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# NOTICE OF BUILDING CODE CHANGE

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This letter is notice to all residential building contractors that the new 2007 State Building Code that adopts the 2006 International Residential Code has gone into effect **July 10, 2007**. Throughout the last couple of months training has been provided by the State of Minnesota informing attendees the changes in code pertaining to the 2006 International Residential Code (IRC) structural provisions and the Minnesota State Building Code Amendments (MSBC). I have listed in this letter **SOME** of the major structural changes, but not limited to, as all projects are unique. If you have any questions do not hesitate to contact Municipal Inspections at 952-461-4777.

## GENERAL BUILDING PLANNING

- Buildings and structures shall be constructed to safely support all loading conditions. As a result the finished system shall provide a complete load path that meets all requirements for the transfer of all loads from their point of origin through the load-resisting elements to the foundation (IRC R301).
- When a building contains structural elements not conforming to this code these elements shall be designed with accepted engineering practices (IRC R301.1.3).

## FOOTING AND FOUNDATION

- Foundations shall be capable of accommodating all loads, and of transmitting the resulting loads to the supporting soils (IRC SECTION R301)
- Unless a geotechnical report is provided the soil bearing capacity shall be assumed at no more than 1500 PSF (TABLE R401.4.1)
- Minimum width of footings shall comply with table R403.1 (IRC). The footing sizes on the plans must reflect this change.
- Foundation walls that meet the following shall be considered laterally supported.
  1. Full basement floor shall be 3.5 inches thick concrete slab poured tight against the bottom of the foundation wall.
  2. Floor joists and blocking shall be connected to the sill plate in accordance with table R404.1 (1) (IRC). Or with an approved connector with the listing capacity equal to or greater than the top reactions listed in the table. **(If you chose to take this path the listing for the connectors shall be on-site at the time of the framing inspection).**
  3. Anchor bolt spacing in accordance with table R404.1 (2) (MSBC).

4. Floors shall be blocked perpendicular to the floor joists. Blocking shall be full depth within three joist spaces of the foundation wall, and spaced 24 inches on center.
5. Where foundation walls support unbalanced load on opposite sides of the building (daylight basement or step down walls) the rim board shall be attached to the sill with a 20 gauge metal angle clip at 24 inches on center, with five 8d nails per leg, or an approved connector supplying 230 pounds per linear foot capacity.

**KEEP IN MIND THAT ALL THESE REQUIREMENTS SHALL BE MET, BUT AT THE SAME TIME THIS ONLY PERTAINS TO FOUNDATIONS WITH UNBALANCED BACKFILL OR LOADS (EX: GABLE ENDS, FULL FOUNDATION WALLS, OR STEP DOWN WALLS ON THE SIDES OF A WALKOUT BASEMENT, BUT NOT LIMITED TO).**

- Cantilevered masonry/concrete foundation walls shall be constructed as set forth in table R404.1.1 (6)-(8) (MSBC).

**Cantilevered means: foundation walls that do not have permanent lateral support at the top (ex. Lookout basement).**

## **WALL CONSTRUCTION**

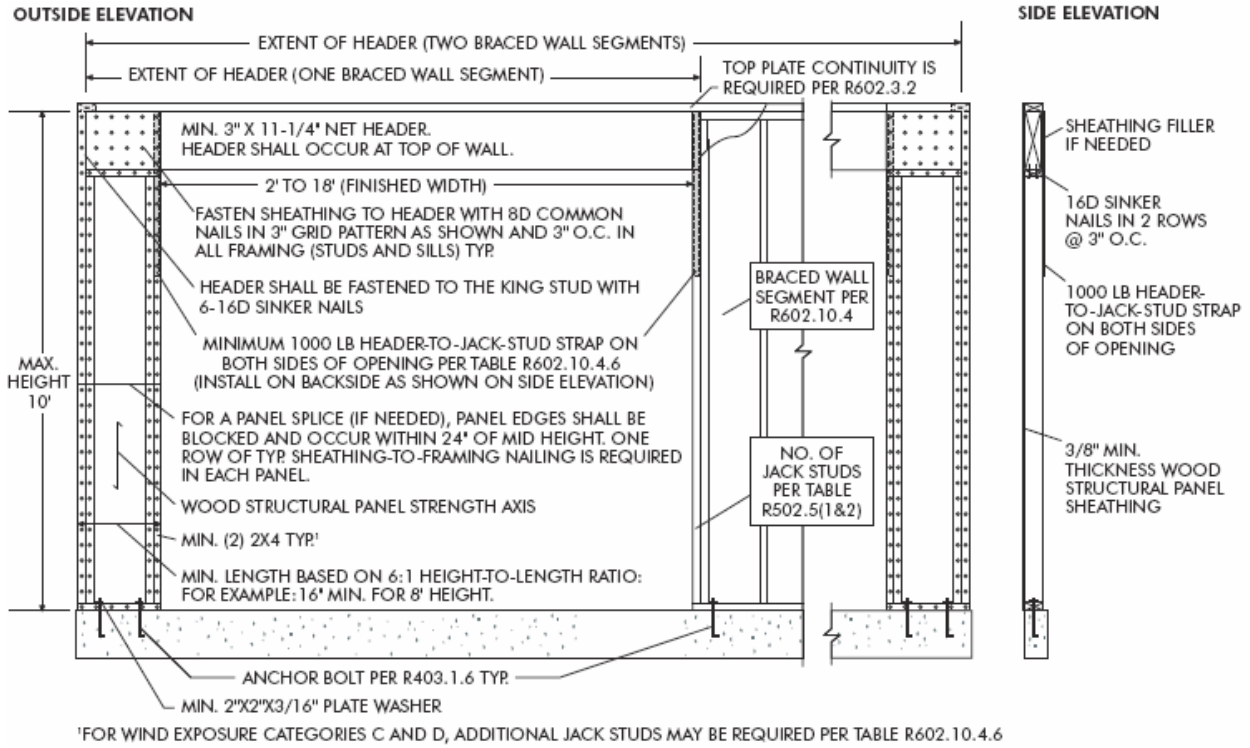
- All exterior walls shall be braced in accordance with R602.10 (IRC).

**Braced wall line means: a series of braced wall panels in a single story constructed in accordance with section R602.10 (IRC) to resist racking from wind loads.**

**Braced wall panel means: a section of a braced wall line constructed in accordance with R602.10 (IRC) which extend the full height of the wall.**

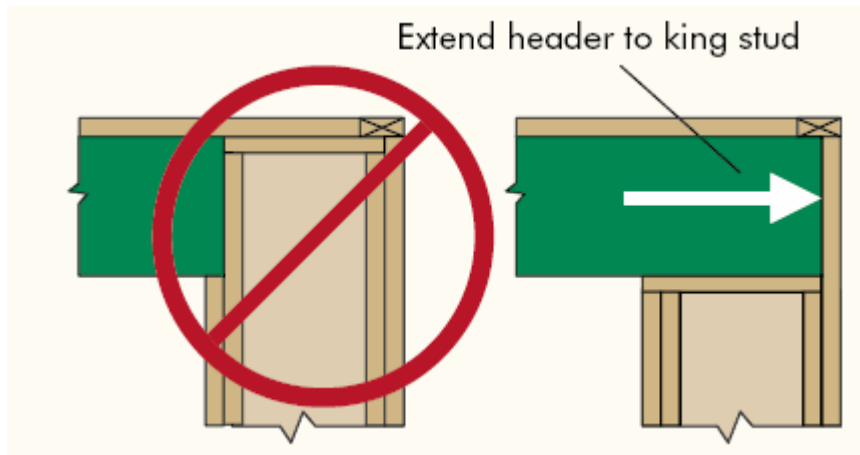
- Walls adjacent to garage opening shall be designed to one of the methods provided in this handout, or an engineered design is required.
  1. Header shall be nailed to the top plate, and the rough opening shall be framed down from the bottom of the header (NO MORE DROPPED HEADERS IN THE GARAGE OPENINGS).
- The following are options to choose from, if neither are used an engineered design is required. Keep in mind that with the exception of the walls adjacent to the garage openings, the majority of single-family dwellings all ready meet the minimum requirements of the code for braced wall lines, because of the continuous structural sheathing.

# CONTINUOUS SHEATHING PORTAL FRAME CONSTRUCTION OPTION 1

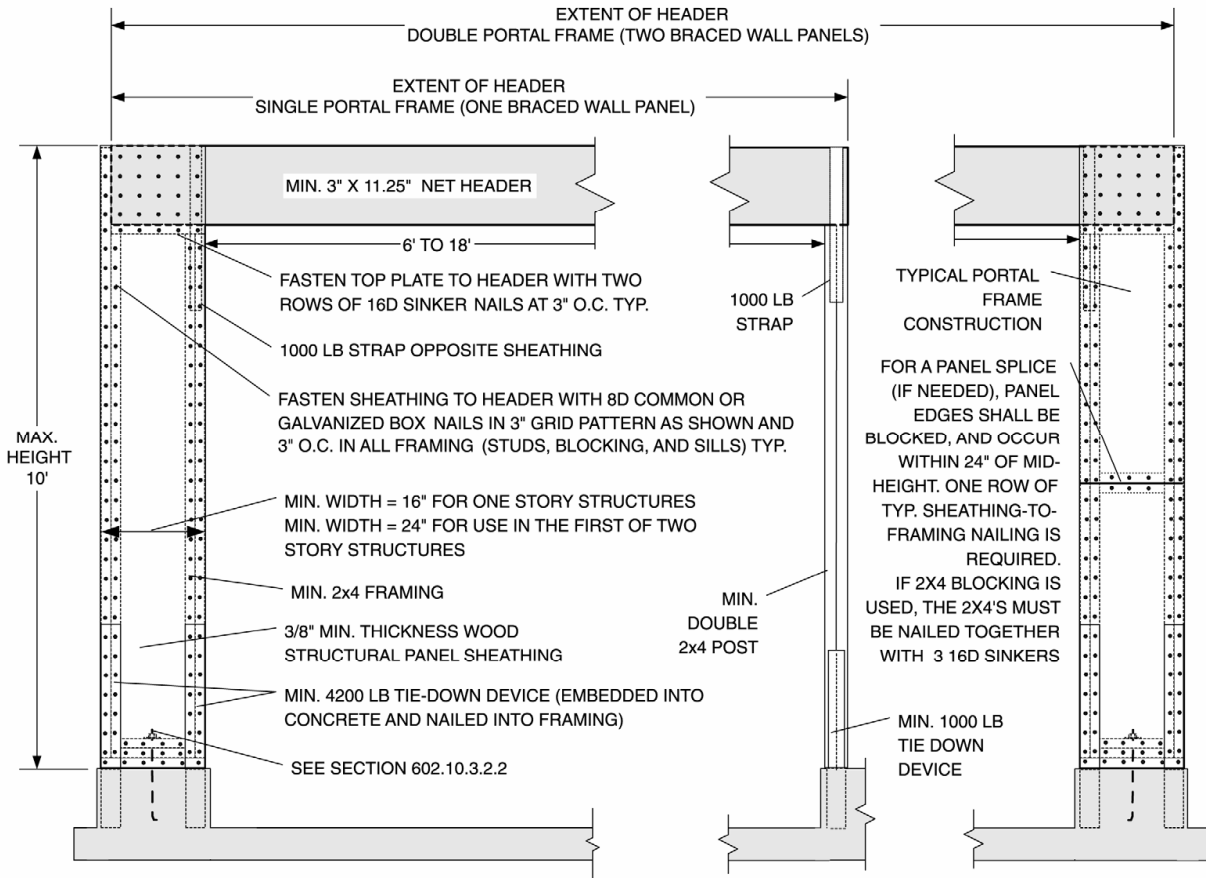


## LENGTH OF PORTAL FRAME PANAL FOR CONTINUOUS SHEATHING

LENGTH OF PORTAL FRAME BRACED WALL PANAL	WALL HEIGHT		
		8'	9'
	16"	18"	20"



## INTERMITTENT PORTAL FRAME CONSTRUCTION OPTION 2



### MINIMUM LENGTH OF PORTAL PANEL

STORY	WALL HEIGHT		
	8'	9'	10'
One-story structure	16"	16"	16"
First of two-story structure	24"	24"	24"

- You can construct a single portal frame (a panel located at only one end of an opening) when only one braced wall panel is required, i.e., at a small window or door opening. You can construct a double portal frame (panels located at both ends of an opening) when more than one braced wall panel is required, i.e., at a large opening such as a garage door. Intermittent portal frames can only be constructed on concrete or masonry.