

## WALL BRACING REQUIREMENTS

All exterior walls must be braced to resist imposed lateral loads in accordance with section 602.10 of the 2013 Residential Code of Ohio. All walls, including panels adjacent to garage door openings, walls with numerous window and door openings, must be designed to resist these forces. Walls that are not built to Code specifications require an engineered design.

**“Sheathing”** shall include plywood, OSB, or other approved wood structural panels.

**“Continuously Sheathed”** wall has all framing components - studs, plates, headers and rims of floor assemblies are covered by Wood Structural Panel sheathing ( includes plywood and OSB).

### **GENERAL REQUIREMENTS FOR 10’ CONTINUOUSLY SHEATHED WALLS:**

Each End: 48” sheathed panels (or other approved widths) beginning not more than 10’ from wall ends, and not more than 20’ apart are required. Each wall end requires a 48” panel or a minimum 24” end panel with a 24” panel return around the corner, nailed into the floor framing with 3-16d @16” o.c. or equivalent; otherwise an 800lb. hold down bracket must be used – Generally a Simpson or Equivalent 1¼” x 12” Strap Tie Fully Nailed Into the Braced Panel Stud Nearest the Wall End and Into the Rim Below.

Total length requirements of braced panels per wall varies.

### **PORTAL FRAME WALLS (Continuously Sheathed):**

#### **Over Raised Wood Floors**

Portal frame construction over wood floors reduces required braced panel lengths to Tie down devices may be required at panel ends, and headers must continue past opening to end of braced wall panel – generally one stud space. Minimum panel lengths vary.

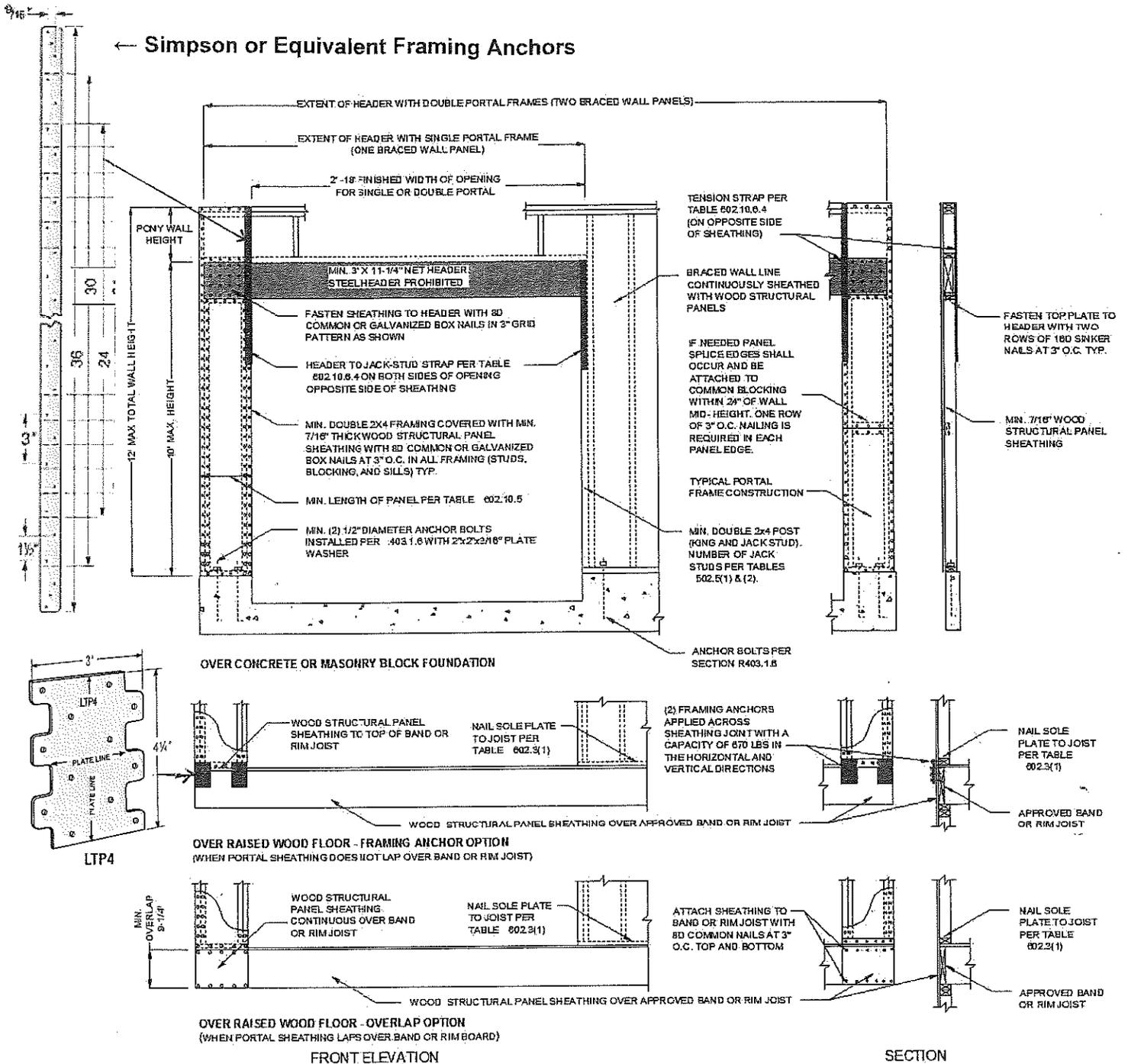
Continue header to at least one stud space beyond opening. Install minimum 1000 lb. 1 ¼” x18” interior metal strapping across double studs and, 1 1/4” header and if present, pony wall above (24” strap). Install two 670 lb. hold down plates on each panel fully nailed to double studs, bottom plate, and rim joist. No hold downs required if wall sheathing continues over rim/band joist.

#### **Garages (Any Direct Attachment to Foundation)**

Reduced braced panel lengths are acceptable if ½” anchor bolts with 2”x2”x3/16” plate washers are installed through each end of the bottom plate of the panel. The remainder of the installation is as over raised wood floors.

### **WALLS NOT CONTINUOUSLY SHEATHED/ALTERNATE WINDBRACING METHODS:**

Walls may also be braced by other methods including; let in bracing, diagonal wood boards, fiber board sheathing, particle board sheathing, hardboard siding, gypsum board, and more. Spacing, fastening requirements, and total required length of braced panels vary. Tie down devices may be required.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound force = 4.448 N.

**FIGURE 602.10.6.4**  
**METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION**