

**2005 IBHS Guidelines for Hurricane Resistant Residential Construction**

*Errata to the 1<sup>st</sup> Printing*

*April 2007*

**Section 104.2:** Change section to read..."See Preface."

**Section 104.3:** Add the following sentence to the end of the section..."The requirements specified for wind speeds of 100 mph are permitted to be used for wind speeds of 110 mph. Requirements for wind speeds of 130 mph are permitted to be interpolated between the requirements for 120 mph and 140 mph wind speeds."

**Table 209A:** In the "Uplift Loads" column, change first column heading to read " **$Y \leq L/2$** ".

Change note a to read..."a.  **$Y \leq L/2$**  : Length of attachment (Y) is less than or equal to 1/2 of building dimension to which attached (L/2) (See Figure 209B)."

Change Example 2 to read..."EXAMPLE 2: 140 mph: For a one-story structure with a 20 ft wide attachment adjoining the 48 ft sidewall of a 32 ft wide building; roofs coincide and a single connector is used for roofs on both sides;  **$Y \leq L/2$** :"

**Section 303.1.1:** Change last sentence to read..."Provide other reinforcement as required in Chapter 4 of the International Residential Code."

**Table 303.2.3:** Change the first row of the table to read..."Basic Wind Speed (mph)".

**Table 303.3.2:** Change the first row of the table to read..."Basic Wind Speed (mph)".

**Table 304C1:** Change the first row of the table to read:

<b>Framing Species</b> <b><math>G \geq 0.49</math></b> <b>(Douglas Fire, Southern Yellow Pine, etc.)</b>	<b>Framing Species</b> <b><math>0.49 &gt; G \geq 0.42</math></b> <b>( Hem Fire, Spruce Pine Fire, etc.)</b>	<b>Framing Species</b> <b><math>G &lt; 0.42</math></b> <b>(California Redwood, Western Cedars, etc.)</b>
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**Table 305A:** Change Note 3 to read..."These values take into consideration the load sharing and composite action of the structural sheathing with studs spaced no more than 16 inches on center. They require a minimum of 1/2" gypsum board wall covering on the inside fastened in accordance with Table R702.3.5 of the International Residential Code and 3/8" wood structural sheathing attached with 8d nails at a maximum of 6 inches o.c. at the perimeter and 12 inches o.c. at intermediate supports."

**Section 305.3.1:** Change first sentence to read..."Framing members in exterior wall systems shall be fastened together in accordance with Table R602.3(1) of the International Residential Code."

**Table 305N1:** Change the first row of the table to read:

Framing Species G ≥ 0.49 (Douglas Fire, Southern Yellow Pine, etc.)	Framing Species 0.49 > G ≥ 0.42 ( Hem Fire, Spruce Pine Fire, etc.)	Framing Species G < 0.42 (California Redwood, Western Cedars, etc.)
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**Section 305.6:** Renumber Section 305.6.1 to 305.6.2 and Table 305S1 to Table 305S2; Add new Section 305.6.1 as follows:

**305.6 WOOD STRUCTURAL PANEL SHEATHING OR SIDING USED FOR UPLIFT RESISTANCE:**

**305.6.1 Wood Structural Panel Sheathing or Siding Used for Both Shearwalls and Uplift:**

Wood structural panel sheathing or siding shall be permitted to be used for both lateral load (shearwalls) and uplift simultaneously provided all of the following conditions are met in those areas:

1. The anchor bolt spacing shall be 16 inches on center or less,
2. 3" x 3" x 1/4" steel washers shall be used at anchor bolt locations, and
3. The minimum nail spacing into the bottom plate shall be 3 inches on center.

Shearwall requirements are determined from Tables 305P1, 2, and 3, and the required shear capacity is achieved based on the framing lumber, sheathing or siding material, nails, building geometry, and nailing pattern shown in Table 305N1 or 2. When the sheathing or siding is wood structural panels and the nail spacing at the top, bottom, and all horizontal joints of sheathing or siding panels are changed to the nail spacing shown in Table 305S1, the uplift resistance capacity of 15/32" wood structural panels shall be as shown. Panels shall be of the minimum thickness required for the shearwalls but not less than 15/32" (7/16" wood structural panels shall be permitted when supported by vertical framing at 16 inches on center) and be installed as follows:

1. Panels shall be installed with face grain parallel to studs.
2. All horizontal joints shall occur over framing and shall be attached per Table 305S1.
3. On single story construction, panels shall be attached to bottom plates and top member of the double top plate. Lowest plate shall be attached to foundation with bolts or connectors of sufficient capacity to resist the uplift forces developed in the wood structural panel sheathed or sided walls.
4. On two-story construction, upper panels shall be attached to the top member of the upper double top plate and to band joist at bottom of panel. Upper attachment of lower panel shall be made to band joist and lower attachment made to lowest plate at first floor framing. Lowest plate of first floor framing shall be attached to foundation with bolts or connectors as described above.
5. Panel attachment to framing shall be as illustrated in Figure 305S1.
6. Where windows and doors interrupt wood structural panel sheathing or siding, framing anchors or connectors shall be used to resist the appropriate uplift loads.

**TABLE 305S1:**  
**UPLIFT CAPACITY OF 15/32" WOOD STRUCTURAL PANEL SHEATHING OR SIDING**  
**WHEN USED FOR BOTH SHEARWALLS AND UPLIFT SIMULTANEOUSLY OVER GROUP**  
**III FRAMING<sup>1,2,3</sup>**  
**(plf uplift on wall)**

Nail Spacing Required for Shearwall Design – See Tables 305N1 and 305N2												
6d @ 6" & 12"			8d @ 6" & 12"			8d @ 4" & 12"			10d @ 6" & 12"			
Alternate Nail Spacing at Top and Bottom Panel Edges												
6"	4"	3"	6"	4"	3"	6"	4"	3"	6"	4"	3"	
Uplift Capacity (plf) <sup>3</sup>												
Nails- Single Row <sup>4</sup>	0	94	189	0	118	237	N/A	0	118	0	142	285
Nails- Double Row <sup>5</sup>	189	377	566	237	474	710	118	355	592	285	570	855

1. 7/16" wood structural panels shall be permitted when supported by vertical framing at 16 inches on center.
2. Anchor bolts shall be installed in accordance with 303.2.3 with the exceptions that 3" x 3" x 1/4" steel washers shall be used with anchor bolts that shall space 16" on center or less.
3. For all Group II framing divide uplift values listed in above table by 0.82.
4. Wood structural panels shall overlap the top member of the double top plate and the bottom plate by 1-1/2 inches and a single row of fasteners shall be placed 3/4" from panel edge.
5. Wood structural panels shall overlap the top member of the double top plate and the bottom plate by 1-1/2 inches. Rows of fasteners shall be 1/2 inch apart with a minimum edge distance of 1/2 inch. Each row shall have nails at the specified spacing.

**Figure 305S1:** Replace Figure 305S1 with the following:

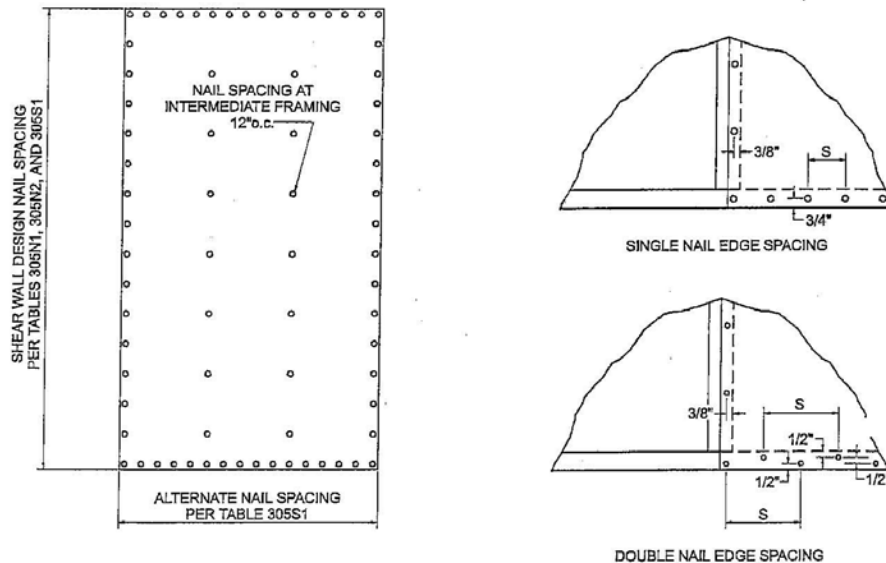


FIGURE 305S1  
 PANEL ATTACHMENT FOR UPLIFT

**Section 308:** Add the following sentence under the section title...*"The provisions of Section 308 were retained from the previous document, but have very limited use due to the conservatism inherent in the design assumptions. It is recommended that Section 209 be used for obtaining the applicable loads for open structures and open parts of buildings."*

**Section 308.4.1:** Change first sentence to read...*"The columns shall be fastened to girders above and below in accordance with the International Residential Code."*

**Section 308.5:** Change section to read...*"Girders shall be designed in accordance with Section R502.5 of the International Residential Code or the AF&PA/NDS."*