

R4603.6 Tying and bracing of wood piles.

Beams and girders shall fully bear on pilings and butt joints shall occur over pilings. ~~If sills, beams or girders are shall be attached to the piling a minimum of two 5/8-inch (16 mm) galvanized steel bolts per beam member shall be through bolted using either bolts or screws at each piling connection in accordance with Table R4603.6 and Figure R4503.6(a) R4603.6(a).~~ When the piling is notched so that the cross-section is reduced below 50 percent or the girder is top bearing, sills, beams or girders shall be attached using 3/16 × 4 × 18-inch (5 × 102 × 467 mm) hot dip galvanized straps, one each side, ~~bolted with two 5/8-inch (15.9 mm) galvanized through bolts fastened top and bottom with either bolts or screws in accordance with Table R4603.6 and Figure R4603.6(b) and Figure R4503.6(e) R4603.6(c).~~ Where butt joints occur over the piling and screws are used, there shall be two straps on each side of the piling, having a minimum size of 3/16 × 2 × 18 inches (5 × 51 × 467 mm), with four self-drilling screws as described below in each end.

Table R4603.6 Minimum Fastening of Beams and Girders to Pilings

<u>Amount Piling is Notched</u>	<u>Beam/Girder Continuous</u>		<u>Beam/Girder Butt Joint</u>	
	<u>Bolts</u>	<u>Screws</u>	<u>Bolts</u>	<u>Screws</u>
<u>≤ 50%</u>	<u>two 5/8" bolts²</u>	<u>four screws³</u>	<u>four 5/8" bolts²</u>	<u>eight screws³</u>
<u>> 50%¹</u>	<u>two 5/8" bolts²</u>	<u>four screws³</u>	<u>four 5/8" bolts³</u>	<u>eight screws</u>

1. Where piling is notched over 50%, use strap as required in Section 4603.6. Install the specified number of bolts or screws in each end of the strap.
2. Bolts shall be 5/8" diameter hot dipped galvanized through bolts with nuts and washers.
3. Screws shall be 0.270" (6.9 mm) minimum in diameter, hot dipped galvanized to a minimum of A153, Class C, and having a minimum length of 4", and also shall be long enough to penetrate at least one inch through the remaining pile and into the girder.

R4603.6.1 Tying at corners. At corners, girders shall be connected to the pile with a minimum 3/16 × 4 × 18-inch (5 × 102 × 467 mm) hot dip galvanized strap bolted with two 5/8 inch (15.9 mm) galvanized through bolts on the exterior and a minimum L4 x 3/16 x 1'-6" (102 × 5 × 467 mm) galvanized steel angle bolted with two 5/8 inch (15.9 mm) galvanized through bolts on the interior in accordance with Figure R4603.6(d).

R4603.6.2 Bracing of Pilings. Bracing of pile foundations is required where the clear height from ground to sill, beam or girder exceeds 10 feet (3048 mm) or the dwelling is more than one story above piles. A line of X-bracing is defined as a row of piles with X-bracing provided in at least two bays. A line of X-bracing shall be provided at all exterior pile lines. Where the perimeter lines of X-bracing exceed 40 feet (12 192 mm), an additional line of X-bracing shall be provided near the center of the building. See Figure R4603.6(e). X-bracing shall be with 2 × 10s through bolted with two 3/4-inch (19.1 mm) bolts at each end. The code official is permitted to accept alternate bracing designs if they bear the seal of a registered design professional.

Revise Figures as follows:

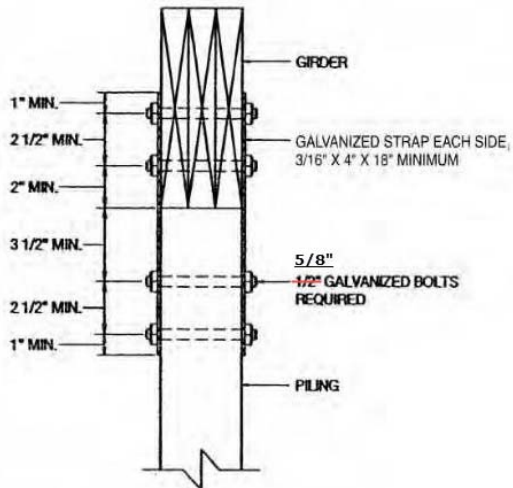


FIGURE R4603.6(b)
TOP MOUNTED GIRDER

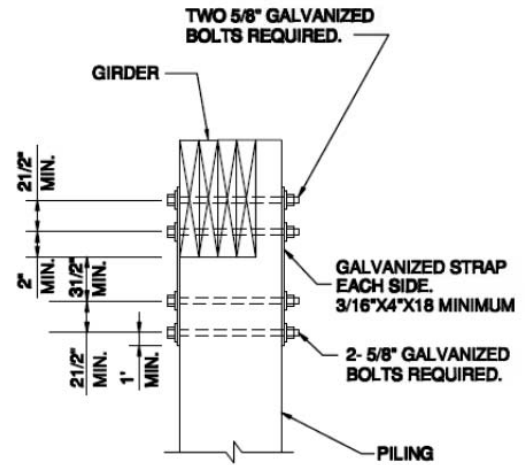


FIGURE R4603.6(c)
PILING NOTCHED MORE THAN 50%

The delayed effective date of this Rule is January 1, 2020.
The Statutory authority for Rule-making is G. S. 143-136; 143-138.

314.4 Vehicles. Liquid- or gas-fueled vehicles, boats or other motorcraft shall not be located indoors except as follows:

1. Batteries are disconnected.

Exception: Alternative-fueled vehicles in which manufacturer prohibits the disconnection of power supply.

2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19L) (whichever is least).

Exception: Diesel-fueled vehicles, the maximum fuel amount permitted shall be 20 gallons.

3. Fuel tanks and fill openings are closed and sealed to prevent tampering and the release of vapors.

4. Vehicles, boats or other motorcraft equipment are not fueled or defueled within the building.

The delayed effective date of this Rule is January 1, 2020.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.