GROUP A
NEW STANDARDS PROPOSED IN
2021 CODE CHANGE CYCLE
LISTED BY STANDARDS ORGANIZATION
STAFF ANALYSES

March 19, 2021

The following are comments by ICC staff regarding certain aspects of standards proposed to be referenced in the ICC Codes by code change proposals submitted for the 2021 Group A Proposed Changes. The comments relate to portions of the criteria for standards contained in Section 3.6 of CP#28 (*see last page of this document*).

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
AARST STANDARDS			
G164–21 **M50–21** **G162–21** **G203–21**	**IBC:** 1202.7; Table S102.1 **IMC**: 512	***AARST CC-1000–2018*** *Soil Gas Control Systems in New Construction of Buildings*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
PM12–21	**IPMC:** 403.6	***ANSI/AARST MAMF–2017*** *Protocol for Conducting Measurements of Radon and Radon Decay Products in Multifamily Buildings*	Appears to be written in enforceable language. Note: Section 1.5 of the standard identifies the term “shall” with mandatory provisions. This section further identifies other terms, such as “should” or “recommended” with good practices that are not mandatory. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
PM12–21	**IPMC:** 403.6	***ANSI/AARST RMS-MF–2018*** *Radon Mitigation Standards for Multifamily Buildings*	Appears to be written in enforceable language. Note: Section 2.2 of the standard identifies the term “shall” with mandatory provisions. This section further identifies other terms, such as “should” or “recommended” with good practices that are not mandatory. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
G162–21	**IBC:** 1202.7, S102.1	***ANSI/AARST RRNC–2020*** *Rough-in of Radon Control Components in New Construction of 1 & 2 Family Dwellings and Townhouses*	Appears written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process is stated.
ACCA STANDARDS			
PM17–21	**IPMC:** 603.2	***ANSI/ACCA 4 QM–2013*** *Maintenance of HVAC Systems*	Appears to be written in enforceable language. Does not appear to require

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			proprietary materials or agencies. Promulgation by a consensus process stated in preface.
PM17–21	**IPMC:** 603.2	***ASHRAE/ACCA/ANSI Standard 180–2018*** *Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems*	Currently referenced in the IMC.
ACI STANDARDS			
SP18–21	**ISPSC:** Table 307.2.2	***ACI 318–19*** *Building Code Requirements for Structural Concrete*	Currently referenced in the IBC and the IRC.
ANSI STANDARDS			
E3–21	**IBC:** 1003.4., 1003.4.1 NEW	***ANSI A326.3–2017*** *American National Standard Test Method Measuring Dynamic Coefficient of Friction of Hard Surface Flooring Materials*	Test methods appear to be written in enforceable language. Appears to not require proprietary materials or agencies but does call for a specific testing device (BOT 3000E). Promulgation by a consensus process stated in preface as part of ANS approval.
ASA STANDARDS			
G167–21	**IBC:** 1206.4 **IBC**: 1206.4.1	***ANSI/ASA S1.1–2013*** *American National Standard Acoustic Terminology*	This is a standard for terminology definitions for reference and not an enforcement standard. Does not appear to require proprietary materials or agencies. Promulgation by consensus stated in preface.
G167–21	**IBC:** 1206.4.1	***ANSI/ASA S1.13–2020*** *American National Standard Measurement of Sound Pressure Levels in Air*	Appears written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by consensus stated in preface.
ASHRAE STANDARDS			
RM3–21	**IRC:** M1401.1	***ASHRAE 15.2–2020*** *Safety Standard for Refrigeration Systems in Residential Applications*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface. The Standard was submitted in a consensus draft form.
PM17–21	**IPMC:** 603.2	***ANSI/ASHRAE/ACCA 180–2018*** *Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems*	Currently referenced in the IMC.
ASME STANDARDS			
P133–21, Part I **P133–21, Part II**	**IPC:** 202, 1003.1, 1003.2 **IRC:** 3202 NEW, P3202.1	***ASME A112.18.8–2020*** *Sanitary Waste Valves*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.

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PM18–21	**IPMC:** 606.3.3	***ASME A17.3–2020*** *Safety Code for Existing Elevators and Escalators*	Currently referenced in the IFC and IEBC.
ASSE STANDARDS			
P47–21	**IPC:** 412.2	***ASSE 1014–2019*** *Backflow Prevention Devices for Handheld Showers*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P51–21	**IPC:** 423.4 NEW	***ASSE 1023–2019*** *Electrically Heated or Cooled Water Dispensers*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P99–21	**IPC:** 608.17.1.2	***ASSE 1032–2004(R2011)*** *Performance Requirements for Dual Check Valve Type Backflow Preventers for Carbonated Beverage Dispensers, Post Mix Type*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P93–21	**IPC:** Table 608.1	***ASSE 1053–2019*** *Performance Requirements for Dual Check Backflow Preventer Wall Hydrants-Freeze Resistant Type*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P94–21	**IPC:** Table 608.1	***ASSE 1057–2012*** *Freeze Resistant Sanitary Yard Hydrants with Backflow Protection*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P103–21	**IPC:** 611.1	***ASSE 1087–2018*** *Commercial and Food Service Water Treatment Equipment Utilizing Drinking Water*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P58–21	**IPC:** 602.3.1; 602.3.6	***ASSE 1093/WCS PAS-97–2019*** *Performance Requirements for Pitless Adapters, Pitless Units, and Well Caps*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P15–21	**IPC:** 312.10.2	***ASSE/IAPMO/ANSI Series 5000–2015*** *Performance Requirements for Cross-Connection Control Professional Qualifications Standard*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a

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			consensus process stated in preface.
ASTM STANDARDS			
P62–21, Part II	**IRC:** Table 2906.5	***A269/A269M–15a (2019)*** *Standard Specification for Seamless and Welded Austenitic Stainless-Steel Tubing for General Service*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P62–21, Part II	**IRC:** Table 2906.5	***A312/1312M–19*** *Standard Specification for Seamless, Welded, and Heavily Cold Worked Austenitic Stainless-Steel Pipes*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M83–21	**IMC:** Table 1107.4	***A333/A333M–18*** *Standard Specification for Seamless and Welded Steel Pipe for Low-Temperature Service and Other Applications with Required Notch Toughness*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P111–21	**IPC:** Table 706 NEW	***A518/A518M–99(2018)*** *Standard Specification for Corrosion-Resistant High-Silicon Iron Castings*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M87–21 **M88–21** **P61–21, Part I** **P61–21, Part II** **P62–21, Part I** **P62–21, Part II** **P63–21, Part I** **P63–21, Part II**	**IMC:** Table 1202.4; Table 1202.5 **IPC:** Table 605.3; Table 605.4; Table 605.5 **IRC**: Table P2906.4; P2906.5; P2906.6	***A554–16*** *Standard Specification for Welded Stainless-Steel Mechanical Tubing*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M87–21 **M88–21**	**IMC:** Table 1202.4, Table 1202.5 **IPC**: Table 605.3	***A778/A778–16*** *Standard Specification for Welded, Unannealed Austenitic Stainless-Steel Tubular Products*	Currently referenced in the IPC.
WUIC12–21	**IWUIC:** 504.2, 506.2; 505.2	***C726–2017*** *Standard Specification for Mineral Wool Roof Insulation Board*	Currently referenced in the IBC and IRC.
S4–21	**IBC: 1510.4**	***C1744–2019*** *Standard Practice for Installation and Use of Radiant Barrier Systems (RBS) in Commercial/Industrial Building Construction*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a

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			consensus process stated in preface.
SP9–21	**ISPSC:** 305.2.4.1 NEW	***D3787–16(2020)*** *Standard Test Method for Bursting Strength of Textiles-Constant-Rate-of Traverse (CRT) Ball Burst Test*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
SP9–21	**ISPSC:** 305.2.4.1	***D5034–09(2017)*** *Standard Test Method for Breaking Strength and Elongation of Textiles Fabrics (Grab Test)*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
FS132–21	**IBC:** 1403.15.2	***D6662–2017*** *Standard Specification for Polyolefin-Based Plastic Lumber Decking Boards*	Currently referenced in the IWUIC.
SP12–21	**ISPSC:** 306.2	**D7032–17** *Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards, and Handrails*	Currently referenced in the IBC, IRC and IWUIC.
FS134–21	**IBC:** 1403.15	***D7793–20*** *Standard Specification for Insulated Vinyl Siding.*	Currently referenced in the IRC.
P55–21 **P56–21**	**IPC:** 504.7	***E84–2020*** *Standard Test Method for Surface Burning Characteristics of Building Materials*	Currently referenced in the IBC, IRC, IFC, IEBC, IWUIC.
WUIC7–21	**IWUIC:** 503.2	***E1354–17*** *Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*	Currently referenced in the IBC and IFC.
FS3–21	**IBC:** 703.2.2	***E2032–09(2017)*** *Standard Guide for Extension of Data from Fire Resistance Tests Conducted in Accordance with ASTM E119*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies.
WUIC13–21	**IWUIC:** 505.5.3; 504.5.4	***E2707–15*** *Standard Test Method for Determining Fire Penetration of Exterior Wall Assemblies Using a Direct Flame Impingement Exposure*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
FS132–21	**IBC:** 1403.15.1	***E2768–11(2018)*** *Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test)*	Currently referenced in the IWUIC.
FS111–21 **FS86–21** **FS117–21**	**IBC:** 717.2.1; 909.21.3; 909.20.2.2 **IFC:** 909.20.2.2; 909.21.3	***E2816–2020a*** *Standard Test Methods for Fire Resistive Metallic HVAC Duct Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies.
FS45–21 **FS46–21**	**IBC:** 715.6	***E2837–13(2017)*** *Standard Test Method for Determining the Fire Resistance of Continuity Head-of-Wall Joint Systems Installed Between Rated Wall*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies.

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		Assemblies and Nonrated Horizontal Assemblies	
FS22–21	**IBC:** 705.8.5	***E2874–2019*** *Standard Test Method for Determining the Fire-Test Response Characteristics of a Building Spandrel-Panel Assembly Due to External Spread of Fire*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies.
WUIC15–21	**IWUIC:** 504.10.1, 505.10.1	***E2886/E2886M–20*** *Standard Test Method for Evaluating the Ability of Exterior Vents to Resist the Entry of Embers and Direct Flame Impingement*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P143–21	**IPC:** Table 1102.7, **IRC:** Table P3302.1; Table P3009.1	***F667/F667M–16*** *Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P129–21, Part I	**IPC:** 718.7	***F1216–2016*** *Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P129–21, Part I	**IPC:** 718.7	***F1743–2017*** *Standard Practice for Rehabilitation of Existing Pipelines and Conduits by Pulled-in-Place Installation of Cured-in-Place Thermosetting Resin Pipe (CIPP)*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
SP8–21	**ISPSC:** 305.2.4	***F2286–2016*** *Standard Design and Performance Specification for Removable Mesh Fencing for Swimming Pools, Hot Tubs, and Spas*	Currently referenced in the IRC.
F163–21	**IFC:** 202 NEW, 3101.1, 3106 NEW, 3106.1 NEW, 3106.2 NEW, 3106.3 NEW, 3106.4 NEW, 3106.5 NEW, 3106.6 NEW	***F2374–20*** *Standard Practice for Design, Manufacture, Operation and Maintenance of Inflatable Amusement Devices*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P129–21, Part II	**IRC**: P3012 NEW, P3012.1 NEW, P3012.2 NEW	***F2561–20*** *Standard Practice for Rehabilitation of a Sewer Service Lateral and Its Connection to the Main Using a One-Piece Main and Lateral Cured-in-Place Liner*	Currently referenced in the IPC.
P129–21, Part II	**IRC**: P3012 NEW, P3012.1 NEW, P3012.2 NEW	***F2599–20*** *Standard Practice for Sectional Repair of Damaged Pipe by Means of an Inverted Cured-in-Place Liner*	Currently referenced in the IPC.
P111–21	**IPC:** Table 706 NEW	***F2618–19***	Appears to be written in enforceable language. Does not appear to require

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		Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Fittings for Chemical Waste Drainage Systems	proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P107–21 **P135–21**	**IPC:** Table 702.3; Table 1102.7, Table 1102.4,	***F2763–16*** *Standard Specification for 12 to 60 in [300 to 1500mm] Dual and Triple Profile-Wall Polyethylene (PE) Pipe and Fittings for Sanitary Sewer Applications*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P138–21	**IPC:** Table 1102.7	***F2764/F2764M–19*** *Standard Specification for 6 to 60 in [150 to 1500mm] Polypropylene (PP) Corrugated Double and Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications*	Currently referenced in the IPC.
P108–21 **P142–21**	**IPC:** Table 702.3, Table 1102.4, Table 1102.7	***F2947/F2947M–20*** *Standard Specification for 150 to 1500 mm [6 to 60 in.] Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Sanitary Sewer Applications*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P144–21	**IPC:** Table 1102.7	***F3202–19a*** *Standard Specification for Solid Wall Poly (Vinyl Chloride) PVC Fittings for Joining Corrugated Wall High Density Polyethylene (PE) and Polypropylene (PP) Piping*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P63–21, Part I	**IPC:** Table 605.5	***F3226/F3226M–19*** *Standard Specification for Metallic Press-Connect Fittings for Piping and Tubing Systems*	Currently referenced in the IRC.
P129–21, Part II	**IRC:** P3012 NEW, P3012.1 NEW, P3012.2 NEW	***F3240–19e1*** *Standard Practice for Installation of Seamless Molded Hydrophilic Gaskets (SMHG) for Long-Term Water tightness of Cured-in-Place Rehabilitation of Main and Lateral Pipelines*	Currently referenced in the IPC.
P74–21 **P76–21** **P117–21, Part I** **P117-21, Part II**	**IPC:** 605.14.2, 605.15.2 705.10.2 **IRC:** P3003.9.2	***F3328–18*** *Standard Practice for the One-Step (Solvent Cement Only) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M99–21, Part I **P64–21, Part I** **P64–21, Part II** **M99–21, Part II**	**IMC:** Table 1210.5, Chapter 15 **IPC:** Table 606.5, Chapter 15 **IRC:** Table P2906.6; Table M2101, Chapter 44	***F3347–20a*** *Standard Specification for Metal Press Insert Fittings with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9 Polyethylene of Raised Temperature (PE-RT) Tubing*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M100–21, Part I **M100–21, Part II** **P65–21, Part I** **P65–21, Part II**	**IMC:** Table 1210.5 **IPC:** Table 605.5	***F3348–20b*** *Standard Specification for Plastic Press Insert Fittings with Factory Assembled Stainless Steel Press Sleeve for SDR9 Cross-linked Polyethylene (PEX) Tubing and SDR9*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a

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	IRC: Table P2906.6	*Polyethylene of Raised Temperature (PE-RT) Tubing*	consensus process stated in preface.
P120–21, Part I **P120–21, Part II**	**IRC:** P3003.11.1 **IPC:** Table 702.1 705.13.1	***F3371–19*** *Standard Specification for Polyolefin Pipe and Fittings for Drainage, Waste, and Vent Applications*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface. Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
FS58–21 **FS69–21**	**IBC:** 714.2, 715.2	***ASTM WK 70416*** *Standard Specification for On-Site Identification of Penetration, Fire-Resistive Joint and Perimeter Fire Barriers and Their Systems or Judgments*	The Standard was submitted in consensus draft form. Appears to be written in enforceable language. Does not appear to require proprietary materials or Agencies.
M80–21	**IMC:** 1108.10	***ASTM FXXX WK74677*** *Polyethylene of Raised Temperature/Aluminum/Polyethylene of Raised Temperature (PERT/AL/PERT) line sets*	The Standard was submitted in consensus draft form. Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
AWWA STANDARDS			
P70–21	**IPC**: 605.11	***C227–17*** *Bolted, Split-Sleeve Couplings*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
CCR STANDARDS			
F166–21	**IFC:** 3104.2	***CCR California Code of Regulations. 19 CCR 1237*** *Test Requirements for Exterior Flame-Retardant Chemicals (when Applied to Standard Test Fabric)*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process.
CSA and CSA AMERICA STANDARDS			
P136–21	**IPC:** Table 1102.4	***CSA B182.8:21*** *Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
EPA STANDARDS			
P87–21, Part I **P87–21, Part II**	**IPC:** Table 604.4	***USEPA*** *WaterSense Specification for Specification for Showerheads Version 1.1, July 26, 2018*	Currently referenced in the 2018 IgCC.

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	IRC: Table: P2903.2		
FCC STANDARDS			
F48–21	**IFC:** 510.6.3	***47 CFR Part 15–2021*** *Radio Frequency Devices*	Contains language that could affect enforceability. (Example(s) from the standard: Sections 15.15 (c), 15.31 (b) and 15.120 (e) (1)) Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process as it is a federal regulation.
F35–21	**IFC:** 510.3	***47 CFR Part 22–2021*** *Public Mobile Services*	Contains language that could affect enforceability. (Example(s) from the standard: Sections 22.150 (b), 22.352 and 22.503 (k)) Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process as it is a federal regulation.
F35–21	**IFC:** 510.3	***47 CFR Part 24–2021*** *Personal Communication Services*	Contains language that could affect enforceability. (Example(s) from the standard: Sections 24.10 and 24.245 (b)) Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process as it is a federal regulation.
F35–21	**IFC:** 510.3	***47 CFR Part 27–2021*** *Miscellaneous Wireless Communication Services*	Contains language that could affect enforceability. (Example(s) from the standard: Sections 27.14 (l)(1) and (2), 27.5 (a)(1)(B) and 27.64(b) and (c)) Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process as it is a federal regulation.
F48–21	**IFC:** 510.6.3	***47 CFR Part 90–2021*** *Private Land Mobile Radio Devices*	Contains language that could affect enforceability. (Example(s) from the standard: Sections 90.129 (g)) 90.165 (a) and 90.168 (a)(2)(l)(A)). Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process as it is a federal regulation.
IAPMO STANDARDS			
P39–21, Part I **P39–21, Part II**	**IPC:** 405.3.4 **IBC:** [P] 1210.2.2, [P] 1210.3	***IAPMO Z124.XX DRAFT 19JAN2021*** *Water Closet and Urinal Partitions*	The Standard was submitted in consensus draft form. Appears to be written in enforceable language. Does not appear to require

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			proprietary materials or agencies. Does not indicate promulgation by a consensus process.
P68–21, Part I **P68–21, Part II**	**IPC:** Table 605.7 **IRC:** Table P2903.9.4, Table P2903.4	***IAPMO/ANSI Z1157–2014[e1]*** *Ball Valves*	Currently referenced in the IPC.
P13–21 **P147–21, Part I** **P147–21, Part II** **PSD1–21**	**IPC:** 311.1 Appendix G101.2, **IRC:** Appendix AX101.2; **IPSDC:** 1101.2	***ANSI/CAN/IAPMO/ISO 30500–2019*** *Non-Sewered Sanitation Systems-Prefabricated Integrated Treatment Units-General Safety and Performance Requirements for Design and Testing*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
ICC STANDARDS			
PM11–21	**IPMC:** 310.1; 310.2; 310.3	***ICC/ NSSA 500–2020*** *Standard for the Design and Construction of Storm Shelters*	Currently referenced in the IBC, IRC and IEBC.
G102–21	**IBC:** 429.2	***ICC 1200–2021*** *Standard for Off-Site Construction: Planning, Design, Fabrication and Assembly*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Submitted in consensus draft form.
G102–21	**IBC:** 429.3	***ICC 1205–2021*** *Standard for Off-Site Construction: Inspection and Regulatory Compliance*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Submitted in consensus draft form.
THE INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)			
F125–21 **F146–21** **F152–21** **F151–21** **F140–21** **F144–21** **F145–21** **F124–21**	**IFC:** 1201.2, 1207.5.5, 1207.10.1, 1207.10.2 1207.6.3, 1207.3.1; 1207.5.3; 1207.5.4.1, 1201.1	***IEEE C2–2017*** *2017 National Electrical Safety Code (R) (NESC(R))*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
INTERNATIONAL INSTITUTE OF AMMONIA REFRIGERATION (IIAR)			
F55–21 **M69–21**	**IFC:** 608.1.1 **IMC**: 1101.1.1	***BSR/IIAR CO2–2021*** *Safety Standard for Closed-Circuit Carbon Dioxide Refrigeration Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M70–21	**IMC:** 1101.1.2	***ANSI/IIAR 6–2019*** *Standard for Inspection, Testing, and Maintenance of Closed-Circuit Ammonia Refrigeration System*	Currently referenced in the IFC.
NEMA STANDARDS			
F116–21	**IFC:** 1202.2.1.5	***ANSI Z535–2011*** *Color Chart*	Currently referenced in the ISPSC.
NFPA STANDARDS			

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
F127–21	**IFC:** 1204.5.1	***NFPA 37–2021*** *Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
G99–21, Part I **G99–21, Part II, Part III, Part IV, Part V, Part VI, Part VII, Part VIII, Part IX, Part X, Part XI, Part XII**	**IBC:** 306.3, 311.3, 429.3, 509.1, Table 1004.5, **IFC**: 608.9.1 **IMC:** 1103.2, 1104.2.3	***NFPA 75–2020*** *Standard for the Fire Protection of Information Technology Equipment*	Appears to be written in enforceable language, *except for the Annex sections which are for informational purposes only and not required*. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
G201–21	**IBC:** Q106.5.3	***NFPA 550–2017*** *Guide to the Fire Safety Concepts Tree*	Standard appears to be written as a concept strategy guide not intended to be enforceable. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process is stated in preface.
F76–21	**IFC:** 904.12 NEW	***NFPA 770–2021*** *Standard on Hybrid (Water and Inert Gas) Fire Extinguishing Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
G175–21 **G176–21**	**IBC**: Section 202 NEW; Section 2703 NEW, 2703.1 NEW, 2703.2 NEW; 2703.3 NEW, NFPA Chapter 06 NEW	***NFPA 780–20*** *Standard for the Installation of Lightning Protection Systems*	Currently referenced in the IFC.
E26–21, Part I **E26–21, Part II** **F123–21** **F125–21**	**IBC:** Section 202 NEW, 1008.3.4, 1013.6.3, [F] 2702.1.1, [F] 2702.1.3; NFPA Chapter 06 NEW **IFC:** 1201.1, 1202, 1207.6.3	***NFPA 855–20*** *Standard for the Installation of Stationary Energy Storage Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F43–21	**IFC:** 510.4.2, 510.5	***NFPA 1225–2021*** *Standards for Emergency Service Communications*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies.

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
			Promulgation by a consensus process stated in preface. Submitted in consensus draft form.
G100–21, Part I **G100–21, Part II** **G100–21, Part III**	**IBC:** 429 NEW, 429.1 NEW; **IFC:** 322 NEW, 322.1 NEW **IPMC:** 310 NEW, 310.1 NEW	***NFPA 1402–2019*** *Standard on Facilities for Fire Training and Associated Props*	Appears to be written in enforceable language, *except for the Annex sections which are for informational purposes only and not required*. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F173–21 **F125–21**	**IFC:** 3301.1.1; 1201.2.1.1	***NFPA 1620–2020*** *Standard for Pre-incident Planning*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
G201–21	**IBC:** Appendix Q107.5	***NFPA 1660–2022*** *Standard on Community Risk Assessment, Pre-Incident Planning, Mass Evacuation, Sheltering, and Re-entry Programs*	Combines the NFPA 1600, 1616, & 1620 as part of a consolidation plan (see comments above for 1620). NFPA 1600 & 1616 both appear to be written in enforceable language except for Annex sections written for informational purposes only. Both do not appear to require proprietary materials or agencies. Promulgation by a consensus process is in the preface of both standards. Standard was submitted in consensus draft form.
NSF STANDARDS			
P54–21, Part I **P54–21, Part II**	**IPC:** 501.9 NEW **IRC:** P2801.9 NEW, Part II	***NSF/ANSI/CAN 372–2020*** *Drinking Water System Components-Lead Content*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
PHTA STANDARDS			
PM4-21 **SP1–21** **SP33–21**	**ISPSC:** [A] 102.3; 303.3 B101.1	***ANSI/PHTA/ICC-2–2021*** *Standard for Public Pool and Spa Operations and Maintenance*	Contains language that could affect enforceability. (Example(s) from the standard: Sections 10.2.2.3, 10.3.1.4.2 and 10.6) Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process. The Standard was submitted in consensus draft form.
SP24–21	**ISPSC:** 326 NEW	***ANSI/PHTA/ICC 10—202X***	The Standard was submitted in consensus draft form. Appears

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
		American National Standard for Elevated Pools and Spas	to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
SP28–21	**ISPSC:** 613.12	***ANSI/APSP/ICC 11—2019*** *Water Quality in Public Pools and Spas*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
SP32–21	**ISPSC:** Appendix B101.1	***APSP 13—2017*** *Water Conservation Efficiency in Residential and Public Pools, Spas, Portable Spas and Swim Spas*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
SFM STANDARDS			
G47–21	**IBC:** 3105.3	***SFM 19 CCR 1237*** *Awning Fabric Flame Testing*	The standard appears to only set enforceable fire resistance criteria determined by a referenced test method (not included with link). Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process.
STANDARDS AUSTRALIA			
SP11–21	**ISPSC:** 306.2	***SA AS 4586—2013*** *Slip resistance classification of new pedestrian surface materials*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
UL STANDARDS			
G176–21	**IBC:** 2703.1 NEW, 2703.2 NEW, 2703.2.1 NEW, 2703.3 NEW	***UL 96A—2016*** *Standard for Installation Requirements for Lightening Protection Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Does not appear to indicate promulgation by a consensus process.
F52–21	**IFC:** 605.4.1.1; 605.4.2.1 605.4.2.2	***UL142A—2018*** *Special Purpose Aboveground Tanks for Specific Flammable or Combustible Liquids*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F182–21	**IFC:** 3903.4.2	***UL 471—2010*** *Standard for Commercial Refrigerators and Freezers with revisions through November 2018.*	Currently referenced in the IMC.
RM5–21	**IRC:** M1404.1	***UL 474—2015*** *Standard for Safety Dehumidifiers*	Currently referenced in the IMC.
RM5–21	**IRC:** M1404.1	***UL 484—2019*** *Standard for Room Air Conditioners*	Appears to be written in enforceable language. Does

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
			not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F46–21	**IFC:** 510.5.6	***UL 497C—2001*** *Protectors for Coaxial Communications Circuits—with revisions through February 10, 2017*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F46–21	**IFC:** 510.5.6	***UL 497E–2011*** *Protectors for Antenna Lead-In Connectors with revisions*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process.
P51–21 **M62–21**	**IPC:** 423.4 **IMC:** 931.1 NEW	***UL 499—2014*** *Electric Heating Appliances-with revisions through February 2017*	Currently referenced in the IMC and IFC.
F12–21	**IFC:** 309.2	***UL 558—2012*** *Standard for Industrial Trucks, Internal Combustion Engine-Powered*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F12–21	**IFC:** 309.2	***UL 583—2012*** *Electric-Battery-Powered Industrial Trucks*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P55–21 **P56–21**	**IPC:** 504.7	***UL 723—18*** *Standard for Test for Surface Burning Characteristics of Building Materials*	Currently referenced in the IBC, IFC, IWUIC, IRC and IMC.
FG7–21	**IFGC:** 606.1	***UL 791—2006*** *Residential Incinerators—with revisions through November 2014*	Currently referenced in the IMC.
M45–21	**IMC:** 507.1	***UL 921—2020*** *Standard for Safety Commercial Dishwashers*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F50–21	**IFC:** 603.5.1,	***UL962A—2018*** *Furniture Power Distribution Units—with revisions through September 1, 2020*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
E52–21	**IBC:** 1010.2.11, 1010.2.12**,** 1010.2.13.1; 1010.2.14	***UL 1034—2011*** *Burglary-Resistant Electric Locking Mechanisms—with revisions through June 2020*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
			consensus process stated in preface.
F181–21	**IFC:** 3903.4	***UL 1389—2019*** *Plant Oil Extraction Equipment for Installation and Use in Ordinary (Unclassified) Locations and Hazardous (Classified) Locations*	Currently referenced in the IFC.
F146–21 **F151–21** **F140–21** **F144–21** **F141–21** **F143–21**	**IFC:** 1207.5.5; 1207.3.1. 1207.5.3	***UL 1778—2014*** *Uninterruptible Power Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
M27–21	**IMC:** 502.21.2	***UL 1805–2002*** *Standard for Laboratory Hoods and Cabinets (Ed.1)*	Currently referenced in the IFC.
M61–21	**IMC:** 912.1	***UL 2021–2015*** *Fixed and Location-Dedicated Electric Room Heaters —with revisions through December 14, 2016*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F25–21 **F24–21**	**IFC:** 323.3	***UL 2272–2016*** *ANSI/CAN/UL Standard for Electrical Systems for Personal E-Mobility Devices*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
E36–21 **E35–21** **G59–21**	**IBC:** 1009.8	***UL 2525–2020*** *Two-Way Emergency Communications Systems for Rescue Assistance (1st Ed, June 12, 2020)*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
FG7–21, Part I **FG7–21, Part II**	**IFGC:** 606.1 **IMC:** 907.1	***UL 2790–2010*** *Commercial Incinerators—with revisions through June 2019*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F25–21 **F24–21**	**IFC:** 323.2	***UL 2849–2020*** *Standard for Electrical Systems for eBikes*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F50–21	**IFC:** 603.5.1.1	***UL 2930–2020*** *Outline of Investigation for Cord-and-Plug Connected Healthcare Facility Outlet Assemblies*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process.

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
G202–21	**IBC:** Appendix P-P103.1' P104.4, P105.1	***UL 3401–19*** *Outline of Investigation for 3D Printed Building Construction*	Does not appear to require proprietary materials or agencies. Missing some standards affecting enforceability (see 13.1 – not all items include a standard). Did not find a statement of promulgation by consensus.
F128–21 **F129–21**	**IFC:** 1205.2.3; 1205.2	***UL 3741–2020*** *Standard for Safety Photovoltaic Hazard Control*	Contains some language that could affect enforceability (example 1.1.2, 5.1, 9.4.1, 9.5.1, 12.2.3 (l) items 3 and 4, 14.2.3.2.) Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F177–21	**IFC:** 3901.1, 3901.4 NEW	***UL 8800–2019*** *Standard for Horticultural Lighting Equipment and Systems*	Contains some language that could affect enforceability (Examples 18.5, 19.2.1, 19.2.2, 19.2.3, 19.2.4, 19.2.5). Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
G173–21	**IBC:** 1210.1	***UL 8802–2020*** *Outline of Investigation for Germicidal Systems*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Does not indicate promulgation by consensus.
M72–21 **RM6–21**	**IMC:** 1101.2.1	***UL 60335-2-40 2019*** *Household and Similar Electrical Appliances-Safety-Part 2-40: Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
F182–21 **M72–21** **RM6–21**	**IFC:** 3903.4.2	***UL 60335-2–89 2017*** *Household and Similar Electrical Appliances - Safety - Part 2-89: Requirements for Commercial Refrigerating Appliances with an Incorporated or Remote Refrigerant Unit or Compressor*	Currently referenced in the IMC.
F181–21	**IFC:** 3003.4	***UL 61010-1–2012*** *Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use-Part 1: General Requirements*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
UN STANDARDS			
F232–21 **F233–21**	**IFC:** E102.1.7.2 NEW, E103.2, Section E104 NEW	***UN Rev.7, 2017*** *UN Recommendations on the Transport of Dangerous Goods,* ***Globally Harmonized System of Classification and Labelling of Chemicals (GHS)****, Part 2: Physical Hazards, Part 2*	Contains language that could affect enforceability. (Examples, though nonmandatory language is common though. Part 2 is basically defining hazards.

CODE CHANGE NUMBER	CODE SECTION(S)	STANDARD	STAFF COMMENTS
			Sections 2.2.4.2.3, 2.3.2 and 2.4.4) Does not appear to require proprietary materials or agencies. Does not indicate promulgation by a consensus process.
WSC STANDARDS			
P58–21	**IPC:** 602.3.1; 602.3.6	***ASSE 1093/WSC PAS-97–2019*** *Performance Requirements for Pitless Adapters, Pitless Units, and Well Caps*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.
P88–21	**IPC:** 606.5.11	***WST PST 2000/2016*** *Standard Pressurized Water Storage Tank*	Appears to be written in enforceable language. Does not appear to require proprietary materials or agencies. Promulgation by a consensus process stated in preface.

3.6 Referenced Standards: In order for a standard to be considered for reference or to continue to be referenced by the Codes, a standard shall meet the following criteria:

3.6.1 Code References:

3.6.1.1 The standard, including title and date, and the manner in which it is to be utilized shall be specifically referenced in the Code text.

3.6.1.2 The need for the standard to be referenced shall be established.

3.6.2 Standard Content:

3.6.2.1 A standard or portions of a standard intended to be enforced shall be written in mandatory language.

3.6.2.2 The standard shall be appropriate for the subject covered.

3.6.2.3 All terms shall be defined when they deviate from an ordinarily accepted meaning or a dictionary definition.

3.6.2.4 The scope or application of a standard shall be clearly described.

3.6.2.5 The standard shall not have the effect of requiring proprietary materials.

3.6.2.6 The standard shall not prescribe a proprietary agency for quality control or testing.

3.6.2.7 The test standard shall describe, in detail, preparation of the test sample, sample selection or both.

3.6.2.8 The test standard shall prescribe the reporting format for the test results. The format shall identify the key performance criteria for the element(s) tested.

3.6.2.9 The measure of performance for which the test is conducted shall be clearly defined in either the test standard or in Code text.

3.6.2.10 The standard shall not state that its provisions shall govern whenever the referenced

standard is in conflict with the requirements of the referencing Code.

3.6.2.11 The preface to the standard shall announce that the standard is promulgated according to a consensus procedure.

3.6.3 Standard Promulgation:

3.6.3.1 Code change proposals with corresponding changes to the code text which include a reference to a proposed new standard or a proposed update of an existing referenced shall comply with this section.

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 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. If the committee action at the Committee Action Hearing is Disapproval, further consideration on the Public Comment Agenda shall include a 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.

3.6.3.1.2 Update of Existing Standards. Code change proposals which include technical revisions to the code text to coordinate with a proposed update of an existing referenced standard shall include the submission of the proposed update to the standard in at least a consensus draft form in accordance with Section 3.4. If the proposed update of the existing 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, including the update of the existing referenced standard, shall be considered at the Committee Action Hearing by the applicable code development committee responsible for the corresponding changes to the code text. If the committee action at the Committee Action Hearing is either As Submitted and As Modified and the updated 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 updated standard shall be completed and readily available prior to the Public Comment Hearing. If the committee action at the Committee Action Hearing is Disapproval, further consideration on the Public Comment Agenda shall include a recommendation stating that in order for the public comment to be considered, the updated standard shall be completed and readily available prior to the Public Comment Hearing.

Updating of standards without corresponding code text changes shall be accomplished administratively in accordance with Section 4.6.

3.6.3.2 The standard shall be developed and maintained through a consensus process such as ASTM or ANSI.