



Reside Conditions Letter

The following items are conditions for permit issuance and strict compliance is mandatory.

Exterior walls shall provide the building with a weather-resistive exterior wall envelope. The exterior wall envelope shall include flashing as described in section R703.8. The exterior wall envelope shall be designed and constructed in such a manner as to prevent the accumulation of water within the wall assembly by providing a water-resistive barrier behind the exterior veneer as required by section R703.2.

1309.0703 SECTION R703, EXTERIOR COVERING.

Subpart 1. **Section R703.2.** IRC section R703.2 is amended to read as follows:

R703.2 Weather-resistive sheathing paper. A minimum of one layer of No. 15 asphalt felt complying with ASTM D 226 for Type 1 felt or other approved weather-resistive material shall be applied over sheathing of all exterior walls.

R703.2. Such felt or material shall be applied horizontally, with the upper layer lapped over the lower layer not less than 2 inches (51 mm). Where joints occur, felt shall be lapped not less than 6 inches (152 mm). The felt or other approved material shall be continuous up to the underside of the rafter or truss top chord and terminated at penetrations and building appendages in such a manner to meet the requirements of the exterior wall envelope as described in Section R703.1.

Exception: Such felt or material is permitted to be omitted in the following situations:

1. In detached accessory buildings.
2. Under exterior wall finish materials as permitted in Table R703.4.
3. Under paper backed stucco lath when the paper backing is an approved water resistive barrier.

TABLE R703.4

WEATHER-RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS

<u>SIDING MATERIAL</u>	<u>NOMINAL THICKNESS^A (")</u>	<u>JOINT TREATMENT</u>	<u>WATER-RESISTIVE BARRIER REQUIRED</u>
Horizontal aluminum ^e			
Without insulation	0.019 ^f	Lap	Yes
	0.024	Lap	Yes
With insulation	0.019	Lap	Yes
Anchored veneer: brick, concrete, masonry or stone	2	Section R703	Yes

Adhered veneer: brick, concrete, masonry or stone ^w	-	Section R703	Yes Note w
Hardboard ^k Panel siding-vertical	7/16	-	Yes
Hardboard ^k Lap-siding-horizontal	7/16	Note p	Yes
Steel ^h	29 ga.	Lap	Yes
Particleboard panels	3/8 -1/2	-	Yes
Particleboard panels	5/8	-	Yes
Wood structural panel ⁱ ANSI/APA-PRP 210 siding ⁱ (ext grade)	3/8 -1/2	Note p	Yes
Wood structural panel siding	3/8-1/2	Note p Note x	Yes
Vinyl Siding ^l	0.035	Lap	Yes
Wood ^j Rustic, drop	3/8 Min	Lap	Yes
Shiplap	19/32 Average	Lap	Yes
Bevel	7/16	Lap	Yes
Butt tip	3/16	Lap	Yes
Fiber cement panel siding ^q	5/16	Note q	Yes Note u
Fiber cement lap siding ^s	5/16	Note s	Yes Note u

For SI: 1 inch = 25.4mm.

- a. Based on stud spacing of 16 inches on center where studs are spaced 24 inches, siding shall be applied to sheathing approved for that spacing.
- b. Nail is a general description and shall be T-head, modified round head, or round head with smooth or deformed shanks.
- c. Staples shall have a minimum crown width of 7/16-inch outside diameter and be manufactured of minimum No. 16 gage wire.
- d. Nails or staples shall be aluminum, galvanized, or rust-preventive coated and shall be driven into the studs where fiberboard, gypsum, or foam plastic sheathing backing is used. Where wood or wood structural panel sheathing is used, fasteners shall be driven into studs unless otherwise permitted to be driven into sheathing in accordance with the siding manufacturer's installation instructions.
- e. Aluminum nails shall be used to attach aluminum siding.
- f. Aluminum (0.019 inch) shall be unbacked only when the maximum panel width is 10 inches and the maximum flat area is 8 inches. The tolerance for aluminum siding shall be +0.002 inch of the nominal dimension.

- g. All attachments shall be coated with a corrosion-resistive coating.
- h. Shall be of approved type.
- i. Three-eighths-inch plywood shall not be applied directly to studs spaced more than 16 inches on center when long dimension is parallel to studs. Plywood ½ inch or thinner shall not be applied directly to studs spaced more than 24 inches on center. The stud spacing shall not exceed the panel span rating provided by the manufacturer unless the panels are installed with the face grain perpendicular to the studs or over sheathing approved for that stud spacing.
- j. Woodboard sidings applied vertically shall be nailed to horizontal nailing strips or blocking set 24 inches in center. Nails shall penetrate 1.5 inches into studs and wood sheathing combined or blocking. A weather-resistant membrane shall be installed weatherboard fashion under the vertical siding unless the siding boards are lapped or battens are used.
- k. Hardboard siding shall comply with AHA A135.6.
- l. For masonry veneer, a weather-resistive sheathing paper is not required over a sheathing that performs as a weather-resistive barrier when a 1-inch air space is provided between the veneer and the sheathing. When the 1-inch space is filled with mortar, a weather-resistive sheathing paper is required over studs or sheathing.
- m. Vinyl siding shall comply with ASTM D 3679.
- n. Minimum shank diameter of 0.092 inch minimum head diameter of 0.225 inch, and nail length must accommodate sheathing and penetrate framing 1.5 inches.
- o. When used to resist shear forces, the spacing must be 4 inches at panel edges and 8 inches on interior supports.
- p. Minimum shank diameter of 0.099 inch, minimum head diameter of 0.240 inch, and nail length must accommodate sheathing and penetrate framing 1.5 inches.
- q. Vertical end joints shall occur at studs and shall be covered with a joint cover or shall be caulked.
- r. Fiber cement siding shall comply with the requirements of ASTM C 1186.
- s. See Section R703.10.1.
- t. Minimum 0.102" smooth shank, 0.255" round head.
- u. Minimum 0.099" smooth shank, 0.250" round head.
- v. See Section R703.10.2.
- w. Face nailing: 2 nails at each stud. Concealed nailing: one 11 gage 1-1/2 galv. roofing nail (0.371" head diameter, 0.120" shank) or 6d galv. box nail at each stud.
- x. See Section R703.2 exceptions.
- y. Minimum nail length must accommodate sheathing and penetrate framing 1-1/2 inches.
- z. Adhered masonry veneer shall comply with the requirements of Sections 6.1 and 6.3 of ACI 530/ASCE 5/TMS-402.

Subp. 9. **Section R703.8** IRC Section R703.8 is amended to read as follows:

R703.8 Flashing. Approved corrosion resistant flashing shall be applied shingle fashion in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural framing components. Self-adhered membranes used as flashing shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Approved corrosion-resistant flashing shall be installed at all of the following locations:

1. Exterior window and door openings. Flashing shall be installed at the head and sides of exterior window and door openings and shall extend to the surface of the exterior wall finish or to the water-resistive barrier for subsequent drainage. Flashing at exterior window and door openings shall be installed in accordance with at least one of the following: a) the fenestration manufacturer's installation and flashing instructions. When flashing is not addressed in the fenestration manufacturer's instructions, it shall be installed in accordance with the flashing manufacturer's instructions; b) in accordance with the flashing design or method of a registered design professional; and c) in accordance with other approved methods.
2. At the intersection of chimneys or other masonry construction with frame or stucco walls, with projecting lips on both sides under stucco copings.
3. Under and at the ends of masonry, wood, or metal copings and sills.
4. Continuously above all projecting wood trim.
5. Where exterior porches, decks, or stairs attach to a wall or floor assembly of wood frame construction.
6. At wall and roof intersections.
7. At built in gutters.
8. Where exterior material meets in other than a vertical line.
9. Where the lower portion of a sloped roof stops within the plane of an intersecting wall cladding in such a manner as to divert or kick out water away from the assembly in compliance with Section R903.2.1

R703.10 Fiber cement siding.

R703.10.1 Panel siding. Fiber-cement panels shall comply with the requirements of ASTM C1186, Type A, minimum Grade II. Panels shall be installed with the long dimension either parallel or perpendicular to framing. Vertical and horizontal joints shall occur over framing members and shall be sealed with caulking, covered with battens or shall be designed to comply with Section R703.1. Panel siding shall be installed with fasteners according to Table R703.4 or *approved* manufacturer's installation instructions.

R703.10.2 Lap siding. Fiber-cement lap siding having a maximum width of 12 inches shall comply with the requirements of ASTM C 1186, Type A, minimum Grade II. Lap siding shall be lapped with a minimum of 1-1/4 inches (32mm) and lap siding not having tongue-and-groove end joints shall have the ends sealed with caulking, installed with an H-section joint cover, located over a strip of flashing or shall be designed to comply with Section R703.1. Lap siding courses may be installed with the fastener heads exposed or concealed, according to Table R703.4 or *approved* manufacturer's installation instructions.

R703.11 Vinyl siding. Vinyl siding shall be certified and *labeled* as conforming to the requirements of ASTM D 3679 by an *approved* quality control agency.

R703.11.1 Installation. Vinyl siding, soffit and accessories shall be installed in accordance with the manufacturer's installation instructions.