TABLE R703.4
WEATHER–RESISTANT SIDING ATTACHMENT AND MINIMUM THICKNESS

SIDING MATERIAL		NOMINAL THICKNES[a] (inches)	JOINT TREATMENT	WATER-RESISTIVE BARRIER REQUIRED	TYPE OF SUPPORTS FOR THE SIDING MATERIAL AND FASTENERS[b,c,d]					
					Wood or wood structural panel sheathing	Fiberboard sheathing into stud	Gypsum sheathing into stud	Foam plastic sheathing into stud	Direct to studs	Number or spacing of fasteners
Horizontal aluminum[e]	Without insulation	0.019[f]	Lap	Yes	0.120 nail 1½″ long	0.120 nail 2″ long	0.120 nail 2″ long	0.120 nail[y]	Not allowed	Same as stud spacing
		0.024	Lap	Yes	0.120 nail 1½″ long	0.120 nail 2″ long	0.120 nail 2″ long	0.120 nail[y]	Not allowed	
	With insulation	0.019	Lap	Yes	0.120 nail 1½″ long	0.120 nail 2½″ long	0.120 nail 2½″ long	0.120 nail[y]	0.120 nail 1½″ long	
Brick veneer[z] Concrete masonry veneer[z]		2 2	Section R703	Yes (Note l)	See Section R703 and Figure R703.7[z]					
Hardboard[k] Panel siding-vertical		7/16	—	Yes	Note n	Note n	Note n	Note n	Note n	6″ panel edges 12″ inter. sup.[o]
Hardboard[k] Lap-siding-horizontal		7/16	Note q	Yes	Note p	Note p	Note p	Note p	Note p	Same as stud spacing 2 per bearing
Steel[h]		29 ga.	Lap	Yes	0.113 nail 1¾″ Staple–1¾″	0.113 nail 2¾″ Staple–2½″	0.113 nail 2½″ Staple–2¼″	0.113 nail[y] Staple[y]	Not allowed	Same as stud spacing
Stone veneer		2	Section R703	Yes (Note l)	See Section R703 and Figure R703.7[z]					
Particleboard panels		3/8 – 1/2	—	Yes	6d box nail (2″ × 0.099″)	6d box nail (2″ × 0.099″)	6d box nail (2″ × 0.099″)	box nail[y]	6d box nail (2″ × 0.099″), 3/8 not allowed	6″ panel edge, 12″ inter. sup.
		5/8	—	Yes	6d box nail (2″ × 0.099″)	8d box nail (2½″ × 0.113″)	8d box nail (2½″ × 0.113″)	box nail[y]	6d box nail (2″ × 0.099″)	
Plywood panel[i] (exterior grade)		3/8	—	Yes	0.099 nail–2″	0.113 nail–2½″	0.099 nail–2″	0.113 nail[y]	0.099 nail–2″	6″ on edges, 12″ inter. sup.
Vinyl siding[m]		0.035	Lap	Yes	0.120 nail 1½″ Staple–1¾″	0.120 nail 2″ Staple–2½″	0.120 nail 2″ Staple–2½″	0.120 nail[y] Staple[y]	Not allowed	Same as stud spacing
Wood[j] rustic, drop		3/8 Min	Lap	Yes	Fastener penetration into stud–1″				0.113 nail–2½″ Staple–2″	Face nailing up to 6″ widths, 1 nail per bearing; 8″ widths and over, 2 nails per bearing
Shiplap		19/32 Average	Lap	Yes						
Bevel		7/16								
Butt tip		3/16	Lap	Yes						
Fiber cement panel siding[r]		5/16	Note s	Yes Note x	6d corrosion-resistant nail[t]	6d corrosion-resistant nail[t]	6d corrosion-resistant nail[t]	6d corrosion-resistant nail[t, y]	4d corrosion-resistant nail[u]	6″ o.c. on edges, 12″ o.c. on intermed. studs
Fiber cement lap siding[r]		5/16	Note v	Yes Note x	6d corrosion-resistant nail[t]	6d corrosion-resistant nail[t]	6d corrosion-resistant nail[t]	6d corrosion-resistant nail[t, y]	6d corrosion-resistant nail[v]	Note w

For SI: 1 inch = 25.4 mm.

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 16 gage wire.

d. Nails or staples shall be aluminum, galvanized, or rust-preventative coated and shall be driven into the studs for fiberboard or gypsum backing.

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-resistant coating.

h. Shall be of approved type.

(continued)

Footnotes to Table R703.4—continued

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 $^1/_2$-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. Wood board sidings applied vertically shall be nailed to horizontal nailing strips or blocking set 24 inches on center. Nails shall penetrate $1^1/_2$ inches into studs, studs and wood sheathing combined, or blocking. A weather-resistive 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 $1^1/_2$ 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 $1^1/_2$ 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 in Sections 6.1 and 6.3 of ACI 530/ASCE 5/TMS-402.