

R602.10.6.1 Braced wall panel connections for Seismic Design Categories D₀, D₁ and D₂. *Braced wall panels* shall be fastened to required foundations in accordance with Section R602.11.1, and top plate lap splices shall be face-nailed with at least eight 16d nails on each side of the splice.

R602.10.6.2 Connections to roof framing. Exterior *braced wall panels* shall be connected to roof framing as follows.

1. Parallel rafters or roof trusses shall be attached to the top plates of *braced wall panels* in accordance with Table R602.3(1).
2. For SDC A, B and C and wind speeds less than 100 miles per hour (45 m/s), where the distance from the top of the rafters or roof trusses and perpendicular top plates is $9\frac{1}{4}$ inches (235 mm) or less, the rafters or roof trusses shall be connected to the top plates of *braced wall lines* in accordance with Table R602.3(1) and blocking need not be installed. Where the distance from the top of the rafters and perpendicular top plates is between $9\frac{1}{4}$ inches (235 mm) and $15\frac{1}{4}$ inches (387 mm) the rafters shall be connected to the top plates of *braced wall panels* with blocking in accordance with Figure R602.10.6.2(1) and attached in accordance with Table R602.3(1). Where the distance from the top of the roof trusses and perpendicular top plates is between $9\frac{1}{4}$ inches (235 mm) and $15\frac{1}{4}$ inches (387 mm) the roof trusses shall be connected to the top plates of *braced wall panels* with blocking in accordance with Table R602.3(1).

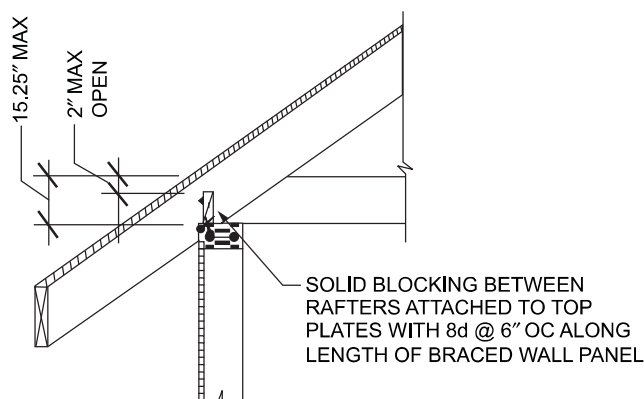
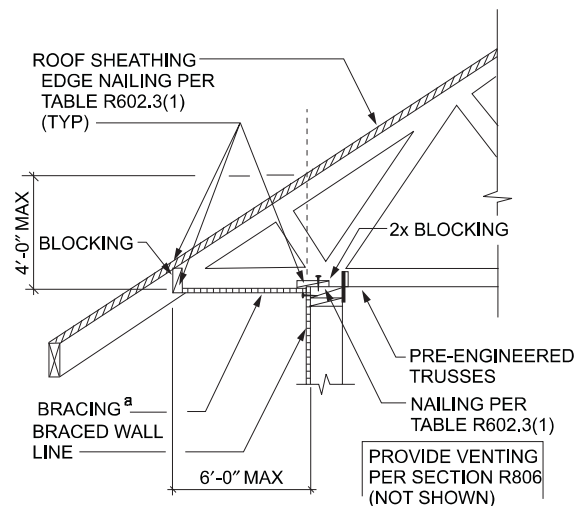


FIGURE R602.10.6.2(1)
BRACED WALL PANEL CONNECTION
TO PERPENDICULAR RAFTERS

For SI: 1 inch = 25.4 mm.

3. For SDC D₀, D₁ and D₂ or wind speeds of 100 miles per hour (45 m/s) or greater, where the distance between the top of rafters or roof trusses and perpendicular top plates is $15\frac{1}{4}$ inches (387 mm) or less, rafters or roof trusses shall be connected to the top plates of *braced wall panels* with blocking in accordance with Figure R602.10.6.2(1) and attached in accordance with Table R602.3(1).
4. For all seismic design categories and wind speeds, where the distance between the top of rafters or roof trusses and perpendicular top plates exceeds $15\frac{1}{4}$ inches (387 mm), perpendicular rafters or roof trusses shall be connected to the top plates of *braced wall panels* in accordance with one of the following methods:
 - 4.1. In accordance with Figure R602.10.6.2(2),
 - 4.2. In accordance with Figure R602.10.6.2(3),
 - 4.3. With full height engineered blocking panels designed for values listed in American Forest and Paper Association (AF&PA) Wood Frame Construction Manual for One- and Two-Family *Dwellings* (WFCM). Both the roof and floor sheathing shall be attached to the blocking panels in accordance with Table R602.3(1).
 - 4.4. Designed in accordance with accepted engineering methods.

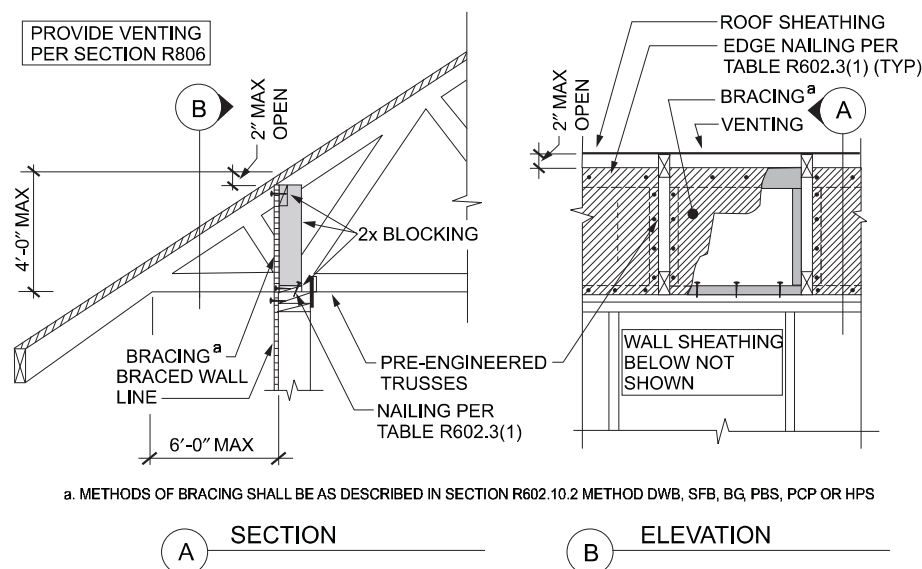
Lateral support for the rafters and ceiling joists shall be provided in accordance with Section R802.8. Lateral support for trusses shall be provided in accordance with Section R802.10.3. Ventilation shall be provided in accordance with Section R806.1.



a. METHODS OF BRACING SHALL BE AS DESCRIBED IN SECTION R602.10.2 METHOD DWB, WSP, SFB, GB, PBS, PCP OR HPS

For SI: 1 inch = 25.4 mm.

FIGURE R602.10.6.2(2)
BRACED WALL PANEL CONNECTION OPTION TO
PERPENDICULAR RAFTERS OR ROOF TRUSSES



a. METHODS OF BRACING SHALL BE AS DESCRIBED IN SECTION R602.10.2 METHOD DWB, SFB, BG, PBS, PCP OR HPS

FIGURE R602.10.6.2(3)
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

R602.10.7 Braced wall panel support. *Braced wall panel* support shall be provided as follows:

1. Cantilevered floor joists, supporting *braced wall lines*, shall comply with Section R502.3.3. Solid blocking shall be provided at the nearest bearing wall location. In Seismic Design Categories A, B and C, where the cantilever is not more than 24 inches (610 mm), a full height rim joist instead of solid blocking shall be provided.
2. Elevated post or pier foundations supporting *braced wall panels* shall be designed in accordance with accepted engineering practice.
3. Masonry stem walls with a length of 48 inches (1220 mm) or less supporting *braced wall panels* shall be reinforced in accordance with Figure R602.10.7. Masonry stem walls with a length greater than 48 inches (1220 mm) supporting *braced wall panels* shall be constructed in accordance with Section R403.1 *Braced wall panels* constructed in accordance with Sections R602.10.3.2 and R602.10.3.3 shall not be attached to masonry stem walls.

R602.10.7.1 Braced wall panel support for Seismic Design Category D₂. In one-story buildings located in Seismic Design Category D₂, *braced wall panels* shall be supported on continuous foundations at intervals not exceeding 50 feet (15 240 mm). In two-story buildings located in Seismic Design Category D₂, all *braced wall panels* shall be supported on continuous foundations.

Exception: Two-story buildings shall be permitted to have interior *braced wall panels* supported on continuous foundations at intervals not exceeding 50 feet (15 240 mm) provided that:

1. The height of cripple walls does not exceed 4 feet (1219 mm).

2. First-floor *braced wall panels* are supported on doubled floor joists, continuous blocking or floor beams.
3. The distance between bracing lines does not exceed twice the building width measured parallel to the *braced wall line*.

R602.10.8 Panel joints. All vertical joints of panel sheathing shall occur over, and be fastened to common studs. Horizontal joints in *braced wall panels* shall occur over, and be fastened to common blocking of a minimum 1½ inch (38 mm) thickness.

Exceptions:

1. Blocking at horizontal joints shall not be required in wall segments that are not counted as *braced wall panels*.
2. Where the bracing length provided is at least twice the minimum length required by Tables R602.10.1.2(1) and R602.10.1.2(2) blocking at horizontal joints shall not be required in *braced wall panels* constructed using Methods WSP, SFB, GB, PBS or HPS.
3. When Method GB panels are installed horizontally, blocking of horizontal joints is not required.

R602.10.9 Cripple wall bracing. In Seismic Design Categories other than D₂, cripple walls shall be braced with a length and type of bracing as required for the wall above in accordance with Tables R602.10.1.2(1) and R602.10.1.2(2) with the following modifications for cripple wall bracing:

1. The length of bracing as determined from Tables R602.10.1.2(1) and R602.10.1.2(2) shall be multiplied by a factor of 1.15, and
2. The wall panel spacing shall be decreased to 18 feet (5486 mm) instead of 25 feet (7620 mm).