**TABLE R602.3(2)—continued**
**ALTERNATE ATTACHMENTS TO TABLE R602.3(1)**

For SI: 1 inch = 25.4 mm.

a. Nail is a general description and shall be permitted to be T-head, modified round head or round head.

b. Staples shall have a minimum crown width of $^{7}/_{16}$-inch on diameter except as noted.

c. Nails or staples shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater. Nails or staples shall be spaced at not more than 12 inches on center at intermediate supports for floors.

d. Fasteners shall be placed in a grid pattern throughout the body of the panel.

e. For 5-ply panels, intermediate nails shall be spaced not more than 12 inches on center each way.

f. Hardboard underlayment shall conform to CPA/ANSI A135.4

g. Specified alternate attachments for roof sheathing shall be permitted where the ultimate design wind speed is less than 130 mph. Fasteners attaching wood structural panel roof sheathing to gable end wall framing shall be installed using the spacing listed for panel edges.

h. Fiber-cement underlayment shall conform to ASTM C1288 or ISO 8336, Category C.

**TABLE R602.3(3)**
**REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES[a, b, c]**

| MINIMUM NAIL | | MINIMUM WOOD STRUCTURAL PANEL SPAN RATING | MINIMUM NOMINAL PANEL THICKNESS (inches) | MAXIMUM WALL STUD SPACING (Inches) | PANEL NAIL SPACING | | ULTIMATE DESIGN WIND SPEED $V_{ult}$ (mph) | | |
|---|---|---|---|---|---|---|---|---|---|
| Size | Penetration (Inches) | | | | Edges (Inches o.c.) | Field (inches o.c.) | Wind exposure category | | |
| | | | | | | | B | C | D |
| 6d Common (2.0″ × 0.113″) | 1.5 | 24/0 | $^{3}/_{8}$ | 16 | 6 | 12 | 140 | 115 | 110 |
| 8d Common (2.5″ × 0.131″) | 1.75 | 24/16 | $^{7}/_{16}$ | 16 | 6 | 12 | 170 | 140 | 135 |
| | | | | 24 | 6 | 12 | 140 | 115 | 110 |

For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.

a. Panel strength axis parallel or perpendicular to supports. Three-ply plywood sheathing with studs spaced more than 16 inches on center shall be applied with panel strength axis perpendicular to supports.

b. Table is based on wind pressures acting toward and away from building surfaces in accordance with Section R301.2. Lateral bracing requirements shall be in accordance with Section R602.10.

c. Wood structural panels with span ratings of Wall-16 or Wall-24 shall be permitted as an alternate to panels with a 24/0 span rating. Plywood siding rated 16 o.c. or 24 o.c. shall be permitted as an alternate to panels with a 24/16 span rating. Wall-16 and Plywood siding 16 o.c. shall be used with studs spaced not more than 16 inches on center.

**TABLE R602.3(4)**
**ALLOWABLE SPANS FOR PARTICLEBOARD WALL SHEATHING[a]**

| THICKNESS (Inch) | GRADE | STUD SPACING (inches) | |
|---|---|---|---|
| | | Where siding is nailed to studs | Where siding is nailed to sheathing |
| $^{3}/_{8}$ | M-1 Exterior glue | 16 | — |
| $^{1}/_{2}$ | M-2 Exterior glue | 16 | 16 |

For SI: 1 inch = 25.4 mm.

a. Wall sheathing not exposed to the weather. If the panels are applied horizontally, the end joints of the panel shall be offset so that four panel corners will not meet. Panel edges must be supported. Leave a $^{1}/_{16}$-inch gap between panels and nail not less than $^{3}/_{8}$ inch from panel edges.

**R602.7 Headers.** For header spans, see Tables R602.7(1), R602.7(2) and R602.7(3).

**R602.7.1 Single member headers.** Single headers shall be framed with a single flat 2-inch-nominal (51 mm) member or wall plate not less in width than the wall studs on the top and bottom of the header in accordance with Figures R602.7.1(1) and R602.7.1(2) and face nailed to the top and bottom of the header with 10d box nails (3 inches × 0.128 inches) spaced 12 inches on center.

**R602.7.2 Rim board headers.** Rim board header size, material and span shall be in accordance with Table R602.7(1). Rim board headers shall be constructed in accordance with Figure R602.7.2 and shall be supported at each end by full-height studs. The number of full-height studs at each end shall be not less than the number of studs displaced by half of the header span based on the maximum stud spacing in accordance with Table R602.3(5). Rim board headers supporting concentrated loads shall be designed in accordance with accepted engineering practice.

**R602.7.3 Wood structural panel box headers.** Wood structural panel box headers shall be constructed in accordance with Figure R602.7.3 and Table R602.7.3.