee Action:** Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

Committee Modification: See IS-MHRRC 0-178 Item 41.

### IS-MHRRC 0-165 ICC 605 Section 603.2.2.1

Proponent: Kelly Nicolello, UL Solutions

Revise as follows:

603.2.2 Exterior wall covering replacement.

**603.2.2.1 Removal.** Exterior wall covering replacement for walls needing to comply with Section 503.4 shall include the removal of all existing layers of wall coverings down to the exterior sheath- ing and replacement shall include the following:

- 1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

  Exception: Where the existing wall assembly includes an exterior layer of 5/8-inch (16 mm) Type X gypsum sheathing and the existing sheathing is not water-soaked or deteriorated.
- 2. Wall coverings of noncombustible material in accordance with Section 502.2.1. **Exception:** Wall coverings where the water-resistive barrier is the only combustible component and has water-resistive barriers having a peak heat release rate of less than 150 kW/m<sup>2</sup>, a total heat release of less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723.
- 3. Approved Design shall be tested in accordance and complying with the requirements of and comply with the acceptance criteria of NFPA 285 where the existing assembly is not water-soaked or deteriorated.

### Reason:

This revision is consistent with language from the IBC relating to NFPA 285.

**Committee Action:** Disapproved

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Note:** This section is deleted by IS-MHRRC 0-166 and is modified in IS-MHRRC 0-178 Item 41.

### IS-MHRRC 0-166 ICC 605 Section 603.2.2.1

**Proponent:** Brad Douglas, American Wood Council

### Revise as follows:

603.2.2.1 Removal Class 1 exterior wall coverings. Unless the existing exterior wall assembly is shown to comply with provisions of 503.4, Exterior wall coverings replacement for walls needing to comply with Section 503.4 shall include the removal of all existing layers of wall coverings shall be removed down to the exterior sheathing, deteriorated materials shall be replaced, and the exterior wall built in accordance with 503.4 and replacement shall include the following:

- 1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

  Exception: Where the existing wall assembly includes an exterior layer of 5/8-inch (16 mm) Type X gypsum sheathing and the existing sheathing is not water-soaked or deteriorated.
- 2. Wall coverings of noncombustible material in accordance with Section 502.2.1. **Exception:** Wall coverings where the water-resistive barrier is the only combustible component and has water-resistive barriers having a peak heat release rate of less than 150 kW/m2, a total heat release of less than 20 MJ/m2 and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723.
- 3. Approved design tested and complying with the requirements of NFPA 285 where the existing assembly is not water-soaked or deteriorated.

### Reason:

If the intent is to ensure that the exterior wall meets the requirements of 503.4, why would the requirements be any different that the requirements for Class 1 in 503.4? I propose this be simplified as proposed.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

Committee Modification: See IS-MHRRC 0-178 Item 41.

### IS-MHRRC 0-167 ICC 605 Section 603.2.2.2

**Proponent:** Brad Douglas, American Wood Council

Revise as follows:

603.2.2.2 Removal of assembly Class 2 exterior wall coverings. Unless the existing exterior wall assembly is shown to comply with provisions of 504.4, exterior wall coverings replacement for walls needing to comply with Section 504.4 shall include the removal of all existing layers of wall coverings shall be removed down to the exterior sheathing, deteriorated materials shall be replaced, and the exterior wall built in accordance with 504.4 replacement shall include the following:

**Exception:** Log walls in accordance with Section 303 of ICC 400.

Exception: Approved and tested design complying with Section 504.4 where the existing assembly is not water-soaked or deteriorated.

1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

### **Exceptions:**

- 1. Where the existing wall assembly includes an exterior layer of %-inch (16 mm) Type X exterior gypsum sheathing and the existing sheathing is not water-soaked or deteriorated.
- 2. Log walls that meet the requirements of a 1-hour fire-resistance rating in accordance with Section 303 of ICC 400.
- 2. Wall coverings shall include exterior surfaces of one of the following materials:
  - 2.1 Noncombustible materials.
  - 2.2 Fire-retardant-treated wood.
  - 2.3 Ignition-resistant building materials.

Exception: Log walls in accordance with Section 303 of ICC 400.

3. A wall designed and tested in accordance with ASTM E2707 and meeting the requirements of Section 504.4.1 where the existing assembly is not water-soaked or deteriorated.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

Committee Modification: See IS-MHRRC 0-178 Item 41.

### IS-MHRRC 0-168 ICC 605 Section 605.1, 607.1

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

605.1. 605.1 General. All building elements in any addition shall comply with the provisions of this standard for new construction.

607.1. 607.1 General. Any structure relocated into a wildfire hazard area shall comply with the provisions of this standard for new construction.

#### Reason:

This proposal revises these sections to clarify that additions (Section 605.1) and relocated buildings (Section 607.1) shall comply with new construction requirements. This concept is stated several times in the standard. Some examples are:

- 1. Section 101.1 states that buildings relocated into the wildfire hazard area shall comply.
- 2. Section 301.2 states that "New buildings constructed in, or buildings relocated into, wildfire hazard areas shall be evaluated..."
- 3. Section 301.2.1 states that "New unenclosed accessory structures constructed in, or relocated into, a wildfire hazard area shall be evaluated..."

This concept is also used in other I-Codes. Any new work must comply with the current requirements.

Section 603 addresses repairs to existing buildings. Repairs are different than additions or relocated buildings in that the repair is maintaining a condition that already existed; whereas an addition or relocated building is increasing the fire load by expanding a structure or placing a structure where previously on did not exist. Therefore, repairs are not required to comply with all of the requirements for new construction, and Section 603 addresses those specific requirements.

**Committee Action:** Approved as Submitted

**Committee Reason:** Based on the Task Group 3 recommendation.

### **IS-MHRRC 0-169**

### ICC 605 Section 608

**Proponent:** Jeffrey Munsterteiger, National Association of Homebuilders

### Delete and substitute as follows:

**608.1** General. Inspection of existing structures shall be performed regularly in accordance to this section. Any repairs that become necessary shall become compliant with the requirements outlined in Section 603.

608.2 Building elements and materials. Repair of any building materials shall meet the requirements as prescribed in Chapter 5 for new construction according to the International Wildland Urban Interface Code class in which the building is located.

### 608.3 Inspection and maintenance of existing buildings.

608.3.1 Roof assemblies. Inspect the exterior envelope of various roof components and details (e.g., edge of roof, around fire-rated or protected vents, open eave rafters, or joist blocking details). If the roof assembly's construction does not conform with the requirements of roof assembly provided in this standard, it shall be repaired in accordance with Section 603.

608.3.2 Joints and interfaces. Inspect joints and interfaces (e.g., door-to-wall, window-to-wall, wall to-wall, roof-to-roof joints) for the accumulation of combustible debris. If debris is present, remove.

608.3.2.1. Caulking. Seal cracks and gaps with fire-resistant caulking, in particular combustible or non-fire-rated joints, to prevent creating areas where vegetative debris and embers can accumulate.

### 608.3.3 Adjacent to roof-to-wall siding interfaces.

608.3.3.1. Inspection. Inspect roof-to-wall joints and interfaces in the roof envelope. Inspect areas where vegetative debris and embers could accumulate. Inspect adjacent combustible dormer or wall siding adjacent to roofing material. If debris is present, remove.

608.3.3.2. Sealant. Seal cracks and gaps with fire-resistant caulking, in particular combustible or non-fire-rated joints, to prevent creating areas where vegetative debris and embers can accumulate.

### 608.3.4 Roof joints at through penetrations (chimneys, skylights, roof vents).

**608.3.4.1.** Inspection. Inspect all roof joints at through penetrations such as chimneys, skylights and roof vents. Ensure the joint at the penetration and the roof assembly is well sealed to minimize the entry of embers.

608.3.4.2. Flashing. Check for standard metal flashing and that no exposed wood is present, repair as necessary. Metal flashing installed around penetration shall not be corroded, torn or loose.

- 608.3.4.3. Replacement. Replace if necessary.
- 608.3.4.4. Debris. Remove vegetative debris from the roof, including on and adjacent to skylights, on a regular basis.
- 608.3.5 Roof-to-roof interfaces (ridges).
- 608.3.5.1. Inspection. Inspect roof caps that also serve as attic ventilation (e.g., underlying ridge vents).
- 608.3.5.2. Vent protection. Ensure that these ridge vents are provided with ember and flame-resistant vent protection. Where roof caps do not serve as attic ventilation, ensure that any gaps are sealed.
- 608.3.5.3. Gaps. For roof ridge edges or terminations, ensure any gaps are filled with a noncombustible material.
- 608.3.6 Roof-to-roof interfaces (valleys).
- 608.3.6.1. Inspection. Inspect roof valley joints with metal valley flashing with an underlying mineral surfaced cap sheet incorporated into the assembly.
- **608.3.6.2.** Condition. Metal flashing installed in valley joints shall not be corroded, torn or loose.
- 608.3.6.3. Replacement. Replace if necessary.
- 608.3.7 Edge-of-roof joints.
- 608.3.7.1. Inspection. Inspect edge-of-roof joints for gaps or cracks.
- 608.3.7.2. Gaps. Plug gaps at the roof edge.
- 608.3.7.3. Caulking. Seal cracks and gaps with fire-resistant caulking.
- 608.3.8 Head-of-wall joints.
- 608.3.8.1. Inspection. Inspect joints between the head of wall and roof or ceiling for gaps or cracks.
- 608.3.8.2. Caulking. Seal cracks and gaps with fire-resistant caulking.
- 608.3.9 Bottom-of-wall-to-roof joints. Inspect joints between bottom of wall and roof for gaps or cracks.
- 608.3.10 Wall-to-wall joints.
- 608.3.10.1. Inspection. Inspect wall-to-wall joints for gaps or cracks.
- 608.3.10.2. Caulking. Seal cracks and gaps with fire resistant caulking.
- 608.3.11 Window-to-wall joints.
- 608.3.11.1. Inspection. Inspect window-to-wall joints for gaps or cracks.
- 608.3.11.2. Scalant. Ensure the space between the door and the framing is well sealed.
- 608.3.11.3. Caulking. Seal cracks and gaps with fire-resistant caulking.

- 608.3.12 Door-to-wall joints.
- 608.3.12.1. Inspection. Inspect door-to-wall joints for gaps or cracks.
- 608.3.12.2. Sealant. Ensure the space between the door and the framing is well sealed.
- 608.3.12.3. Gaps. The gaps around the openings should be filled with fire-resistant caulking, mineral wool or similar noncombustible material.
- 608.3.13 Garage-door-to-wall joints.
- 608.3.13.1. Inspection. Inspect garage door to-wall joints for gaps or cracks. Ensure that the space between the garage door, framing and concrete slab is well sealed to minimize the entry of embers. Ensure weather sealing is provided and in good condition.
- 608.3.13.2. Sealant. Ensure the space between the door and the wall is well sealed.
- 608.3.13.3. Gaps. Where gaps are present, utilize appropriate weatherstripping, firestopping and/or fire-resistant penetration materials/products as needed. Replace weather sealing materials if necessary, firestopping and/or fire-resistant penetration materials/products as needed. Replace weather sealing materials if necessary.
- 608.3.14 Wall expansion joints.
- 608.3.14.1. Inspection. Inspect wall expansion joints.
- 608.3.14.2. Scalant. Ensure the space between the expansion joints is well sealed.
- 608.3.13.3. Gaps in expansion joints should be filled with fire-resistant caulking, mineral wool or similar noncombustible material.
- 608.3.16 Bottom-of-wall-to-foundation joints.
- 608.3.16.1. Inspection. Inspect bottom-of-wall-to-foundation joints.
- 608.3.16.2. Sealant. Ensure the space between the joints is well sealed.
- 608.3.16.3. Firestopping. Block or seal gaps in with firestopping materials (e.g., mineral wool, fire resistant caulking, or other fire-rated sealants).
- 608.3.17 Floor-to-wall joints.
- **608.3.17.1.** Inspection. Inspect floor-to-wall joints such as where balconies, decks and porches interface with the exterior wall envelope.
- 608.3.17.2. Sealant. Ensure the space between the building feature and wall is well sealed.
- 608.3.17.3. Gaps. Block or seal gaps with appropriate firestopping and fire caulking material.
- 608.3.18 Gutters and downspouts.
- 608.3.18.1. Inspection. Inspect rain gutters that interface with the exterior wall envelope and ensure that gutters are properly secured to fascia to eliminate gaps where vegetative debris, leaves or needles can accumulate. Ensure that leaves, pine needles and other debris are removed from the rain gutters themselves and removed from gaps between the back of the gutter and the fascia. Remove vegetative debris from gutters on a regular basis during fire season.

608.3.18.2. Gaps. Ensure that there are no gaps between the rain gutter and fascia.

608.3.18.3. Caulking. If necessary, more securely fasten or secure any sections of the rain gutter that have separated from the fascia. If that is not possible, block or seal gaps with appropriate fire caulking material.

#### 608.3.19 Ventilation opening protection.

**608.3.19.1.** Inspection. Inspect vents (gable vents, dryer vents, crawl space vents) to make sure they are in good condition (e.g., screen is in good condition with no tears that would result in larger openings).

608.3.19.2. Replacement. If necessary, replace the screen or vent with materials conforming to Chapter 5.

#### 608.3.20 Fences.

608.3.20.1. Inspection. Inspect fences for the accumulation of vegetative debris, both on and below the fence.

608.3.20.2. Debris. Remove vegetative debris that can accumulate at the base of the fence on a regular basis. Do not use fences as a trellis for plants because plants can create and trap ignitable vegetative debris.

### 608.3.21 Solar panels.

608.3.21.1. Inspection. Inspect solar panels for the accumulation of vegetative debris, both on top of and below the panel and its support framing.

608.3.21.2. Debris. Remove vegetative debris that has accumulated on top of and below the solar panels and support structures.

### 608.3.22 Decks, stairs, and landings attached to structure.

608.3.22.1. Inspection. Inspect the gaps between decks, stairs, landings, etc. and the structure to ensure that no vegetative debris has accumulated in the gap.

608.3.22.2. Debris. Remove vegetative debris that has accumulated in the gap.

608.3.22.3. Gaps. Block or seal gaps with appropriate firestopping and fire caulking material.

### 608.3.23 Pergolas and trellises.

608.3.23.1 Inspection. Inspect pergolas and trellises for the accumulation of vegetative debris, both on and below the pergola and trellis.

608.3.23.2 Debris. Remove vegetative debris that has accumulated on the pergola or trellis on a regular basis. Do not intentionally use pergolas or trellises as a support for plants because plants can create and trap ignitable vegetative debris.

### 608.3.24 Exterior wall bump outs.

608.3.24.1. Inspection. Inspect the top and bottom of any bump out features on exterior walls. Inspect for gaps between the bump out and the main structure.

608.3.24.2. Debris. Remove vegetative debris that has accumulated on the top of the bump out.

608.3.24.3. Gaps. Block or seal gaps on the top and bottom of the bump out with appropriate firestopping and/or fire caulking material.

### Replace with:

<u>608.1 General.</u> Owners of existing buildings, or their agents shall cause existing buildings and structures to be inspected biannually in accordance with this section.

Repair of existing buildings shall comply with section 603.

- <u>608.2 Materials.</u> New materials shall meet the requirements of Chapter 5 for the Wild Hazard Area Class in which the building or structure is located.
- 608.2.1 Joints and intersections. Joints ands intersections of existing buildings shall be maintained in accordance with the requirements for the Wild Hazard Area Class in which the building or structure is located.
- 608.2.2 Sealants. Where gaps and cracks create areas where vegetative debris and embers can accumulate such gaps and cracks shall be sealed with fire-resistant caulking or other non-combustible material.
  - **608.2.3 Flashing**. Existing metal flashing shall not be missing, corroded, torn or loose.
- 608.2.4 Debris accumulations. Accumulations of combustible trash or debris, including vegetative debris, shall be removed and properly disposed of away from structures.
- <u>608.3 Areas requiring inspection.</u> Biannual inspections of existing buildings and structures shall include the following locations, areas and building elements.
  - 1. Roof assemblies
    - a. Roof-to-wall siding interfaces
    - b. Roof joints at through penetrations (plumbing vents, chimneys, skylights, roof vents)
    - c. Roof-to-roof interfaces (valleys, ridges and hips)
    - d. Roof vent protection
    - e. Edge-of-roof joints
  - 2. Wall assemblies
    - a. Wall to roof, floor or foundation intersections
    - b. Wall-to-wall joints
    - c. Wall openings (windows, doors, garage doors, vents)
    - d. Architectural elements or projecting features
  - 3. Gutters and downspouts
  - 4. Attached decks, stairs, and landings
  - 5. Exterior features (Fences, pergolas, and trellises)
  - 6. Solar panels
  - 7. Other elements, features or areas that may accumulate combustible debris or embers.

#### Reason:

This section was very long and as a result was difficult to follow. Many of the same or similar requirements were repeated from area to area. This replacement abbreviates the requirements by starting with minimum material

requirements and specifics, and then listing the areas of focus for the inspection. Some deference needs to be given that individuals performing inspections have a basic level of competency to perform the task. Jurisdictions can further support them by providing educational handouts or even various forms of media to assist. The complexity that was in the original text would not further the cause of providing an adequate outcome.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

**Committee Modification:** 

Delete 608.1 through 608.2.4 and replace with:

608.1 General. Owners of existing buildings, or their agents shall cause existing buildings and structures to be inspected biannually in accordance with this section. Repair of existing buildings shall comply with section 603.

<u>608.2 Materials.</u> New materials shall meet the requirements of Chapter 5 for the Wild Hazard Area Class in which the building or structure is located.

- <u>608.2.1 Joints and intersections</u>. Joints and intersections of existing buildings shall be maintained in accordance with the requirements for the Wild Hazard Area Class in which the building or structure is located.
- <u>608.2.2 Sealants</u>. Where gaps and cracks create areas where vegetative debris and embers can accumulate such gaps and cracks shall be sealed with fire-resistant caulking or other non-combustible material.
- 608.2.3 Flashing. Existing metal flashing shall not be missing, corroded, torn or loose.
- 608.2.4 Debris accumulations. Accumulations of combustible trash or debris, including vegetative debris, shall be removed and properly disposed of away from structures.
- <u>608.3 Areas requiring inspection.</u> Biannual inspections of existing buildings and structures shall include the following locations, areas and building elements.
  - 1. Roof assemblies
    - a. Roof-to-wall siding interfaces
    - b. Roof joints at through penetrations (plumbing vents, chimneys, skylights, roof vents)
    - c. Roof-to-roof interfaces (valleys, ridges and hips)
    - d. Roof vent protection
    - e. Edge-of-roof joints
  - 2. Wall assemblies
    - a. Wall to roof, floor or foundation intersections
    - b. Wall-to-wall joints
    - c. Wall openings (windows, doors, garage doors, vents)
    - d. Architectural elements or projecting features
  - 3. Gutters and downspouts
  - 4. Attached decks, stairs, and landings
  - 5. Exterior features (Fences, pergolas, and trellises)
  - 6. Solar panels

7. Other elements, features or areas that may accumulate combustible debris or embers.

### Revise as follows:

608.3-704 Areas requiring evaluation. Annual evaluation of existing buildings and structures shall include the following locations, areas, and building elements.

- 1. Roof assemblies
  - a. Roof-to-wall siding interfaces joints and intersections (dormers and walls adjacent to a roof surface)
  - b. Roof joints at through penetrations (plumbing vents, chimneys, skylights, roof vents)
  - c. Roof-to-roof interfaces joints and intersections (valleys, ridges and hips)
  - d. Roof vent protection
  - e. Edge-of-roof joints
- 2. Eaves and soffits
  - a. Attic vent protection
- 3. Exterior wall assemblies
  - a. Wall to roof, floor, deck, or and foundation joints and intersections
  - b. Wall-to-wall joints
  - c. Wall openings (windows, screens, doors, and garage doors, vents)
  - d. Wall vent protection
  - e. Architectural elements or and projecting features
- 4. Underfloor areas (underside of exposed floors, decks, structural columns, beams and supporting walls)
- 5. Gutters and downspouts
- 6. Attached decks, stairs, and landings
- 7. Exterior features and structures that may become a fire exposure threat to the building, including fences, pergolas, and trellises.
- 8. Solar panels
- 9. Other elements, features or areas that may accumulate combustible debris or embers.

### **IS-MHRRC 0-170**

ICC 605 Sections 608, 608.1, 608.3, 101.6

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

### SECTION 608 INSPECTION AND MAINTENANCE

608.1 General. Inspection Maintenance inspections of existing structures shall be performed regularly in accordance to this section. The owner shall ensure that routine maintenance inspections are conducted. Any repairs that become necessary shall become compliant with the requirements outlined in Section 603.

### 608.3 Inspection and maintenance of existing buildings Maintenance inspections.

#### Add new text as follows:

101.6 Maintenance. Buildings, structures, landscape materials, vegetation, defensible space or other devices or safeguards required by this standard shall be maintained as specified in this standard. The owner or the owner's authorized agent shall be responsible for the maintenance of buildings, structures, landscape materials and vegetation.

#### Reason:

This section mandates inspections, but does not provide information on who is responsible for inspections. While the items listed in Section 608.3 can be inspected by the code official, the checklist and repair format is intended for the homeowner. The code official has the authority to inspect, and can enforce repair or replacement to maintain any of the provisions in the standard.

This section should only deal with maintenance inspections performed by the homeowner. Many of the inspection items are not something a code enforcement officer will inspect—they are designed for homeowner inspection or hired contractor inspection. Section 101.6 is added to state that all required items must be maintained, then Section 608 provides guidance for the homeowner for routine inspection and maintenance.

Committee Action: Approved as Modified

**Committee Reason:** Based on the Task Group 3 recommendation.

#### **Committee Modification:**

Section 608, 608.1, 608.3, 101.6

### **PART 1: APPROVE WITH MODIFICATION**

NOTE: Editorial - Relocate "Maintenance" from 608 into a new Chapter 7 with new sections numbers.

Technical – Changes "Routine Inspection" to "Annual Evaluation."

### PART 2: REFERRED to Admin Group

NOTE: Adds Definition "Maintenance."

### **PART 3: APPROVE WITH MODIFICATION**

NOTE: Technical – Changes inspection implementation from the AHJ to the building owner AND modifies "code language" to homeowner/layman language.

Relocates Sections 608.3.1 through 608.3.24.3 into a new Appendix B <u>Annual Building</u> Evaluation Checklist

## 0-170 PART 1. (Coordinated with IS-MHRRC 0-169, 0-172 Item 7 and 0-179 Item 42) Revise as follows:

## SECTION 608 CHAPTER 7 INSPECTION AND MAINTENANCE

608.1 701 General. Inspection Maintenance inspections evaluation of existing buildings structures shall be performed regularly in accordance to with this section. The owner or owner's authorized agent shall ensure that routine annual maintenance inspections evaluations are conducted and repairs made as required in ICC 605 Section 603 Repairs. Any repairs that become necessary shall become compliant comply with the requirements outlined in Section 603.

### 0-170 PART 1. (Coordinated with IS-MHRRC 0-172 Item 8 and 0-179 Item 44)

608.2 702 Building elements and materials. Repair of any building materials shall meet the requirements as prescribed in Chapter 5 ICC 605 Section 603 Repairs. for new construction according to the International Wildland-Urban Interface Code wildfire hazard area construction class in which the building is located.

### 0-170 PART 2.

Add new text as follows:

2025-02-26 Proposed Adjustments by Chapter 6 Workgroup Referred to Admin Group for Chapter 1 review

101.2.5 Maintenance. [Reserved.]

- 101.4 Maintenance. Buildings, structures, landscape materials, vegetation, defensible space or other devices or safeguards required by this standard shall be maintained as specified in this standard. The owner or the owner's authorized agent shall be responsible for the maintenance of buildings, structures, landscape materials and vegetation.
- 101.4 101.5 Alternative means and methods. A large number of alternatives are available to a designer for providing fire-resistant designs and construction details. The provisions given are not intended to prevent the use of alternative materials or methods as permitted by Section R104. 2.2 of the International Residential Code.
- **101.5 101.6 Items not addressed.** Elements and assemblies not specifically addressed by this standard shall be designed and constructed in accordance with the International Residential Code.

### 0-170 PART 3: New Appendix B

Relocate Sections 608.3.1 through 608.3.24.3 into a new Appendix B Annual Building Evaluation Checklist. (Coordinate 0-170 Part 3 with 0-169 & 0-171 & 0-172 Items 6-14 & 0-178 Item 45)

#### Add new text as follows:

608.3 703 Inspection and maintenance of existing buildings Maintenance evaluations inspections. Evaluate the exterior envelope of the building structure ensuring that ignition-resistance or fire-resistance is maintained. The owner or owner's authorized agent can be guided by the checklist in ICC 605 Appendix B.

## APPENDIX B ANNUAL BUILDING EVALUATION CHECKLIST

This appendix is for information purposes and is not intended for adoption.

About this appendix: Appendix B is not part of the regulatory requirements in this standard. Its purpose is to provide guidance for owners, the owner's designated representative, and maintenance personnel in evaluating the structure to determine if repairs are necessary to maintain the ignition-resistance of the building. This appendix is in a checklist format to aid in the evaluation of the exterior components of the building.

### **SECTION B101—GENERAL**

- **B101.1 Scope.** The building construction components required in ICC 605 shall be evaluated annually and maintained throughout the life of the building.
- <u>B101.2 Evaluation.</u> The checklist in <u>ICC 605</u> Table B101.2 can be used to ensure that all necessary building components are evaluated and maintained in accordance with the wildfireresistant design and construction established in ICC 605 chapters 3, 4, and 5.
- B101.3 Building Maintenance. Maintenance or repair shall be performed where the evaluation identifies deficiencies in building components. Repair of any building materials shall meet the requirements as prescribed in ICC 605 section 603 Repairs.

### <u>Table B101.2</u> <u>Annual Building Evaluation Checklist</u>

<b>Building Com</b>	ponent	Description	Maintenance Notes
	Inspection Evaluation	Inspect Evaluate the exterior envelope surface of roof components and details for damage that may reduce ember-resistance or expose combustible building components.  If the roof assembly's construction does not conform with the requirements of roof assembly provided in this standard, it damage shall be repaired in accordance with ICC 605 Section 603 Repairs.	
608.3.1 Roof surface assembly	Joints and interfaces intersections	Inspect Evaluate joints and intersections interfaces where two surfaces or different materials intersect interface. Ensure that roof assembly surface joints are without gaps and cracks that may allow the accumulation of debris and collect embers, including:  Roof-to-wall (e.g. dormers and walls adjacent to a roof surface)  Roof-to-chimney  Roof-to skylight  Roof surface vents  Roof ridge cap  Roof valley, and  Edge of roof surface.	
	Caulking Sealant	Seal cracks and gaps with fire stopping sealant caulking or noncombustible material, in particular combustible or non-fire-rated joints, to prevent creating areas where vegetative debris and embers can accumulate.	
	Flashing	Ensure that metal flashing joints and exposed edges are without gaps and buckling that may allow accumulation of debris and collect embers.  Metal flashing installed around penetrations through the roof surface shall not be corroded, torn or loose.  Sealants must not be used to cover openings required for draining moisture.	
	Roof vents	Ensure that ridge vents and roof surface vents are provided with ember-resistant screens with mesh openings not to exceed 1/8 inch (3.2 mm). Repair any gaps between the roof surface and ember-resistant screens.	
	Roof ridge	Seal gaps that may collect debris and embers between the roof surface and ridge caps, that do not serve as attic ventilation.  Seal gaps at the ends of ridge caps.	
	Openable Skylights	Ensure that openable skylights provide ember protection by noncombustible corrosion-resistant mesh not to exceed 1/16 inch.	
	Eave and soffit	See 'Ventilation opening protection."	
	<u>Debris</u>	Remove vegetative debris from the roof, including on, and adjacent to dormers, chimney, skylight and similar features.	
608.3.8 Exterior wall surface	Inspection Evaluation	Inspect Evaluate the exterior envelope surface of wall components and details for damage that may reduce ember-resistance or expose combustible building elements.	

Building Component	Description	Maintenance Notes
	If the wall assembly's construction does not conform with the	
	requirements of wall assembly provided in this standard, it damage	
	shall be repaired in accordance with ICC 605 section 603 Repairs.	
	Inspect Evaluate joints and intersections interfaces where two	
	surfaces or different materials intersect interface. Ensure that wall	
	assembly surface joints are without gaps and cracks that may allow	
	the accumulation of debris and collect embers, including:	
	Top-of-wall (e.g. intersection with roof and eaves and soffits)	
Joints and	Bottom-of-wall surface (e.g. intersection with foundation)	
interfaces	Wall surface corners and edge trim	
intersections	Wall-to-windows	
	Wall-to-doors	
	Wall-to-garage door	
	Wall surface vents (e.g. attic and foundation vent openings)	
	Wall to deck surface, and	
	Wall-to-architectural details.	
	Seal cracks and gaps with fire ignition resistant caulking or	
	noncombustible material, in particular combustible or non-fire-rated	
Caulking	joints, to prevent creating areas where vegetative debris and embers	
<u>Sealant</u>	can accumulate.	
	Sealants must not be used to cover openings required for draining	
	moisture, including weep holes and stucco weep screed.	
	Ensure that the space between door, framing and concrete slab is	
	well sealed to minimize the entry of embers does not have gaps	
	exceeding 1/8 inch (3.2 mm). Ensure weather sealing is provided	
Doors	and in good condition.	
	Ensure that fire-resistant shutters, where provided, are functional	
	and maintained. Backup energy systems for power assisted	
	shutters, shall be tested.	
	Ensure that the space between window, framing and sill does not have gaps expending 1/8 inch (3.2 mm). Ensure weather scaling is	
	have gaps exceeding 1/8 inch (3.2 mm). Ensure weather sealing is provided and in good condition.	
	Ensure that fire-resistant shutters, where provided, are functional	
Windows	and maintained. Backup energy systems for power assisted	
Time we	shutters, shall be tested.	
	Ensure that openable windows are covered with a noncombustible	
	and corrosion-resistant screen with openings not to exceed 1/16-	
	inch.	
	Ensure that the space between the garage door, framing and	
Corago Door	concrete slab is well sealed to minimize the entry of embers does	
Garage Door	not have gaps exceeding 1/8 inch (3.2 mm). Ensure weather sealing	
	is provided and in good condition.	
Attic and	See 'Ventilation opening protection."	
crawlspace		
vents		
	Evaluate ember-resistance at the exterior wall intersection with	
Exterior	grade, balconies, bay window projections bump-outs, and walls	
perimeter	adjacent to a roof surface.	
	Ensure that the bottom of exterior walls maintains a minimum of 6	
	inches (152 mm) of ignition-resistant material or metal flashing.	

		Remove combustible items and vegetation below bay window	
		projections bump-outs.	
L		Remove or relocate combustible items within 5 feet of the building.	
	Debris	Remove vegetative debris that has accumulated adjacent to the	
	Deniis	structure.	
		Inspect Evaluate the ember-resistance of rain gutters and	
		downspouts. that interface with the exterior wall envelope and	
		Ensure that gutters and downspouts are without gaps that may allow	
608.3.18	Inspection	accumulation of debris and collect embers.	
Gutters and	Evaluation	Ensure that Routinely remove leaves, pine needles and other debris	
downspouts		are removed from the rain gutters themselves and removed from	
		gaps between the back of the gutter and the fascia.	
		Remove vegetative debris from gutters on a regular basis during fire	
		season.	
T	Inspection	Inspect Evaluate vents (gable attic vents and crawl space vents) to	
	Evaluation	make sure they are in good condition (e.g., screen is in good	
		condition with no tears that would result in larger openings).	
	Ember-	Ensure that ventilation openings are protected by a screen with	
	resistant	mesh openings not to exceed 1/8 inch (3.2 mm). Repair or seal any	
	screen mesh	gaps between ember-resistant screens and wall or roof surface.	
protection	Ember and	When ember and flame-resistant vents required, the installation	
	flame-	must conform to ICC 605 Chapter 5. Ensure that gaps around vents	
1	resistant	are sealed in accordance with the manufacture's installation	
	vents	instructions to avoid flame intrusion.	
	Inspection	Inspect Evaluate fences and gates for the accumulation of	
_	<b>Evaluation</b>	combustible items and vegetative debris. on and below the fence.	
608.3.20		Remove vegetative debris and combustible items adjacent to fences	
Fences	Debris	and gates, that can accumulate at the base of the fence on a regular	
		basis. Do not use fences as a trellis for plants because plants can	
		create and trap ignitable vegetative debris.	
<del>608.3.21</del> Solar	Incocetion	Inspect Fuglish as law panels for the accumulation of completion	
	Inspection Evaluation	Inspect Evaluate solar panels for the accumulation of vegetative debris, both on top of and below the panel and its support framing.	
parieis	Evaluation	Remove vegetative debris that has accumulated on top of and below	
	Debris	the solar panels and support structures.	
		the solar panels and support structures.	
	Inches of the	Inspect Evaluate the gaps between decks, stairs, landings, etc. and	
	Inspection	the deck structures to ensure that no for the accumulation of	
	<b>Evaluation</b>	vegetative debris or combustible storage is present in the gap.on or	
Decks, stairs,		under the deck.	
and landings	Debris	Remove vegetative debris that has accumulated if present in the	
attached to		gap.on or under the deck.	
structure		Remove combustible items and combustible storage from below the	
	Storage	deck.	
	_	Block or seal gaps with appropriate firestopping and fire caulking material.	

Building Component		Description	Maintenance Notes
608.3.23	Inspection Evaluation	Inspect Evaluate pergolas and trellises for the accumulation of vegetative debris, both on and below the pergola and trellis.	
Pergolas and trellises	Debris	Remove vegetative debris that has accumulated on the pergola or trellis on a regular basis. Do not intentionally use pergolas or trellises as a support for plants because plants can create and trap ignitable vegetative debris.	

### IS-MHRRC 0-171 ICC 605 Section 608.3.13.1

Proponent: Kevin Scott, KH Scott & Associates LLC

### Revise as follows:

**608.3.13.1 Inspection.** Inspect garage-door-to-wall joints for gaps or cracks. Ensure that the space between the garage door, framing and concrete slab is well sealed to minimize the entry of embers does not have gaps exceeding 1/8 inch (3.2 mm). Ensure weather sealing is provided and in good condition.

#### Reason:

This proposal revises the vague language of "well sealed" and replaces it with specific criteria which is a measurement that can be determined during inspection.

The measurement of 1/8" is the same requirement used in Section 503.5.1 for doors.

Committee Action: Approved as Modified

Committee Reason: Based on the Task Group 3 recommendation.

**Committee Modification:** Included in the modification to IS-MHRRC 0-170 Part 3 in Table B101.2 Annual Building Evaluation Checklist.

608.3.8  Exterior wall surface	Caulking Sealant	Seal cracks and gaps with fire ignition resistant caulking or noncombustible material, in particular combustible or non-fire-rated joints, to prevent creating areas where vegetative debris and embers can accumulate.  Sealants must not be used to cover openings required for draining moisture, including weep holes and stucco weep screed.
	Doors	Ensure that the space between door, framing and concrete slab is well sealed to minimize the entry of embers does not have gaps exceeding 1/8 inch (3.2 mm). Ensure weather sealing is provided and in good condition.  Ensure that fire-resistant shutters, where provided, are functional and maintained. Backup energy systems for power assisted shutters, shall be tested.

### IS-MHRRC 0-172 ICC 605 Chapter 6

Proponent: Larry Stevig, State Farm

### Revise as follows:

- 1. In Section 603 Repairs, when referring to Section 503.4, 504.4 and 505.4, consider adding <u>Class 1</u>, <u>Class 2</u>, and <u>Class 3</u> behind these for increased clarity.
- 2. In 603.2.2.2 Removal of Assembly, formatting of the Exception confuses the arrangement of subparagraphs 1, 2 and 3.
- 3. In Section 603, please add a section for Roof Covering Repair (call it 603.2.3). Roofing will likely need repairs in addition to exterior wall coverings. The IWUI Code has a short paragraph for roof repair in Section 507.1. Also, 608.3.1 references guidance for roof repair.
- 4. In Section 604.1, reference to 604.5 should be revised to 604.3 since there are only 3 paragraphs in this section.
- 5. In Section 608, consider changing title to <u>Maintenance Program</u> in lieu of Inspection and Maintenance. Putting "inspection" in the title introduces a new term that is unexpected.
- 6. Section 608 numerous paragraphs require inspection or removal of debris "on a regular basis." That term is undefined. Consider changing to "not less than annually" or "as debris accumulates."
- 7. In 608.1, insert the following as a first sentence: "General. A maintenance program is required for all buildings in wildfire hazard area. Inspection of existing structures..."
- 8. In 608.2, why is the IWUI Code class referenced instead of the class(es) described in ICC605?
- 9. In 608.3.1, 608.3.2, 608.3.5.1, 608.3.16.3, 608.3.19.1, examples are listed parenthetically (e.g. edge of roof...). Is this appropriate code language? If lists are included, consider "including but not limited to..." language.
- 10. In 608.3, numerous paragraphs require caulking. Consider adding language that limits the caulking in areas that would defeat the purpose of flashing above or below openings to shed water.
- 11. In 608.3.19, consider adding a requirement that screen mesh size be minimum 1/8 inch square, and note that a vent cover product may need caulking below a flange or otherwise seal around the wall penetration.
- 12. In 608.3.22, consider addressing screening or skirt walls around a deck perimeter, and require removal of combustible storage materials below a deck.
- 13. In 608.3.24, will it be well understood how a "bump out" is defined? Also in paragraph 24.2 add removal of debris <u>below</u> the bump out.
- 14. Consider adding new section 608.3.25 Exterior wall corners. Wind effects can cause leaves and debris to collect in re-entrant corners of a structure that should be inspected and cleaned.

#### Reason:

### Committee Action: By Item number:

Item 1: Disapproved

Item 2: Approved as Modified

Item 3: Approved as Modified

Item 4: Approved as Submitted in IS-MHRRC 0-178 Item 42.

Item 5: Approved as Modified in IS-MHRRC 0-170 Part 1.

Item 6: Approved as Modified in IS-MHRRC 0-170 Part 3.

Item 7: Approved as Modified in IS-MHRRC 0-170 Part 1.

Item 8: Approved as Modified in IS-MHRRC 0-170 Part 1.

Item 9: Disapproved [intended as homeowner language]

Items 10-14: Approved as Modified in IS-MHRRC 0-170 Part 3.

### Committee Reason: By Item number:

Item 1: This has been addressed in IS-MHRRC 0-166 and 0-178 Item 41.

Item 2: This has been addressed in IS-MHRRC 0-166 and 0-178 Item 41.

Item 3: Based on the Task Group 3 recommendation. Add a requirement for roof repairs greater than 25% to retrofit the entire roof to meet new construction requirements.

Item 4: This has been addressed in IS-MHRRC 0-178 Item 42.

Item 5: This has been coordinated with IS-MHRRC 0-169, 0-172 Item 7, and 0-179 Item 42.

Item 6: This has been addressed in IS-MHRRC 0-170 Part 3 Table B101.2.

Item 7: This has been addressed in IS-MHRRC 0-170 Part 1.

Item 8: This has been addressed in IS-MHRRC 0-170 Part 1.

Item 9: This has been addressed in IS-MHRRC 0-170 Part 3.

Items 10-13: This has been addressed in IS-MHRRC 0-170 Part 3 Table B101.2.

Item 14: Based on the Task Group 3 recommendation. Add an evaluation of the

"exterior perimeter" of all walls and specified remove/relocate combustible items within 5-feet.

### Committee Modification: By Item number:

Item 3:

### Add a new section as follows:

### 603.2.3 Roof covering repair.

The roof covering on buildings or structures in existence prior to the adoption of this code that are replaced or have 25 percent or more replaced in a 12-month period shall be replaced with a roof covering required for new construction.

Item 13: Changed "Bump outs" to "projections" in the modification to IS-MHRRC 0-170 Part 3 Table B101.2.

Item 14: Added an evaluation of the "exterior perimeter" of all walls and specified remove/relocate combustible items within 5-feet in the modification to IS-MHRRC 0-170 Pa Table B101.2.					

# Chapter 7 REFERENCED STANDARDS

### IS-MHRRC 0-173 ICC 605 Chapter 7

**Proponent:** Charles Jourdain, Mendocino Forest Products

### Revise as follows:

Chapter 7 does not list all the standards that are referenced in the document. For instance ASTM E2707 is not listed in Chapter 7.

### Reason:

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 1 recommendation. Task Group 1 will work with ICC staff to editorially add any referenced standards that need to be added to Chapter 7.

### IS-MHRRC 0-174 ICC 605 Chapter 7

Proponent: Gary Ehrlich, NAHB

### Revise as follows:

#### **NFPA**

National Fire Protection Association 1 Batterymarch Park Quincy, MA 02169-7471

NFPA 13 - 2022

Standard for the Installation of Sprinkler Systems

NFPA 285 - 2023

Standard Fire Test Method for Evaluation of Fire Propagation Characteristics of Exterior Wall Assemblies Containing Combustible Components

NFPA 286 - 2024

Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth

NFPA 1140 - 2022

Standard for Wildland Fire Protection

#### Reason:

NFPA 13, NFPA 286, and NFPA 1140 do not appear to be currently referenced in ICC 605, thus the references should be deleted.

Also note referencing NFPA 13 would set up a major conflict with the IRC. The IRC specifies either NFPA 13D Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes or the prescriptive requirements of IRC Section P2904 (which are based on NFPA 13D) for installation of automatic sprinkler systems in IRC-scope dwellings.

Committee Action: Approved as Submitted

**Committee Reason:** Based on the Task Group 1 recommendation. Task Group 1 will work with ICC staff to editorially add any referenced standards that need to be added to Chapter 7.

# Appendix A FIRE HAZARD SEVERITY

### IS-MHRRC 0-175 ICC 605 Table A101.1

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

### TABLE A101.1 FIRE HAZARD SEVERITY FORM

Total for Subdivision (add the scores for Items A through G)			
Moderate Hazard	40–59		
High Hazard	60–74		
Extreme Hazard	75+		

Portions of the table not shown remain unchanged...

### Reason:

There are no directions provided with the table. This proposed revision will provide that guidance for the use of the form.

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 2 recommendation.

### IS-MHRRC 0-176 ICC 605 A101.1

**Proponent:** Larry Stevig, State Farm

Revise as follows:

**A101.1 Fire hazard severity form.** Table A101.1 or Table A101.2 contain some examples templates for analyzing the fire hazard severity of building sites.

Reason:

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 2 recommendation.

### Multi-chapter proposals

# **IS-MHRRC 0-177** ICC 605 AII

Proponent: Charles Jourdain, Mendocino Forest Products

Revise as follows:

All references to "WUI Class" should be changed to "WHA Construction Class."

Reason:

Committee Action: Approved as Submitted

Committee Reason: Based on the Task Group 2 recommendation.

### IS-MHRRC 0-178 ICC 605 various

Proponent: Kevin Scott, KH Scott & Associates LLC

Revise as follows:

#### **EDITORIAL PUBLIC COMMENT**

### 1. Revise Commentary on Section 301.2 as follows:

\*Commentary: 301.2. Example for designing a building in WHA wildfire hazard area. Figure 1 provides an example for designing buildings and structures based on the provided defensible space on each side. In this This example building is located in an area with extreme wildfire hazard and according to Table 402.3, the required defensible space distance in this condition is equal to 100 feet. As it is shown in Figure 1:

- On the northern side of the building, the area under control of the building owner is less than required defensible space (blue arrow shows the area outside control of building owner). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). The fuel modification area on this side (purple area) will be limited to the lot lines or required defensible space distance (green line) whichever is less.
- On the eastern side of the building, the area under control of the building owner is less than required defensible space (orange arrow shows the area outside control of building owner). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). The fuel modification area on this side (yellow area) will be limited to the lot lines or required defensible space distance (green line), whichever is less.
- On the southern side of the building, <u>the</u> area under control of <u>the</u> building owner is more than 1.5 times of required defensible space. As a result, this side can be constructed in three different ways:
  - a. To only resist against ember exposure and in accordance with WHA Wildfire Hazard Area Construction Class 3 (Section 505). In this case, maintenance of defensible space area on this side (green area) will be limited to the lot lines or 1.5 times of required defensible space distance (blue line), whichever is less.
  - b. To resist against ember and radiation heat exposures and in accordance with WHA Wildfire Hazard Area Construction Class 2 (Section 504). In this case, the fuel modification area on this side (Zone 1, dark green area) will be limited to the lot lines or required defensible space distance (green line), whichever is less.
  - c. To resist against ember, radiation heat and direct flame contact exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). In this case, the fuel modification area on this side (dark green area) will be limited to the lot lines or required defensible space distance (green line), whichever is less—which in this example will be the same as method b and dark

green area (Zone 1).

- On the western side of the building, the area under control of the building owner is more than required defensible space and less than 1.5 times of this distance. As a result, this side can be constructed in two different ways:
  - a. To resist against ember and radiation heat exposures and in accordance with WHA Wildfire Hazard Area Construction Class 2 (Section 504). The defensible space area on this side will be limited to the green line (blue line if using 1.5 times the defensible space).
  - b. To resist against ember, radiation heat and direct flame contact exposures and in accordance with WHA Wildfire Hazard Area Construction Class 1 (Section 503). The defensible space area on this side will be limited to the green line (blue line if using 1.5 times the defensible space).

### 2. Revise the caption for Commentary Figure 301.2.1 as follows:

Commentary Figure 301.2.1. Required defensible <u>Defensible</u> space around unenclosed attached accessory structures.

### 3. Revise Section 401.1 as follows:

**401.1 Scope.** Fuel management on the premises of new and existing buildings and associated accessory structures located within <u>in</u> wildfire hazard areas shall comply with this chapter shall comply with this chapter.

### 4. Revise Section 401.2 as follows:

**401.2 Objective.** The objective of this chapter is to establish minimum requirements to mitigate the risk to life and property from wildland fires and exposures from fires in adjacent structures and to reduce risk of structure fires spreading to wildland fuels.

### 5. Revise Commentary to Section 402.1 as follows:

**Commentary:** The target wildland fire exposure for to a structure in wildfire hazard areas are ember exposure, and heat exposure less than 15 kW/m<sup>2</sup>. These exposures form the basis of the defensible space provisions of Section 402.

### 6. Revise the title in Table 402.2 as follows:

TABLE 402.2. \_ DEFENSIBLE SPACE DISTANCES

#### 7. Revise Section 402.2.4.2 as follows:

402.2.4.2 Defensible space sign. Provided defensible space area shall be identified

by a permanent sign approved by the enforcing agency, placed next to, or adjacent to, a permanent fixture such as <u>an</u> exterior water faucet, <u>exterior</u> water meter or electrical box. The sign shall identify fire hazard severity, provided defensible space distances, <u>WHA</u> <u>wildfire hazard area</u> construction classification, ground slope on each side and the applicable edition of this standard.

### 8. Revise Table in commentary for Section 402.2.4.2

♣Commentary: An example of a defensible space sign. \*

<b>Building Sides</b>	Provided Defensible Space (f <u>ee</u> t)	WHA Wildfire Hazard Area Construction Classification	Slope (%)
Side A			
Side B			
Side C			

### 9. Revise Sections 402.3.1 through 402.3.3 as follows:

**402.3.1 Zone X** (0 to 5 feet). Zone X initiates from the edges of the exterior walls of buildings or structures and extends 5 feet (1524 mm) horizontally away from the perimeter of all projections. This zone shall be maintained in accordance with the following:

- 1. Any ground cover shall be noncombustible, such as gravel, pavers or bare soil. Combustible ground covers such as bark and mulch shall not be permitted in this zone.
- 2. All vegetation shall be removed from this zone. New vegetation shall not be permitted within this zone.

**Exception:** Where approved by the enforcing agency, existing heritage trees and existing *fire smart vegetation* maintained in accordance with Section 402.4 shall be permitted adjacent to sides constructed in accordance with Section 503.

3. Fences, gates and arbors within Zone X shall be constructed with noncombustible materials.

**Exception:** Fences constructed with combustible materials shall be permitted provided the structure is constructed in accordance with Section 503.

- 4. Detached accessory structures are not permitted in this zone.
- 5. Storage of combustible material is prohibited in Zone X. A permanent sign shall be installed in each unenclosed underfloor area, stating the following: "Storage of combustible material is prohibited in this location."

### **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material where the structure is constructed in accordance with Section 503. The permanent sign shall not be required in unenclosed

underfloor areas constructed in accordance with Section 503.

- 6. All exterior surfaces of buildings such as gutters, roofs and decks, and areas within Zone X shall be maintained free of accumulated combustible debris.
- **402.3.2 Zone** Y (5 to 30 feet). Zone Y initiates after Zone X and extends to 30 feet (9144 mm) from the building. Zone Y shall be maintained in accordance with the following:
  - 1. Groundcover vegetation shall be maintained in accordance with Section 402.4.1.
  - 2. Shrubs shall be maintained in accordance with Section 402.4.2.
  - 3. All trees shall be removed from this area.

### **Exceptions:**

- 1. Trees trimmed and maintained in accordance with shrubs shrub requirements provided in Section 402.4.2.
- 2. Existing heritage trees approved by the enforcing agency and maintained in accordance with Section 402.4.3, provided the structure is constructed in accordance with Section 503.
- 4. All portions of fences, gates and arbors within 10 feet (3048 mm) from of the structure shall be constructed with approved noncombustible materials.

### **Exceptions:**

- 1. Fences, gates and arbors with a total height not exceeding 5 feet (1524 mm) above the ground.
- 2. Fences constructed with combustible materials, provided the structure is constructed in accordance with Section 503.
- 5. All detached accessory structures located within Zone Y shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Exterior openings on enclosed detached accessory structures located less than 20 feet (6096 mm) from a building containing habitable space shall be limited to the sides that are not facing the building. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

**Exception:** Detached *accessory structures* constructed with noncombustible or ignition-resistant material, not exceeding 200 square feet (11 m2) in floor area, where located not less than 20 feet (6096 mm) from buildings containing habitable spaces. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

6. Storage of combustible material is prohibited on Zone Y.

#### **Exceptions:**

- 1. Combustible material contained in a fully enclosed noncombustible storage container.
- 2. Combustible material where the structure is constructed in accordance with Section 503.
- 7. All areas within Zone Y shall be maintained free of combustible debris.
- **Zone Z** (30 to 150 feet). Zone Z initiates after Zone Y and extends the distance specified in Section 402.3.4. Zone Z shall be maintained in accordance with the following:

- 1. Ground cover vegetation shall be maintained in accordance with Section 402.4.1.
- 2. Shrubs shall be maintained in accordance with Section 402.4.2.
- 3. Trees shall be maintained in accordance with Section 402.4.3.
- 4. A 10-foot (3048 mm) clearance around exposed wood piles shall be provided by noncombustible ground covering in all directions.
- 5. LP-gas containers or tanks located in Zone Z shall be in accordance with the International Fire Code. A 10 feet (3048 mm) clearance around LP-gas containers shall be provided by noncombustible ground covering in all directions.
- 6. All detached accessory structures located within Zone Z shall comply with Section 301.2.2 or be retrofit in accordance with Chapter 6. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

**Exception:** Detached accessory structures not exceeding 200 square feet (11 m<sup>2</sup>) in floor area where located not less than 30 feet (9144 mm) from buildings containing habitable spaces on the same lot. Defensible space shall be provided around detached accessory structures in accordance with Section 402.3.1.

### 16. Revise Table 402.3.4.2 as follows:

# TABLE 402.3.4.2. LOT-LIMITED DEFENSIBLE SPACE DISTANCES AND CORRESPONDING ZONES

FIRE HAZARD	DEFENSIBLE SPACE	REQUIRED ZONES – DISTANCE FROM BUILDING (feet)			
SEVERITY	DISTANCE (feet)	Zone X	Zone Y	Zone Z	
Moderate	Extend to lot line	0–5	From 5 ft to lot line	N/A	
High	Extend to lot line	0–5	5–30, (or to lot line, if closer than 30 ft)	From 30 ft to lot line	
Extreme	Extend to lot line	0–5	5–30, (or to lot line, if closer than 30 ft)	From 30 ft to lot line	

For SI: 1 foot = 304.8 mm. N/A = Not Applicable.

### 17. Revise Section 402.4 as follows:

**402.4 Vegetation management.** All new vegetation in the provided *defensible space* shall be approved *fire smart vegetation*.

## **402.4.1 Groundcover vegetation.** All groundcover vegetation within the provided defensible space-shall comply with the following:

1. Groundcover vegetation shall not exceed 6 inches (152 mm) in height.

2. Groundcover vegetation shall be separated horizontally from crown of shrubs, trees and combustible structures such as fences and detached accessory structures a minimum of 12 inches (3045 mm).

# **Shrubs.** All shrubs within the provided defensible space shall comply with the following:

- 1. Shrubs located in Zone Y shall not exceed 5 feet (1524 mm) in height.
- 2. Groupings of shrubs are limited to a maximum aggregate diameter of 10 feet (3048 mm).
- 3. Shrub groupings shall be separated from other groupings and structures in accordance with Table 402.4.3.
- 4. Shrubs shall be pruned to remove limbs to a height of 12 inches (305 mm) above the ground surface or 25 percent of the total crown height, whichever is less.
- 5. No combustible material or debris allowed under the shrub canopy.
- 6. Shrubs shall be maintained in a healthy state, by regular and appropriate watering and removal of dead material.
- 7. Shrubs shall be separated from combustible structures such as fences and detached accessory structures a minimum of 5 feet (1524 mm).

# **Trees.** All trees within the provided defensible space shall comply with the following:

- 1. The horizontal distance between crowns of trees shall be in accordance with Table 402.4.3.
- 2. Tree crowns shall be pruned to remove limbs to a height 6 feet (1829 mm) above the ground surface or 25 percent of the total crown height, whichever is less.
- 3. Combustible material is prohibited under the tree canopy.
- 4. Trees shall be separated from shrubs, other trees and the structure in accordance with Table 402.4.3.
- 5. Trees shall be maintained in a healthy state by regular and appropriate watering and removal of dead material.
- 6. Tree branches shall be separated from combustible structures such as fences, sheds or other detached accessory structures a minimum of 10 feet (3048 mm).

# 18. Revise Section 502.1 as follows:

**502.1 General**. Materials and assemblies shall comply with the applicable requirements of Sections 502.2 through 502.3. Intersections of different wildfire hazard area (WHA) construction classes or of different materials shall comply with the applicable requirements of Section 502.4.

# 19. Revise Section 502.2.3 as follows:

502.2.3 Ignition-resistant building material. Materials required to be ignition-resistant shall be tested on the front and back faces in accordance with the extended ASTM E84 or UL 723 test, for a total test period of 30 minutes, or with the ASTM E2768 test. The materials shall bear identification showing the fire test results. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.18 mm). The materials, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, shall comply with Sections 503.2.3.1 through 503.2.3.3.

**Exception:** Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019-inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149-inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

# 20. Revise Section 502.3.1 as follows:

**502.3.1 Fire-resistance-rated construction**. Where this standard requires fire-resistance-rated construction, the rating of building elements, components or assemblies from the exterior side shall be determined by the test procedures set forth in ASTM E119 or UL 263 or established, based on the fire exposure and acceptance criteria specified in ASTM E119 or UL 263, by any of the following analytical methods:

- 1. Fire-resistant designs documented in approved sources.
- 2. Prescriptive designs of fire-resistance-rated building elements, components or assemblies as prescribed in Section 721 in the *International Building Code*.
- 3. Calculations in accordance with Section 722 in the *International Building Code*.
- 4. Engineering analysis based on a comparison of building element, component or assembly designs having fire-resistance ratings as determined by the test procedures set forth in ASTM E119 or UL 263.
- 5. Fire-resistant designs certified by an approved agency.
- 6. Fire-resistance-rated log wall construction in accordance with Section 303 of ICC 400.

#### 21. Revise Section 502.3.2 as follows:

**502.3.2 Fire-retardant-treated wood roof coverings.** Roof assemblies that contain fire-retardant-treated wood shingles and shakes shall comply with the requirements of Section R902.2 of the *International Residential Code* and be classified as shall meet the requirements for Class A roof assemblies as required in accordance with Section 502.3.3.

### 22. Revise Section 502.4 as follows:

# 502.4 Intersections.

- 502.4.1 Intersection of different International Wildland-Urban Interface Code construction classes. The intersection of different International Wildland-Urban Interface Code wildfire hazard area construction classes, as identified in Section 301, shall be protected with materials compliant with the more stringent class.
- Intersection of different construction elements within the same International Wildland-Urban Interface Code construction class. The intersection of different construction elements within the same International Wildland-Urban Interface Code Construction wildfire hazard area construction class shall conform to the requirements listed within each International Wildland-Urban Interface Code Construction wildfire hazard area construction classification section.

#### 23. Revise the title of Section 503 as follows:

# SECTION 503 WILDFIRE HAZARD AREA <del>(WHA)</del> CLASS 1

## 24. Revise Section 503.2.1 as follows:

- **Solution Acceptance criteria.** Where provided, eaves and soffits shall <del>comply with</del> be tested in accordance with ASTM E2957 and meet all the following acceptance criteria:
  - 1. Absence of flame penetration of the eaves at any time.
  - 2. Absence of structural failure of the eave's subassembly at any time.
  - 3. Absence of sustained combustion of any kind at the conclusion of the 40-min test.

#### **25.** Delete Section 503.2.3:

**503.2.3** Construction. For roof assemblies where the profile allows a space between the roof covering and roof deck, the space at the eave ends shall be constructed to preclude entry of flames or embers or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible roof deck.

#### 26. Revise Section 503.4.1 and 503.4.2 as follows:

**503.4.1 Fire-resistance rating.** Exterior wall assemblies shall have a fire-resistance rating of not less than 1 hour as determined in accordance with Section 502.3.1. Continuity of the 1-hour fire-resistance rating shall be maintained from the foundation to the eaves and soffits addressed in Section 503.2.

**503.4.2 Intersections.** Exterior wall to eave and soffit intersections shall meet the

requirements of Section 503.7.1 503.7.

## 27. Revise Section 503.7.4 as follows:

**503.7.4** Control joints. Where provided, control joints shall not exceed a maximum width of 0.625 - 1/16 inch (15.9 mm) and shall achieve a 1-hour fire-resistance rating when tested as part of an assembly in accordance with ASTM E119 or UL 263.

# 28. Revise Commentary for Section 503.8 as follows:

♣ Examples of unenclosed attached accessory structures include decks and pergolas. Accessory structures have the same/similar same or similar vulnerability to direct embers as a-the primary structure, and so should resist ignition in the same manner to reduce the potential of generating additional exposure.

## 29. Revise Section 503.8.1 as follows:

- **Rating.** Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fireresistance-rated construction, heavy timber construction or constructed of one of the following:
  - 1. Approved noncombustible materials.
  - 2. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the *International Building Code* 502.2.2.
  - 3. Ignition-resistant building materials in accordance with Section 503.2 502.2.3.

**Exception:** Coated materials shall not be used as the walking surface of decks.

# 30. Revise the title of Section 504 as follows:

# SECTION 504 WILDFIRE HAZARD AREA <del>(WHA)</del> CLASS 2

# 31. Revise Commentary to Section 504 as follows:

♣ Exposure based on Chapter 3. This WHA class Wildfire hazard area Class 2 assumes conforming defensible space that is subject to radiant heat and embers.

# 32. Revise Section 504.4.1 as follows:

**504.4.1 Acceptance criteria.** Exterior wall assemblies <u>tested in accordance with ASTM E2707</u> that pass the following acceptance criteria. when tested in accordance with ASTM E2707:

The ASTM E2707 test shall be conducted on a minimum of three test specimens and meet the conditions of acceptance in Items 1 and 2 below. If any one of the three tests does not meet the conditions of acceptance, three additional tests shall be performed. All

three additional tests must meet the conditions of acceptance.

- 1. Absence of flame penetration through the wall assembly at any time.
- 2. Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70-minute test.

# 33. Revise Section 504.6 as follows:

**504.6 Underfloor areas.** Buildings or structures shall have underfloor areas enclosed to the ground, with exterior walls in accordance with Section 504.4.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected constructed in accordance with Section 504.4.

# 34. Revise Section 503.7.5 (504.7.5) as follows:

**503.7.5. 504.7.5 Gaps around doors.** Gaps around rated doors and windows shall be sealed with sealants in accordance with door or window manufacturer installation instructions to avoid flame intrusion through the gaps.

#### 35. Revise Section 504.8 as follows:

# 504.8 Attached accessory structures.

♣ Examples of unenclosed attached accessory structures include decks and pergolas. Accessory structures have the same/similar vulnerability to direct embers as a-the primary structure, and so should resist ignition in the same manner to reduce the potential of generating additional exposure.

#### 36. Revise Section 504.8.1 as follows:

**504.8.1. 504.8.1 Rating.** Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fireresistance-rated construction, heavy timber construction or constructed of one of the following:

- 1. Approved noncombustible materials.
- 2. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the International Building Code 502.2.2.
- 3. Ignition-resistant building materials in accordance with Section 503.2 502.2.3.

**Exception:** Coated materials shall not be used as the walking surface of decks.

#### 37. Revise Section 505.2.2 as follows:

**505.2.2. 505.2.2 Openings.** Ventilation openings in eaves and soffits shall comply with Section 506.6 505.5.3.

# 38. Revise Commentary for Section 505.4 as follows:

Table of Classes and Requirements:

WHA Construction Class 1	WHA Construction Class 2	WHA-Construction Class 3
1-hour rated assembly	ASTM E2707-compliant	Ember Protection: 6" min.
AND	assembly	
NC Noncombustible Wall		
Coverings (with WRB water-		
resistant barrier exception)		
AND		
Protection of		
rainscreens/openings		
OR	OR	
NFPA 285-compliant assembly	1-hour rated assembly	
	AND	
	1. NC-Noncombustible	
	or	
	2. FRTW Fire-retardant-	
	treated wood	
	or	
	3. IR-Ignition-resistant	
	OR	
	Log walls per Section 303 of	
	ICC-400	

NC - noncombustible, FRTW - fire-retardant-treated wood, IR - ignition resistant.

# 39. Revise Section 505.8 as follows:

**505.8 Attached accessory structures.** Unenclosed accessory structures and projections attached to the building shall have underfloor areas enclosed to the ground in a manner that complies accordance with Section 506.5 505.6.

# 40. Revise Section 603.2.1.2 as follows:

**603.2.1.2 Existing materials.** Materials already in use in a *building* in compliance which complied with requirements or approvals in effect at the time of their erection or installation shall be permitted to remain in use unless determined by the *code official* to be unsafe.

# 41. Revise Sections 603.2.2 as follows:

603.2.2 Exterior wall covering replacement.

# 603.2.2.1. 603.2.2.1 Removal Replacement of exterior wall coverings for Class 1

<u>construction</u>. Exterior wall covering replacement for walls needing to comply with <u>Section 503.4 wildfire hazard area construction Class 1</u> shall include the removal of all existing layers of wall coverings down to the exterior sheathing and replacement shall include the following:

- 1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

  Exception: Where the existing wall assembly includes an exterior layer of 5/8-inch (16 mm) Type X gypsum sheathing board and the existing sheathing board is not water-soaked or deteriorated.
- 2. Wall coverings of noncombustible material in accordance complying with Section 502.2.1.

**Exception:** Wall coverings where the water-resistive barrier is the only combustible component and has water-resistive barriers having a peak heat release rate of less than 150 kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL 723.

3. Approved design tested and complying with the requirements of NFPA 285 where the existing assembly is not water-soaked or deteriorated.

# 603.2.2.2 Removal of assembly Replacement of exterior wall coverings for Class 2 construction. Unless the existing exterior wall assembly is shown to comply with provisions of Section 504.4 wildfire hazard area construction Class 2, exterior wall covering replacement for walls needing to comply with Section 504.4 shall include the removal of all existing layers of wall coverings down to the exterior sheathing and

**Exception:** Approved and tested design complying with Section 504.4 where the existing assembly is not water-soaked or deteriorated.

1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

# **Exceptions:**

replacement shall include the following.

- 1. Where the existing wall assembly includes an exterior layer of \(^{5}\)\_8-inch (16 mm) Type X exterior gypsum sheathing and the existing sheathing is not water-soaked or deteriorated.
- 2. Log walls that meet the requirements of a 1-hour fire-resistance rating in accordance with Section 303 of ICC 400.
- 2. Wall coverings shall include exterior surfaces of one of the following materials:
  - 2.1. Noncombustible materials.
  - 2.2. Fire-retardant-treated wood.
  - 2.3. Ignition-resistant building materials.

Exception: 2.4 Log walls in accordance with Section 303 of ICC 400.

3. A wall <u>assembly</u> designed and tested in accordance with ASTM E2707 and meeting the requirements of Section 504.4.1 where the existing assembly is not water-soaked or deteriorated.

# 603.2.2.3. 603.2.2.3 Replacement of exterior wall coverings for Class 3 construction.

For exterior wall covering replacement for walls needing to comply with Section 505.4 wildfire hazard area construction Class 3, the intersections with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:

- 1. Weather-exposed surface of noncombustible materials or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
- 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.

#### 42. Revise Section 604.1 as follows:

**604.1 General.** Alterations to existing buildings shall comply with the provisions of this standard for new construction, except as permitted by Sections 604.2 through 604.5 604.3. Alterations shall not cause the existing building to become less compliant with the provisions of this standard for new construction than the existing building was prior to the work.

#### 43. Revise Section 608.1 as follows:

**608.1 General.** Inspection of existing structures shall be performed regularly in accordance to with this section. Any repairs that become necessary shall become compliant comply with the requirements outlined in Section 603.

#### 44. Revise Section 608.2 as follows:

**608.2 Building elements and materials.** Repair of any building materials shall meet the requirements as prescribed in Chapter 5 for new construction according to the *International Wildland-Urban Interface Code* wildfire hazard area construction class in which the building is located.

## 45. Revise Section 608.3.16.3 as follows:

**608.3.16.3. Firestopping.** Block or seal gaps in-with firestopping materials (e.g., mineral wool, fire resistant caulking, or other fire-rated sealants).

## Reason:

Parts 1 through 45 are each intended to be editorial or grammatical in nature. There is no intended change to the requirements. A description for each of the parts is listed below:

- 1. The commentary for Section 301.2 is revised to remove the acronym WHA. Additional grammatical corrections are included in this commentary.
- 2. The caption for Figure 301.2.1 is revised to remove the word required. This figure does not show the "required" defensible space. The figure shows the required defensible space

- and 1.5 x defensible space. So which is required? They cannot both be required, because they are not the same.
- 3. In Section 401.1, "accessory structure" is deleted because an accessory structure is included under the broader category of building or structure. There accessary structures are already included since the section says it applies to new and existing buildings and structures.
  - The phrase "located within" is simplified by using "in".
  - The last 5 words are italicized. These words are not a definition, so the italics is removed.
- 4. In Section 401.2, "exposures from" is replaced with "fires in" so that the sentence the section establishes requirements to 1) minimize risk from wildland fire, 2) minimize risk from fires in adjacent structures, and 3) reduce risk of fires spreading to wildland fuels.
- 5. The commentary in Section 402.1 is revised to clarify that the section is referring to the target exposure to a structure.
- 6. Table 402.2 is used as an example for table title format. The format throughout the standard is not consistent. Delete the period after the section number and either add a hyphen or place the title on a separate line. This format should be applied throughout all tables in the standard.
- 7. Section 402.2.4.2 is revised to remove the duplicate reference to "exterior". All of the devices mentioned must be exterior, not just the water faucet or water meter. The electrical box must also be exterior. Stating "exterior" just once for the entire list is adequate.
- 8. The table in the commentary for Section 402.2.4.2 is revised to spell out "feet" in the header for Column 2, and replace WHA with Wildfire Hazard Area in Column 3.
- 9. Sections 402.3.1 through 402.3.3 are revised as follows:
  - a. The dimensions shown in the title for Zone X, Y and Z are deleted. For Zone X it is not a significant issue, but with Zones Y and Z, the maximum dimension changes based on Fire Hazard Severity. When the dimensions are shown in the title, it will mislead the code user and cause them to believe that those are the only dimensions. For example, Zone Y could be 100' as shown in Table 402.2 and does not correlate with the dimensions in the title of Section 402.3.2.
  - b. Several locations include language such as "within this zone". This has been deleted since each section deals with only one zone, those requirements only apply to that particular zone. Therefore, the language is redundant.
- 10. Table 402.3.4.2 is revised in Column 4 under "Zone Y" to remove the parentheses. The statement "or to the lot line if closer than 30 feet" should not be a parenthetical phrase, because it is the requirement.
- 11. Section 402.4, and its subsections, only apply to the defensible space. Each subsection does not need to repeat that it addresses vegetation in the defensible space.
- 12. The acronym "WHA" is removed.
- 13. Section 502.2.3 is revised to clarify the application of the section. The title is not enforceable, so the words need to be included in the text. This revision matches the format of Sections 502.2.1 and 502.2.2.
- 14. Section 502.3.1 is revised to include the reference to the IBC. The sections are found in the IBC, not this standard.

- 15. Section 502.3.2 is revised to clarify the requirements. Roof assemblies are required to meet the requirements for Class A, B or C ratings. The requirement is not required in Section 502.3.3; the testing is in accordance with Section 502.3.3.
- 16. Sections 502.4.1 and 502.4.2 are revised to remove the reference to the "*International Wildland-Urban Interface Code*" and replace it with "wildfire hazard area." The IWUIC should not be referenced, because the construction classes are in the ICC 605 Standard.
- 17. The acronym is deleted from the title of Section 503.
- 18. Section 503.2.1 is revised because the product does not comply with ASTM E2957; it is "tested" in accordance with ASTM E2957, and it must comply with Items 1 through 3.
- 19. Section 503.2.3 is deleted because it contains the same requirement as Section 503.1.1. This is already stated, and this section is redundant.
- 20. Sections 503.4.1 and 503.4.2 are revised in three locations.
  - a. Section 503.4.1 states "as determined in accordance with". This is simply stated "in accordance with"
  - b. The reference to 503.2 is not needed. This section is not regulating soffits and eaves, it is simply referring to soffits and eaves.
  - c. The referenced section is revised from 503.7.1 to 503.7. There are several subsections of 503.7 which will be included in the reference to this section. This will be consistent with Section 503.5.4.
- 21. Section 503.7.4 is revised to show the dimension as a fraction. All other measurements of gaps and openings are in fraction form. This should also be a fraction to maintain consistency.
- 22. Commentary for Section 503.8 is revised to remove the slash, and to refer to "the" primary structure.
- 23. Section 503.8.1 is revised in Item 1 by replacing the IBC reference with the appropriate section in this standard. Item 2 is revised to the correct section reference.
- 24. The acronym is deleted from the title of Section 504.
- 25. The commentary for Section 504 is revised to replace the WHA acronym.
- 26. Section 504.4.1 is revised in the 1<sup>st</sup> paragraph to restructure the sentence. The revised sentence clarifies that the testing is in accordance with ASTM E2907, and the acceptance criteria follows.
- 27. The exception to Section 504.6 is revised by replacing "protected" with "constructed." The referenced Section 504.4 describes how to construct the exterior walls; it does not describe how to protect them.
- 28. Section 503.7.5 is renumbered to 504.7.5 so it follows the proper sequence.
- 29. The Commentary to Section 504.8 is revised is revised to remove the slash, and to refer to "the" primary structure. Consistent with revision to Commentary for Section 503.8.
- 30. Section 504.8.1 is revised to reference the section in this standard rather than a section in the IBC.
  - Item 2 is revised to the correct section reference.
- 31. Section 505.2.2 is revised to correct the numbering format and correct the section reference.
- 32. The table in commentary to Section 505.4 is revised to remove the acronym "WHA" in the column headers. Also, since there is no footnote reference for the acronym "WRB",

- all the acronyms are removed and the terms are spelled out "noncombustible", "water-resistive barrier", "fire-resistant-treated wood" and "ignition-resistant".
- 33. Section 505.8 is revised to correct the reference to Section 506.5, which does not exist. The assumed appropriate section is Section 505.6. Also, the section is revised to state that protection shall be in accordance with Section 505.6.
- 34. Section 603.2.1.2 is revised to clarify the section. The materials "complied with" the previous code.
- 35. Section 603.2.2 contains three subsections all dealing with exterior wall replacement, yet the subsection titles are confusing and imply some other type of application. Each subsection addresses a specific class of construction so the titles should represent those differences.

After the section titles are revised, the text in each subsection refers to the construction class rather than the section which addresses the construction class. Section 603.2.2.1, Item 2, is revised to state "complying with Section 502.2.1." Noncombustible materials must "comply" with the criteria in Section 502.2.1. In the exception to Section 603.2.2.1, Item 1, the term "gypsum sheathing" is revised to "gypsum board". This is the term the code uses to describe the product referenced. In Section 603.2.2.2, Item 2, the exception is revised to Item 2.4. The inclusion of log walls should not be an exception. Log wall construction is acceptable, so it should be listed as #4.

- 36. Section 604.1 is revised to change the reference to Section 604.5, which does not exist. It appears that the correct reference is 604.3.
- 37. Section 608.1 is revised to simplify the sentence.
- 38. Section 608.2 is revised to clarify that Section 608 covers repair of the building, not just a specific material. The reference to the IWUIC is replaced with wildfire hazard area construction.
- 39. Section 608.3.16.3 is revised to delete the superfluous word "in".

# **Committee Action:**

- 1. Approved as Modified
- 2. Disapproved
- 3. Approved as Modified
- 4. Approved as Submitted
- 5. Approved as Submitted
- 6. Approved as Submitted
- 7. Approved as Submitted
- 8. Approved as Submitted
- 9. Approved as Submitted
- 16. Disapproved
- 17. Approved as Submitted
- 40. Approved as Submitted
- 41: Approved as Modified
- 42. Approved as Submitted

- 43. Approved as Submitted
- 44. Approved as Modified (Included in the modification to IS-MHRRC 0-170 Part 1)
- 45. Disapproved

# **Committee Modification:**

#### Item 1:

- **❖**Commentary:
- ❖301.2. Example for designing a <u>dwelling building</u> in <u>WHA wildfire hazard area</u>. Figure 1 provides an example for designing <u>dwellings buildings and structures</u> based on the provided defensible space on each side. <u>In this This</u> example <u>dwelling building is</u> located in <u>an</u> area with extreme wildfire hazard and according to table 402.3, <u>the</u> required defensible space distance in this condition is equal to 100 ft. As it is shown in Figure 1:
  - On northern side of the <u>dwelling building</u>, <u>the</u> area under control of <u>the dwelling building</u> owner is less than required defensible space (<u>blue arrow shows the area outside control of building owner Diagonal crosshatched area</u>). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with <u>WHA\_Wildfire Hazard Area</u> Construction Class 1 (Section 503). The fuel modification area on this side (<u>purple area triangle hatched area</u>) will be limited to the <u>lot lines or</u> required defensible space distance line (<u>green\_dot line) whichever is less</u>.
  - On the eastern side of the <u>dwelling building</u>, the area under control of the <u>dwelling building</u> owner is less than required defensible space (Crosshatched area). As a result, this side must be constructed by considering direct flame contact, radiation heat and ember exposures and in accordance with Wildfire Hazard Area Construction Class 1 (Section 503). The fuel modification area on this side (dot hatched area) will be limited to the lot lines or required defensible space distance whichever is less.
  - On the southern side of the <u>dwelling</u> building, the area under control of the <u>dwelling</u> building owner is more than 1.5 times of required defensible space. As a result, this side can be constructed in three different ways:
    - a. To only resist against ember exposure and in accordance with Wildfire Hazard Area Construction Class 3 (Section 505). In this case, maintenance of defensible space area on this side will be limited to the extended required defensible distance line (solid line).
    - b. To resist against ember and radiation heat exposures and in accordance with Wildfire Hazard Area Construction Class 2 (Section 504). In this case, the fuel modification area on this side (diamond hatched area) will be limited to the required defensible space line.
    - c. To resist against ember, radiation heat and direct flame contact exposures and in accordance with Wildfire Hazard Area Construction Class 1 (Section 503). In this case, the fuel modification area on this side will be initiates from edge of the

southern exterior wall of <u>dwelling</u> building and extends 5 ft horizontally away from the perimeter of all projections.

- On the western side of the building, the area under control of the <u>dwelling building</u> owner is more than required defensible space and less than expanded required defensible space. As a result, this side can be constructed in two different ways:
  - a. To resist against ember and radiation heat exposures and in accordance with Wildfire Hazard Area Construction Class 2 (Section 504). The defensible space area on this side will be limited to the dot line (horizontally hatched area).
  - b. To resist against ember, radiation heat and direct flame contact exposures and in accordance with Wildfire Hazard Area Construction Class 1 (Section 503). The defensible space area on this side will be initiates from edge of the western exterior wall of building and extends 5 ft horizontally away from the perimeter of all projections.

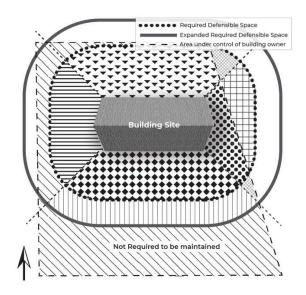


Figure 1. Required defensible space around building

❖301.2.1. Example for designing an unclosed accessory structure in wildfire hazard area Replace this drawing with new drawing with two exposed sides

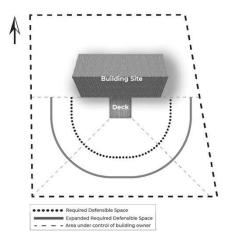


Figure 2. Required defensible space around unenclosed attached accessory structures.

# Item 3:

- **401.1 Scope.** Fuel management on the premises of new and existing <u>buildings</u> and associated accessory structures located within *wildfire hazard areas* shall comply with this chapter.
- **402.1 Objective.** Provisions of this section are intended to modify the *fuel load* in areas adjacent to <u>buildings and structures</u> to create a <u>defensible space</u> that protects <u>building</u> against exposure to direct flame contact and reduces the radiant heat and ember exposures to a level that minimizes potential for ignition or other damage to <u>buildings and structures</u>.
  - **♦•Commentary:** The target wildland fire exposure for a structure in wildfire hazard areas are ember expo- sure, and heat exposure less than 15 kW/m2. These exposures form the basis of the defensible space provisions of Section 402.

#### **Item 41:**

603.2.2 Exterior wall covering replacement for Class 1

construction. Unless the existing exterior wall assembly is shown to comply with provisions of Section 503.4, Exterior wall covering replacement for walls needing to comply with Section 503.4 [0-166] wildfire hazard area construction Class 1, [0-178] shall include the removal of all as determined by the Code official, existing layers of wall coverings shall be removed to provide evaluation of wall covering components and sheathing down to the exterior sheathing. Deteriorated materials shall be replaced and the exterior wall built in accordance with Section 503.4 and replacement shall include the following: [0-166]

- 1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

  Exception: Where the existing wall assembly includes an exterior layer of 5/8-inch (16 mm) Type X gypsum sheathing board and the existing sheathing board is not water-soaked or deteriorated.
- 2. Wall coverings of noncombustible material in accordance complying with Section 502.2.1.

Exception: Wall coverings where the water resistive barrier is the only combustible component and has water resistive barriers having a peak heat release rate of less than 150 kW/m², a total heat release of less than 20 MJ/m² and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and having a flame spread index of 25 or less and a smoke developed index of 450 or less as determined in accordance with ASTM E84 or UL 723.

3. Approved design tested and complying with the requirements Exterior wall assemblies that are tested in accordance with and comply with the acceptance criteria [0-165] of NFPA 285 where the existing assembly is not water-soaked or deteriorated. [0-166]

# 603.2.2.2. 603.2.2.2 Removal of assembly Replacement of exterior wall coverings for

<u>Class 2 construction</u>. Unless the existing exterior wall assembly is shown to comply with provisions of Section 504.4 wildfire hazard area construction Class 2, [0-178]exterior wall covering replacement for walls needing to comply with Section 504.4 shall include the

removal of all as determined by the Code official, existing layers of wall coverings shall be removed to provide evaluation of wall covering components and sheathing down to the exterior sheathing. Deteriorated materials shall be replaced and the exterior wall built in accordance with Section 504.4. and replacement shall include the following.

Exception: Log walls in accordance with Section 303 of ICC 400. [0-167 NOTE: This exception is already in 504.4]

**Exception:** Approved and tested design complying with Section 504.4 where the existing assembly is not water soaked or deteriorated.

1. Type X exterior gypsum sheathing 5/8 inches (16 mm) in thickness.

# **Exceptions:**

- 1. Where the existing wall assembly includes an exterior layer of % inch (16 mm) Type X exterior gypsum sheathing and the existing sheathing is not water soaked or deteriorated.
- 2. Log walls that meet the requirements of a 1 hour fire resistance rating in accordance with Section 303 of ICC 400.
- 2. Wall coverings shall include exterior surfaces of one of the following materials:
  - 2.1. Noncombustible materials.
  - 2.2. Fire-retardant-treated wood.
  - 2.3. Ignition-resistant building materials.

Exception: 2.4 Log walls in accordance with Section 303 of ICC 400.

3. A wall <u>assembly</u> designed and tested in accordance with ASTM E2707 and meeting the requirements of Section 504.4.1 where the existing assembly is not water-soaked or deteriorated. [0-167]

#### <del>603.2.2.3.</del> 603.2.2.3 Replacement of exterior wall coverings for Class 3 construction.

For exterior wall covering replacement for walls needing to comply with Section 505.4 and wildfire hazard area construction Class 3, the intersections with grade, balconies, decks and roofs shall be protected from ignition caused by ember accumulation in accordance with one or both of the following:

- 1. Weather-exposed surface of noncombustible materials or metal flashing, extending a minimum of 6 inches (152 mm) vertically.
- 2. A minimum of 6 inches (152 mm) noncombustible vertical separation between horizontal surfaces and weather-exposed surfaces shall be maintained.