

IBC-Fire Safety



2022 GROUP B PUBLIC COMMENT AGENDA

SEPTEMBER 14 - 21, 2022
KENTUCKY INTERNATIONAL CONVENTION CENTER
LOUISVILLE, KY

2022 Public Comment Agenda

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Proposed Change as Submitted

Proponents: Theresa Weston, representing Rainscreen Association in North America (RAiNA) (holtweston88@gmail.com)

THIS PROPOSAL WILL BE HEARD BY THE INTERNATIONAL BUILDING CODE-STRUCTURAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Add new text as follows:

[BS] 1402.3.1 Veneer attachment. *Veneers* shall be attached as specified in Section 1404. For *veneers* not specified in Section 1404, attachments and associated support systems shall be designed as specified in Chapter 16 and installed in accordance with manufacturer's instructions.

Reason: New claddings that do not directly fit into the wall covering materials currently specified in the code are being introduced to the market. Some of these new claddings are rainscreen systems which provide drainage and ventilation functionality in addition to other cladding functions. The attachment of such claddings need to be designed to resist loads and maintain their performance safely. This proposal provides the "roadmap" to the code requirements for the design of the attachment of these claddings.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal does not add new requirements to the code. Rather, it highlights the the appropriate compliance requirements already in the code for materials that are not directly specified in the code. Therefore, it does not increase or decrease the cost of construction.

FS2-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as the committee felt the change was unnecessary and that the referenced section 1404 does not cover all veneer options. The committee expressed concerns that the terms used in the proposal may not be consistent with the terms used throughout the industry (Vote: 13-1)

FS2-22

Individual Consideration Agenda

Public Comment 1:

IBC: SECTION 202, [BS] 1402.3, [BS] 1402.3.1, 1403.14

Proponents: Theresa Weston, representing Rainscreen Association in North America (RAiNA) (holtweston88@gmail.com) requests As Modified by Public Comment

Replace as follows:

2021 International Building Code

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

[BS] 1402.3 Structural. *Exterior walls*, and the associated openings, shall be designed and constructed to resist safely the superimposed *loads* required by Chapter 16.

[BS] 1402.3.1 Veneer attachment. *Veneers* shall be attached as specified in Section 1404. For *veneers* not specified in Section 1404, attachments and associated support systems shall be designed as specified in Chapter 16 and installed in accordance with manufacturer's instructions.

~~1403.14~~1402.3.1 Attachments through exterior insulation. *Where exterior wall coverings are attached to the building structure through exterior continuous insulation, furring and attachments through the exterior insulation shall be designed to resist design loads determined in accordance with Chapter 16, including support of cladding weight as applicable. Exterior wall coverings* attached to the building structure through foam plastic insulating sheathing shall comply with the attachment requirements of Section 2603.11, 2603.12, or 2603.13.

Commenter's Reason: The modification in this proposal responds to the committee's reason for disapproval as well as issues raised during the discussion of the proposal during the Committee Action Hearing. It does this while continuing to address the issues addressed by the original proposal. The proposal sought to clarify to provisions for attachment of cladding (*exterior wall covering*) systems to be designed to resist loads and maintain their performance safely. This clarity was needed as new technology and types of cladding systems, for example rainscreen systems, that are not specified in Section 1404 are becoming more prevalent in the market. Specifically the modification addresses:

1) The correctness and consistency of terminology: There was inconsistency noted between the terms cladding, *veneer* and *exterior wall covering*. This is addressed by using the consistent term exterior wall covering. To clarify that rainscreen systems are included as *exterior wall coverings*, they were added to the example list within the *exterior wall covering* definition.

2) Clarity of requirements for exterior wall covering attachment: This was done by moving the existing section 1403.14 "Attachment through insulation" from the **Materials Section** to be included under the **1402.3 Structural**. This section is also enlarged to cover all types of exterior continuous insulation rather than only foam plastic insulating sheathing.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This public comment / proposal does not add new requirements to the code. Rather it reorganizes and adds clarifying language to existing sections.

Public Comment# 3384

Public Comment 2:

IBC: 1403.14

Proponents: Jay Crandell, representing P.E., ABTG / ARES Consulting (jcrandell@aresconsulting.biz) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

~~1402.3.2~~1403.14 Attachments through insulation. *Exterior wall coverings* attached to the building structure through foam plastic insulating sheathing shall comply with the attachment requirements of Section 2603.11, 2603.12, or 2603.13.

Commenter's Reason: The original proposal was disapproved by committee because the committee felt it did not cover all veneer options. However, existing Section 1404 of the code does not cover all veneer options and never has. Thus, it is important to consider this proposal because it fills the gap so that structural attachment requirements for all veneer options (including those not prescribed in the code) are adequately addressed. This public comment proposal also modifies the original proposal by including (moving) a relevant veneer attachment requirement currently located in the materials Section 1403 for exterior wall coverings that include foam plastic insulating sheathing.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The public comment and original proposal do not impact cost because they change no requirements and provide a better format and clarity in the code to ensure veneer and exterior wall covering attachment requirements are properly addressed.

Public Comment# 3218

Proposed Change as Submitted

Proponents: Phillip Samblanet, representing The Masonry Society (psamblanet@masonrysociety.org); Jason Thompson, representing Masonry Alliance for Codes and Standards (jthompson@ncma.org)

THIS PROPOSAL WILL BE HEARD BY THE INTERNATIONAL BUILDING CODE-STRUCTURAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Revise as follows:

[BS] 1404.6 Anchored masonry veneer. *Anchored masonry veneer* shall comply with the provisions of Sections 1404.6 through 1404.9 and Sections ~~12.4~~ 13.1 and ~~12.2~~ 13.2 of TMS 402.

[BS] 1404.6.1 Tolerances. *Anchored masonry veneers* in accordance with Chapter 14 are not required to meet the tolerances in Article 3.3 ~~F4G~~ of TMS 602.

Delete without substitution:

~~**[BS] 1404.6.2 Seismic requirements.** *Anchored masonry veneer* located in *Seismic Design Category C, D, E or F* shall conform to the requirements of Section 12.2.2.11 of TMS 402.~~

Revise as follows:

[BS] 1404.10 Adhered masonry veneer. *Adhered masonry veneer* shall comply with the applicable requirements in this section and Sections ~~12.4~~ 13.1 and ~~12.3~~ 13.2 of TMS 402.

Reason: Chapter 12 (Veneer) in TMS 402-16 was moved to Chapter 13 in TMS 402-22. Similarly, the tolerances in TMS 602 were relocated. The changes proposed here reflect those revisions.

In addition, the basis for the Veneer provisions in TMS 402 were modified to be more rationally based. Seismic design requirements are now integrally incorporated into the veneer provisions of TMS 402. As such, IBC Section 1404.6.2 is not needed any longer as these seismic requirements are adopted by the general reference in IBC Section 1404.6.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This change simply updates section references. As such, there is no impact on construction costs.

FS3-22

Public Hearing Results

This proposal includes published errata

<https://cdn-www-v2.iccsafe.org/wp-content/uploads/2022-GROUP-B-CONSOLIDATED-MONOGRAPH-UPDATES-3-14-22.pdf>

Committee Action:

As Modified

Committee Modification:

[BS]1404.6.1 Tolerances. *Anchored masonry veneers* in accordance with Chapter 14 are not required to meet the tolerances in Article 3.3 G.1 of TMS 602.

Committee Reason: Approved as modified as the proposal appropriately updates the reference to TMS402-22. The modification clarifies the reference. (Vote: 14-0)

FS3-22

Individual Consideration Agenda

Public Comment 1:

Proponents: CP28 administration

Commenter's Reason: The administration of ICC Council Policy 28 (CP28) is not taking a position on this code change. This public comment is being submitted to bring a procedural requirement to the attention of the ICC voting membership. In accordance with Section 3.6.3.1.1 of ICC Council Policy 28 (partially reproduced below), the new referenced standard TMS 402-22 must be completed and readily available prior to the Public Comment Hearing in order for this public comment to be considered.

(CP28) 3.6.3.1.1 Proposed New Standards.

In order for a new standard to be considered for reference by the Code, such standard shall be submitted in at least a consensus draft form in accordance with Section 3.4. If the proposed new standard is not submitted in at least consensus draft form, the code change proposal shall be considered incomplete and shall not be processed. The code change proposal shall be considered at the Committee Action Hearing by the applicable code development committee responsible for the corresponding proposed changes to the code text. If the committee action at the Committee Action Hearing is either As Submitted or As Modified and the standard is not completed, the code change proposal shall automatically be placed on the Public Comment Agenda with the recommendation stating that in order for the public comment to be considered, the new standard shall be completed and readily available prior to the Public Comment Hearing

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
N/A

Public Comment# 3533

Proposed Change as Submitted

Proponents: THIS CODE CHANGE WAS HEARD BY THE IBC-STRUCTURAL COMMITTEE.

THIS PROPOSAL WILL BE HEARD BY THE INTERNATIONAL BUILDING CODE-STRUCTURAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Revise as follows:

[BS] 1404.14.1 Application. The siding shall be applied over sheathing or materials listed in Section 2304.6. Siding shall be applied over a ~~te~~ conform to the water-resistive barrier in accordance with requirements in Section 1402.5. Siding and accessories shall be installed in accordance with the *approved* manufacturer's instructions.

Add new text as follows:

1404.14.1.1 Accessories. Accessories must be installed in accordance with the *approved* manufacturer's instructions.

1404.14.1.1.1 Starter Strip. Horizontal siding shall be installed with a starter strip at the initial course at any location.

1404.14.1.1.2 Utility Trim. Under windows, and at top of walls, utility trim shall be used with snap locks.

Reason: This addition brings in critical installation elements for vinyl siding, insulated vinyl siding, and polypropylene siding that sometime ignored by installers. Including these provisions will help to ensure proper installation. The two critical applications are important to highlight as they are part of the wind performance system. In some instances, systems have been installed in high wind events incorrectly resulting in product performance failure. These are standard installation procedures for horizontal polymeric cladding.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. These are standard installation practices that are not being followed in some cases but need to be followed for proper product performance.

FS6-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved as 1) unnecessary duplication, 2) unnecessary use of unique industry terms, and 3) the proposal may limit options. (Vote: 11-3)

FS6-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Matthew Dobson, representing Vinyl Siding Institute (mdobson@vinylsiding.org); Stanley Hathorn, representing Westlake Royal Building Products (shathorn@royalbp.com); Wayne Jewell, representing Green Oak Charter Township (wayne.jewell@greenoaktwp.com) requests As Submitted

Commenter's Reason: This proposal is necessary to help to improve building performance. The practices of using starter strips and utility trims with vinyl siding systems are standard to the industry. It has been a noticeable area in incorrect installation which has led to product failure with wind events. By simply adding these references it will enable the building official and inspectors to understand what is necessary for correct installation and help to enforce this. A similar proposal was accepted by the IRC building committee (RB230) and the committee did accept a similar proposal on polypropylene siding, FS11.

Below are examples of what happens when this standard installation practice is not followed.



Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This PC does not change the scope of the original proposal without causing a cost impact. This simply adds inspections for critical areas that are already system requirements.

Public Comment# 3062

Proposed Change as Submitted

Proponents: Rob Brooks, representing DuPont (rob@rtbrooks.com)

THIS PROPOSAL WILL BE HEARD BY THE INTERNATIONAL BUILDING CODE-STRUCTURAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Revise as follows:

[BS] 1404.17 Fastening. Weather boarding and wall coverings shall be securely fastened with aluminum, copper, zinc, zinc-coated or other *approved* corrosion-resistant fasteners in accordance with the nailing schedule in Table 2304.10.2 or the *approved* manufacturer's instructions. Shingles and other weather coverings shall be attached with appropriate standard-shingle nails to furring strips securely nailed to studs, or with *approved* mechanically bonding nails, except where sheathing is of wood not less than 1-inch (25 mm) nominal thickness or of *wood structural panels* as specified in Table 2308.6.3(3). Fastening of claddings or furring through foam plastic insulating sheathing shall comply with Section 1404.17.1, 1404.17.2, or 1404.17.3 as applicable.

[BS] ~~2603.12.1~~ 1404.17.1 Cladding attachment over foam sheathing to masonry or concrete wall construction. Cladding shall be specified and installed in accordance with this Chapter ~~14~~ and the cladding manufacturer's installation instructions or an approved design. Foam sheathing shall be attached to masonry or concrete construction in accordance with the insulation manufacturer's installation instructions or an approved design. Furring and furring attachments through foam sheathing shall be designed to resist design *loads* determined in accordance with Chapter 16, including support of cladding weight as applicable. Fasteners used to attach cladding or furring through foam sheathing to masonry or concrete substrates shall be approved for application into masonry or concrete material and shall be installed in accordance with the fastener manufacturer's installation instructions.

Exceptions:

1. Where the cladding manufacturer has provided approved installation instructions for application over foam sheathing and connection to a masonry or concrete substrate, those requirements shall apply.
2. For *exterior insulation and finish systems*, refer to Section 1407.
3. For anchored masonry or stone *veneer* installed over foam sheathing, refer to Section 1404.

[BS] ~~2603.12.2~~ 1404.17.2 Cladding attachment over foam sheathing to cold-formed steel framing. Cladding shall be specified and installed in accordance with this Chapter ~~14~~ and the cladding manufacturer's approved installation instructions, including any limitations for use over foam plastic sheathing, or an approved design. Where used, furring and furring attachments shall be designed to resist design *loads* determined in accordance with Chapter 16. In addition, the cladding or furring attachments through foam sheathing to cold-formed steel framing shall meet or exceed the minimum fastening requirements of Sections 1404.17.2.1 ~~2603.12.1~~ and 1404.17.2.2 ~~2603.12.2~~, or an approved design for support of cladding weight.

Exceptions:

1. Where the cladding manufacturer has provided approved installation instructions for application over foam sheathing, those requirements shall apply.
2. For *exterior insulation and finish systems*, refer to Section 1407.
3. For anchored masonry or stone *veneer* installed over foam sheathing, refer to Section 1404.

[BS] ~~2603.12.1~~ 1404.17.2.1 Direct attachment. Where cladding is installed directly over foam sheathing without the use of furring, cladding minimum fastening requirements to support the cladding weight shall be as specified in Table ~~2603.12.1~~ 1404.17.2.1.

TABLE 2603.12.1 1404.17.2.1 CLADDING MINIMUM FASTENING REQUIREMENTS FOR DIRECT ATTACHMENT OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^a

CLADDING FASTENER THROUGH FOAM SHEATHING INTO:	CLADDING FASTENER TYPE AND MINIMUM SIZE ^b	CLADDING FASTENER VERTICAL SPACING (inches)	MAXIMUM THICKNESS OF FOAM SHEATHING ^c (inches)							
			16" o.c. fastener horizontal spacing				24" o.c. fastener horizontal spacing			
			Cladding weight				Cladding weight			
			3 psf	11 psf	18 psf	25 psf	3 psf	11 psf	18 psf	25 psf
Cold-formed steel framing (minimum penetration of steel thickness plus 3 threads)	#8 screw into 33 mil steel or thicker	6	3.00	2.95	2.20	1.45	3.00	2.35	1.25	DR
		8	3.00	2.55	1.60	0.60	3.00	1.80	DR	DR
		12	3.00	1.80	DR	DR	3.00	0.65	DR	DR
	#10 screw into 33 mil steel	6	4.00	3.50	2.70	1.95	4.00	2.90	1.70	0.55
		8	4.00	3.10	2.05	1.00	4.00	2.25	0.70	DR
		12	4.00	2.25	0.70	DR	3.70	1.05	DR	DR
	#10 screw into 43 mil steel or thicker	6	4.00	4.00	4.00	3.60	4.00	4.00	3.45	2.70
		8	4.00	4.00	3.70	3.00	4.00	3.85	2.80	1.80
		12	4.00	3.85	2.80	1.80	4.00	3.05	1.50	DR

For SI: 1 inch = 25.4 mm, 1 pound per square foot (psf) = 0.0479 kPa, 1 pound per square inch = 0.00689 MPa.

DR = design required, o.c. = on center.

- Cold-formed steel framing shall be minimum 33 ksi steel for 33 mil and 43 mil steel and 50 ksi steel for 54 mil steel or thicker.
- Screws shall comply with the requirements of AISI S240.
- Foam sheathing shall have a minimum compressive strength of 15 pounds per square inch in accordance with ASTM C587 or ASTM C1289.

[BS] 2603.12.2 1404.17.2.2 Furred cladding attachment. Where steel or wood furring is used to attach cladding over foam sheathing, furring minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.12.2 1404.17.2.2. Where placed horizontally, wood furring shall be *preservative-treated wood* in accordance with Section 2303.1.9 or *naturally durable wood* and fasteners shall be corrosion resistant in accordance Section 2304.10.6. Steel furring shall have a minimum G60 galvanized coating.

TABLE 2603.12.2 1404.17.2.2 FURRING MINIMUM FASTENING REQUIREMENTS FOR APPLICATION OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^a

FURRING MATERIAL	FRAMING MEMBER	FASTENER TYPE AND MINIMUM SIZE ^b	MINIMUM PENETRATION INTO WALL FRAMING (inches)	FASTENER SPACING IN FURRING (inches)	MAXIMUM THICKNESS OF FOAM SHEATHING ^d (inches)							
					16" o.c. furring ^e				24" o.c. furring ^e			
					Cladding weight				Cladding weight			
					3 psf	11 psf	18 psf	25 psf	3 psf	11 psf	18 psf	25 psf
Minimum 33 mil steel furring or minimum 1x wood furring ^c	33 mil cold-formed steel stud	#8 screw	Steel thickness plus 3 threads	12	3.00	1.80	DR	DR	3.00	0.65	DR	DR
				16	3.00	1.00	DR	DR	2.85	DR	DR	DR
				24	2.85	DR	DR	DR	2.20	DR	DR	DR
		#10 screw	Steel thickness plus 3 threads	12	4.00	2.25	0.70	DR	3.70	1.05	DR	DR
				16	3.85	1.45	DR	DR	3.40	DR	DR	DR
				24	3.40	DR	DR	DR	2.70	DR	DR	DR
	43 mil or thicker cold-formed steel stud	#8 Screw	Steel thickness plus 3 threads	12	3.00	1.80	DR	DR	3.00	0.65	DR	DR
				16	3.00	1.00	DR	DR	2.85	DR	DR	DR
				24	2.85	DR	DR	DR	2.20	DR	DR	DR
		#10 screw	Steel thickness plus 3 threads	12	4.00	3.85	2.80	1.80	4.00	3.05	1.50	DR
				16	4.00	3.30	1.95	0.60	4.00	2.25	DR	DR
				24	4.00	2.25	DR	DR	4.00	0.65	DR	DR

For SI: 1 inch = 25.4 mm, 1 pound per square foot (psf) = 0.0479 kPa, 1 pound per square inch = 0.00689 MPa.

DR = Design Required, o.c. = on center.

- Wood furring shall be spruce-pine-fir or any softwood species with a specific gravity of 0.42 or greater. Steel furring shall be minimum 33 ksi steel. Coldformed steel studs shall be minimum 33 ksi steel for 33 mil and 43 mil thickness and 50 ksi steel for 54 mil steel or thicker.
- Screws shall comply with the requirements of AISI S240.
- Where the required cladding fastener penetration into wood material exceeds $\frac{3}{4}$ inch and is not more than $1\frac{1}{2}$ inches, a minimum 2-inch nominal wood furring or an approved design shall be used.
- Foam sheathing shall have a minimum compressive strength of 15 pounds per square inch in accordance with ASTM C587 or ASTM C1289.
- Furring shall be spaced not more than 24 inches on center, in a vertical or horizontal orientation. In a vertical orientation, furring shall be located over wall studs and attached with the required fastener spacing. In a horizontal orientation, the indicated 8-inch and 12-inch fastener spacing in furring shall be achieved by use of two fasteners into studs at 16 inches and 24 inches on center, respectively.

[BS] 2603.13 1404.17.3 Cladding attachment over foam sheathing to wood framing. Cladding shall be specified and installed in accordance with this Chapter 14 and the cladding manufacturer's installation instructions. Where used, furring and furring attachments shall be designed to resist design loads determined in accordance with Chapter 16. In addition, the cladding or furring attachments through foam sheathing to framing shall meet or exceed the minimum fastening requirements of Section 2603.13.1 1404.17.3.1 or 2603.13.2 1404.17.3.2, or an approved design for support of cladding weight.

Exceptions:

- Where the cladding manufacturer has provided approved installation instructions for application over foam sheathing, those requirements shall apply.
- For exterior insulation and finish systems, refer to Section 1407.
- For anchored masonry or stone veneer installed over foam sheathing, refer to Section 1404.

[BS] 2603.13.1 1404.17.3.1 Direct attachment. Where cladding is installed directly over foam sheathing without the use of furring, minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.13.1 1404.17.3.1.

TABLE 2603.13.1 1404.17.3.1 CLADDING MINIMUM FASTENING REQUIREMENTS FOR DIRECT ATTACHMENT OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^a

CLADDING FASTENER THROUGH FOAM SHEATHING INTO:	CLADDING FASTENER TYPE AND MINIMUM SIZE ^b	CLADDING FASTENER VERTICAL SPACING (INCHES)	MAXIMUM THICKNESS OF FOAM SHEATHING ^c (INCHES)							
			16" o.c. fastener horizontal spacing				24" o.c. fastener horizontal spacing			
			Cladding weight:				Cladding weight:			
			3 psf	11 psf	18 psf	25 psf	3 psf	11 psf	18 psf	25 psf
Wood Framing (minimum 1 ¹ / ₄ - inch penetration)	0.113" diameter nail	6	2.00	1.45	0.75	DR	2.00	0.85	DR	DR
		8	2.00	1.00	DR	DR	2.00	0.55	DR	DR
		12	2.00	0.55	DR	DR	1.85	DR	DR	DR
	0.120" diameter nail	6	3.00	1.70	0.90	0.55	3.00	1.05	0.50	DR
		8	3.00	1.20	0.60	DR	3.00	0.70	DR	DR
		12	3.00	0.70	DR	DR	2.15	DR	DR	DR
	0.131" diameter nail	6	4.00	2.15	1.20	0.75	4.00	1.35	0.70	DR
		8	4.00	1.55	0.80	DR	4.00	0.90	DR	DR
		12	4.00	0.90	DR	DR	2.70	0.50	DR	DR
	0.162" diameter nail	6	4.00	3.55	2.05	1.40	4.00	2.25	1.25	0.80
		8	4.00	2.55	1.45	0.95	4.00	1.60	0.85	0.50
		12	4.00	1.60	0.85	0.50	4.00	0.95	DR	DR

For SI: 1 inch = 25.4 mm, 1 pound per square foot (psf) = 0.0479 kPa.

DR = Design Required, o.c. = on center.

- Wood framing shall be spruce-pine-fir or any wood species with a specific gravity of 0.42 or greater in accordance with ANSI/AWC NDS.
- Nail fasteners shall comply with ASTM F1667, except nail length shall be permitted to exceed ASTM F1667 standard lengths.
- Foam sheathing shall have a minimum compressive strength of 15 psi in accordance with ASTM C587 or ASTM C1289.

[BS] 2603.13.2 1404.17.3.2 Furred cladding attachment. Where wood furring is used to attach cladding over foam sheathing, furring minimum fastening requirements to support the cladding weight shall be as specified in Table 2603.13.2 1404.17.3.2. Where placed horizontally, wood furring shall be *preservative-treated wood* in accordance with Section 2303.1.9 or *naturally durable wood* and fasteners shall be corrosion resistant in accordance with Section 2304.10.6 .

TABLE 2603-13.2 1404.17.3.2 FURRING MINIMUM FASTENING REQUIREMENTS FOR APPLICATION OVER FOAM PLASTIC SHEATHING TO SUPPORT CLADDING WEIGHT^{a, b}

FURRING MATERIAL	FRAMING MEMBER	FASTENER TYPE AND MINIMUM SIZE	MINIMUM PENETRATION INTO WALL FRAMING (INCHES)	FASTENER SPACING IN FURRING (INCHES)	MAXIMUM THICKNESS OF FOAM SHEATHING ^d (INCHES)							
					16" o.c. furring ^e				24" o.c. furring ^e			
					Siding weight:				Siding weight:			
					3 psf	11 psf	18 psf	25 psf	3 psf	11 psf	18 psf	25 psf
Minimum 1x Wood Furring ^c	Minimum 2x Wood Stud	0.131" diameter nail	1 ^{1/4}	8	4.00	2.45	1.45	0.95	4.00	1.60	0.85	DR
				12	4.00	1.60	0.85	DR	4.00	0.95	DR	DR
				16	4.00	1.10	DR	DR	3.05	0.60	DR	DR
		0.162" diameter nail	1 ^{1/4}	8	4.00	4.00	2.45	1.60	4.00	2.75	1.45	0.85
				12	4.00	2.75	1.45	0.85	4.00	1.65	0.75	DR
				16	4.00	1.90	0.95	DR	4.00	1.05	DR	DR
		No. 10 wood screw	1	12	4.00	2.30	1.20	0.70	4.00	1.40	0.60	DR
				16	4.00	1.65	0.75	DR	4.00	0.90	DR	DR
				24	4.00	0.90	DR	DR	2.85	DR	DR	DR
		1/4" lag screw	1 ^{1/2}	12	4.00	2.65	1.50	0.90	4.00	1.65	0.80	DR
				16	4.00	1.95	0.95	0.50	4.00	1.10	DR	DR
				24	4.00	1.10	DR	DR	3.25	0.50	DR	DR

For SI: 1 inch = 25.4 mm, 1 pound per square foot (psf) = 0.0479 kPa, 1 pound per square inch = 0.00689 MPa.

DR = Design Required, o.c. = on center.

- Wood framing and furring shall be spruce-pine-fir or any wood species with a specific gravity of 0.42 or greater in accordance with ANSI/AWC NDS.
- Nail fasteners shall comply with ASTM F1667, except nail length shall be permitted to exceed ASTM F1667 standard lengths.
- Where the required cladding fastener penetration into wood material exceeds ³/₄ inch and is not more than 1¹/₂ inches, a minimum 2-inch nominal wood furring or an approved design shall be used.
- Foam sheathing shall have a minimum compressive strength of 15 psi in accordance with ASTM C587 or ASTM C1289.
- Furring shall be spaced not greater than 24 inches on center in a vertical or horizontal orientation. In a vertical orientation, furring shall be located over wall studs and attached with the required fastener spacing. In a horizontal orientation, the indicated 8-inch and 12-inch fastener spacing in furring shall be achieved by use of two fasteners into studs at 16 inches and 24 inches on center, respectively.

Reason: Fastening of cladding through foam sheathing is currently specified in Chapter 26, but it is optimally located in the cladding attachment provisions of Chapter 14. This proposal relocates the foam sheathing cladding attachment tables from Chapter 26 to Chapter 14. The following list provides the section number revisions:

2603.11 becomes 1404.17.1

2603.12 becomes 1404.17.2

2603.12.1 becomes 1404.17.2.1

2603.12.2 becomes 1404.17.2.2

2603.13 becomes 1404.17.3

2603.13.1 becomes 1404.17.3.1

2603.13.2 becomes 1404.17.3.2

No technical revisions are provided other than section number revisions and editorial reference to "this Chapter" instead of "Chapter 14".

Cost Impact: The code change proposal will not increase or decrease the cost of construction

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved by request of proponent to further clarify fastening requirements during the public comment phase. (Vote: 14-0)

Individual Consideration Agenda

Public Comment 1:

Proponents: Jay Crandell, representing P.E., ABTG / ARES Consulting (jcrandell@aresconsulting.biz) requests As Submitted

Commenter's Reason: The proponent requested disapproval of FS8 to allow coordination with proposal FS9 which was simply relocating this section of code (1404.17) dealing with general fastening requirements for Section 1404. The proponent of FS9 also requested disapproval because it was discovered in the review process and at the hearings that Section 1404.17 was an "orphaned" section from prior legacy codes and was not up-to-date with terminology and content of the current IBC Section 1404. It was decided to request disapproval (and the committee agreed) on both of these proposal to allow Proposal FS9 to be modified to bring existing Section 1404.17 Fastening up to date and properly locate (move) it to Section 1404.5 ahead of specific cladding/veneer types which address specific fastening requirements relevant to specific types of cladding/veneer (just as done in Section R703 of the IRC for fastening of claddings). Refer to a PC on FS9 that updates and moves the outdated legacy Section 1404.17.

Therefore, in coordination with the above-mentioned PC on FS9, this PC on FS8 requests "approval as submitted" since it is merely adding reference to existing general fastening requirements for attachment of various cladding/veneer and furring through foam sheathing materials. These cladding attachment provisions currently exist in Chapter 26 of the code, but are more relevant to provisions in Chapter 14, specifically the content of Section 1404.17 Fastening.

With the above explanation, I urge your support for this PC on FS8 and the related PC on FS9 so that Section 1404.17 is no longer an "orphan" legacy provision and is brought up-to-date with current content of the IBC.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. The PC does not change any requirements and addresses only a code formatting issue dealing with proper location and organization of requirements.

Proposed Change as Submitted

Proponents: Jay Crandell, P.E., ABTG/ARES Consulting, representing Foam Sheathing Committee of the American Chemistry Council (jcrandell@aresconsulting.biz)

THIS PROPOSAL WILL BE HEARD BY THE INTERNATIONAL BUILDING CODE-STRUCTURAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Revise as follows:

[BS] 1404.5 ~~1404.17~~ Fastening. Weather boarding and wall coverings shall be securely fastened with aluminum, copper, zinc, zinc-coated or other *approved* corrosion-resistant fasteners in accordance with the nailing schedule in Table 2304.10.2 or the *approved* manufacturer's instructions. Shingles and other weather coverings shall be attached with appropriate standard-shingle nails to furring strips securely nailed to studs, or with *approved* mechanically bonding nails, except where sheathing is of wood not less than 1-inch (25 mm) nominal thickness or of *wood structural panels* as specified in Table 2308.6.3(3).

Reason: This proposal moves Section 1404.17 to Section 1404.5 without making technical changes. The fastening requirements for exterior wall coverings apply across multiple cladding types and should be located earlier in Section 1404, prior to addressing the specific claddings. This approach is consistent with the approach taken in the IRC and for other similar requirements in the IBC such as water-resistive barriers and flashing that apply to multiple exterior wall covering conditions.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This is a formatting change with no change to requirements or cost.

FS9-22

Public Hearing Results

Committee Action:

Disapproved

Committee Reason: Disapproved by request of proponent. The committee noted that the proposal needs updating and clarification of terms.
(Vote: 14-0)

FS9-22

Individual Consideration Agenda

Public Comment 1:

IBC: [BS] 1404.5

Proponents: Jay Crandell, representing P.E., ABTG / ARES Consulting (jcrandell@aresconsulting.biz); Wayne Jewell, representing Green Oak Charter Township (wayne.jewell@greenoaktwp.com) requests As Modified by Public Comment

Modify as follows:

2021 International Building Code

[BS] 1404.5 Fastening. Weather boarding and *Exterior wall coverings* shall be securely fastened with ~~aluminum, copper, zinc, zinc-coated or other~~ *approved* corrosion-resistant fasteners in accordance with ~~this code the nailing schedule in Table 2304.10.2~~ or the *approved* manufacturer's instructions. Shingles and other weather coverings shall be attached with appropriate standard-shingle nails to furring strips securely nailed to studs, ~~or with approved mechanically bonding nails, except where sheathing is of wood not less than 1-inch (25 mm) nominal thickness or of wood structural panels as specified in Table 2308.6.3(3).~~

Commenter's Reason: Consistent with the committee's reason and proponents request, this PC updates and properly generalizes an outdated provision from the legacy codes for fastening of "weather boarding" and "wall coverings" in addition to the original proposal's intent to update the

location of 1404.17 by moving it to Section 1404.5 (similar to that done for general fastening requirements in Section R703 for the IRC). The IBC has changed much since the legacy subsection 1404.17 was initially placed in the IBC original draft. Its terminology is outdated as well as its application which only applies to the few "legacy" types of wall coverings in the building codes prior to the time of the IBC. Thus, this PC deletes legacy terms and uses the defined term "exterior wall covering". It also deletes reference to "shingles" which is not a cladding or veneer addressed in Section 1404 for exterior walls (i.e., manufacturer's instructions must be used). Reference to specific fastener material types is deleted in favor of a general reference to "corrosion-resistant fasteners" as commonly used in the IBC and IRC.

This proposal is compatible with a separate public comment on proposal FS8-22, but can also stand alone.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This proposal updates and relocates an "orphaned" section of code without changing requirements.

Public Comment# 3224

Proposed Change as Submitted

Proponents: Matthew Dobson, representing Vinyl Siding Institute (mdobson@vinylsiding.org)

THIS PROPOSAL WILL BE HEARD BY THE INTERNATIONAL BUILDING CODE-STRUCTURAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Building Code

Revise as follows:

[BS] 1404.18 Polypropylene siding. *Polypropylene siding* conforming to the requirements of this section and complying with Section 1403.12 shall be limited to *exterior walls* located in areas where the wind speed specified in Chapter 16 does not exceed 100 miles per hour (45 m/s) and the building height is less than or equal to 40 feet (12 192 mm) in Exposure C. Where construction is located in areas where the basic wind speed exceeds 100 miles per hour (45 m/s), or building heights are in excess of 40 feet (12 192 mm), tests or calculations indicating compliance with Chapter 16 shall be submitted. ~~*Polypropylene siding shall be installed in accordance with the manufacturer's instructions. Polypropylene siding shall be secured to the building so as to provide weather protection for the exterior walls of the building.*~~

Add new text as follows:

[BS] 1404.18.1 Installation. Unless otherwise specified in the approved manufacturer's instructions, *Polypropylene siding* and accessories shall be installed over and attached to wood structural panel sheathing with minimum thickness of 7/16 inch (11.1 mm), or other nailable substrate.

[BS] 1404.18.1.1 Accessories. Accessories shall be installed in accordance with the approved manufacturer's instructions.

[BS] 1404.18.1.1.1 Starter Strip. Horizontal siding shall be installed with a starter strip at the initial course at any location.

[BS] 1404.18.1.1.2 Under Windows and Top of Walls. Where nail hem is removed such as under windows and at top of walls, nail slot punch or predrilled holes shall be constructed.

[BS] 1404.18.2 Fastener requirements. Unless otherwise specified in the approved manufacturer's instructions, nails shall be corrosion resistant, with a minimum 0.120-inch (3 mm) shank and minimum 0.313-inch (8 mm) head diameter. Nails shall be a minimum of 1 1/4 inches (32 mm) long or as necessary to penetrate sheathing or nailable substrate not less than 3/4 inch (19.1 mm). Where the nail fully penetrates the sheathing or nailable substrate, the end of the fastener shall extend not less than 1/4 inch (6.4 mm) beyond the opposite face of the sheathing or nailable substrate. Spacing of fasteners shall be installed in accordance with the approved manufacturer's instructions.

Reason: This addition brings in critical installation elements for and polypropylene siding.

Two critical applications are starter strip and utility trim, are important to highlight as they are part of the wind performance system. In some instances, systems have been installed in high wind events incorrectly resulting in product performance failure. These are standard installation procedures for horizontal polymeric cladding.

In addition this proposal highlights the need for proper nail size, spacing uniqueness, and the need to for the installation over a proper nailable substrate.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This change brings in critical required installation practices for the product category.

FS11-22

Public Hearing Results

Committee Action:

As Modified

Committee Modification:

[BS] 1404.18.1 Installation. ~~Unless otherwise specified in the approved manufacturer's instructions, *Polypropylene siding* and accessories shall be installed over and attached to wood structural panel sheathing with minimum thickness of 7/16 inch (11.1 mm), or other nailable substrate, or other~~ substrate suitable for mechanical fasteners in accordance with the approved manufacturer's instructions.

~~**[BS] 1404.18.1.1 Accessories.** Accessories shall be installed in accordance with the approved manufacturer's instructions.~~

~~[BS]1404.18.1.1.1 Starter Strip. Horizontal siding shall be installed with a starter strip at the initial course at any location.~~

~~[BS]1404.18.1.1.2 Under Windows and Top of Walls. Where nail hem is removed such as under windows and at top of walls, nail slot punch or predrilled holes shall be constructed.~~

Committee Reason: Approved as modified as the proposal provides needed supplemental information for polypropylene siding. Some committee members were concerned that it adds to the responsibility of the Building Official. The modifications simplifies the language to rely on manufacture's instructions and to address alternative material. (Vote: 8-6)

FS11-22

Individual Consideration Agenda

Public Comment 1:

Proponents: Matthew Dobson, representing Vinyl Siding Institute (mdobson@vinylsiding.org) requests As Submitted

Commenter's Reason: The proposal as submitted provided clearer requirements for the use of important system components and should be included with the change. Without references to the starter strip strip and other utility trims it will not be clear what the building official and inspector should be looking for when inspecting the installation of the system.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This change simply identifies standardized installation requirements necessary for product performance.

Public Comment# 3136
