

**GENERAL NOTES AND CONDITIONS OF USE**

1. Anchor Tiedown System (ATS) Capacities are based on Allowable Stress Design (ASD).
2. The Simpson Tie-Down System (TDS) capacities in this catalog are based on either ASTM A36 rods with a minimum tensile strength of 58,000 psi, or ASTM A108-C1045 rods with a minimum tensile strength of 120,000 psi. Some TDS runs may use a combination of A36 and A108-C1045 rods. Other rod material grades available for custom TDS runs. Contact Simpson Strong-Tie for custom TDS designs. (See pg 46 for all-thread rod identification markings).
3. Contractor or installer of ATS is to cut rods to length as required.
4. Anchor bolts are not provided with the Simpson Anchor Tiedown System. Anchor bolt diameter and material grade shown, match the 1st floor ATS rod. Anchor bolt diameter, material grade, and embedment depth to be designed and specified by the project engineer. Notify Simpson Strong-Tie for coordination of 1st floor coupling nut if alternate anchor bolt diameter is specified.
5. Contractor or Installer to verify that at straight-through coupling nuts, each rod is threaded in halfway or that transition coupling nuts are fully seated onto larger rods and then the smaller rod fully seated into coupling nut.
6. Project Engineer to review and specify when optional Take-Up Device (TUD1½-1) is to be installed.
7. Shearwall sheathing not to have vertical joints at any of the specified compression members either side of the ATS-Rod with the exception of the shearwall perimeter.
8. Provide shearwall boundary nailing, per the Project Engineer, equally distributed to each stud or post on either side of the ATS rod with spacing equal to:
  - a. For Tiedown Systems with (2) compression members or less on each side of the rod, use the specified boundary nailing, per the Project Engineer, times the total number of compression members, but not greater than 12" on center.
  - b. For Tiedown Systems with more than (2) compression members on each side of the rod, all members shall be field nailed at 12" on center.
9. See page 51 for boundary nailing details.
10. Refer to table below for applicability of load duration factor and ½ steel stress increase.

**Applicability of Load Duration factor and ½ Steel Stress Increase Table**

Code	Load Combination	Cd (Wood) allowed	½ Stress Increase (Steel) allowed
ASCE 7-98, ASCE 7-2002	Basic	Yes	No
2000 International Building Code	Basic	Yes	No
	Alternate	Yes	Yes
2003 International Building Code	Basic	Yes	No
	Alternate	Yes	No
1997 Uniform Building Code	Basic	Yes	No
	Alternate	Yes	Yes
NFPA5000	Basic (ASCE 7-98)	Yes	No
Florida Building Code	Basic	Yes	No (except for Shutter systems)

**GENERAL LUMBER NOTES**

- a. Studs, posts and blocking details are specified by the Project Engineer and are not shipped with the Anchor Tiedown System (ATS).
- b. With the Simpson Anchor Tie-Down System (ATS), it is not necessary to design the lumber in tension. See the Compression Member Selection Tables on pages 5-9 for some compression member allowable capacities and additional design assumptions.
- c. The compression capacity of the lumber listed in the tables are based on the 2001 National Design Specification (NDS) for the plate heights, wall plate and post species specified.
- d. Wall plates and stud species are assumed to be the same as specified in the Compression Member Selection Tables (UNO). The specifier must review the compression members for variation of species, or unsupported heights other than those listed in the tables.
- e. Allowable perpendicular to grain stress for D.Fir-L lumber based on 625 psi, Southern Pine lumber based on 565 psi, Spruce-Pine-Fir lumber based on 425 psi, and Hem-Fir lumber based on 405 psi. Parallam lumber based on 750 psi.
- f. 2x based on stud grade, 3x # 2 grade, 4x and 6x lumber based on # 1 grade.
- g. Bearing area factor C<sub>b</sub> not included in lumber values.
- h. Perpendicular to grain capacities listed in the Compression Member Selection Tables may be multiplied by C<sub>b</sub> for bearings not nearer than 3" to the end of the member.

T (in)	1.50	2.50	3.50	5.50	≥ 6.00
C <sub>b</sub>	1.25	1.15	1.11	1.07	1.0