

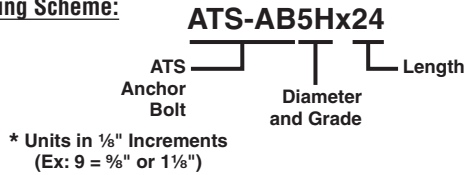
ATS-AB ANCHOR BOLTS

ATS-AB anchor bolts are pre-assembled anchor bolts that have been designed for use with the ATS system. They are available in 18", 24" and 36" lengths and match the strength and material grade of the corresponding Strong-Rod™ connecting rods. The heavy hex nuts are pressed onto the bolt to keep them in place.

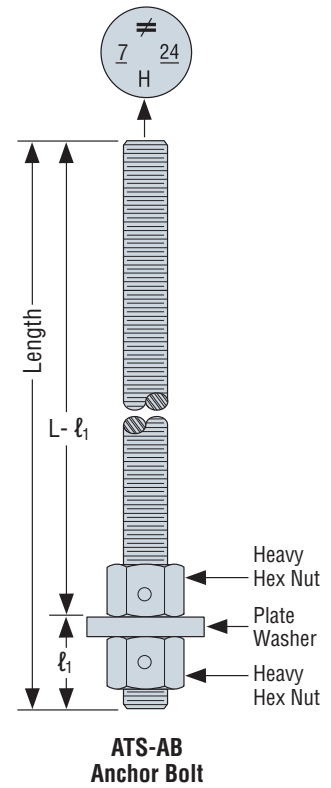
Material: ASTM A307; High strength: ASTM A449 or ASTM A193, Grade B7

Finish: None

Naming Scheme:



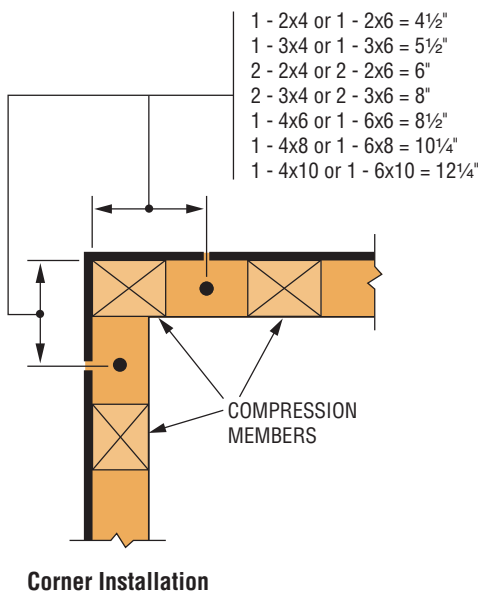
Model No.	Dimensions (in)			Factored Tensile Resistance, T _r		Component Color Code
	Rod Diameter	Plate Washer Size	ℓ ₁ (in)	lbs	kN	
ATS-AB5	5/8"	3/8" x 1 1/2" x 1 1/2"	1 1/4"	9085	40.47	Blue
ATS-AB7	7/8"	3/8" x 2 1/4" x 2 1/4"	1 1/2"	18570	82.72	Green
ATS-AB9	1 1/8"	3/8" x 2 3/4" x 2 3/4"	1 3/4"	30675	136.64	Orange
ATS-AB5H	5/8"	3/8" x 1 1/2" x 1 1/2"	1 1/4"	18170	80.94	Blue
ATS-AB7H	7/8"	3/8" x 2 1/4" x 2 1/4"	1 1/2"	37145	165.46	Green
ATS-AB9H	1 1/8"	3/8" x 2 3/4" x 2 3/4"	1 3/4"	61345	273.25	Orange



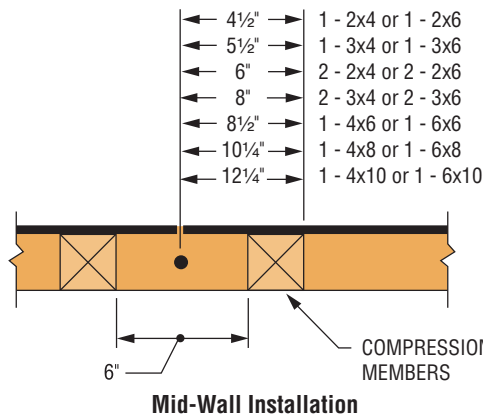
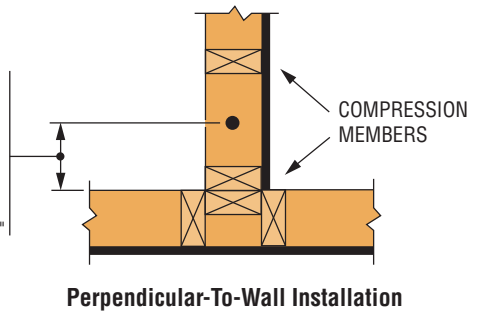
1. Factored resistances have been calculated in accordance with 25.2.2.1 CSA S16-01
2. Anchor rods are available in 18", 24" and 36" lengths.

ANCHOR BOLT LOCATIONS

Anchor bolts shall be specified by the Designer.



- 1 - 2x4 or 1 - 2x6 = 4 1/2"
- 1 - 3x4 or 1 - 3x6 = 5 1/2"
- 2 - 2x4 or 2 - 2x6 = 6"
- 2 - 3x4 or 2 - 3x6 = 8"
- 1 - 4x6 or 1 - 6x6 = 8 1/2"
- 1 - 4x8 or 1 - 6x8 = 10 1/4"
- 1 - 4x10 or 1 - 6x10 = 12 1/4"



ATS-AB ANCHOR BOLTS

Concrete Anchorage for Wind Design

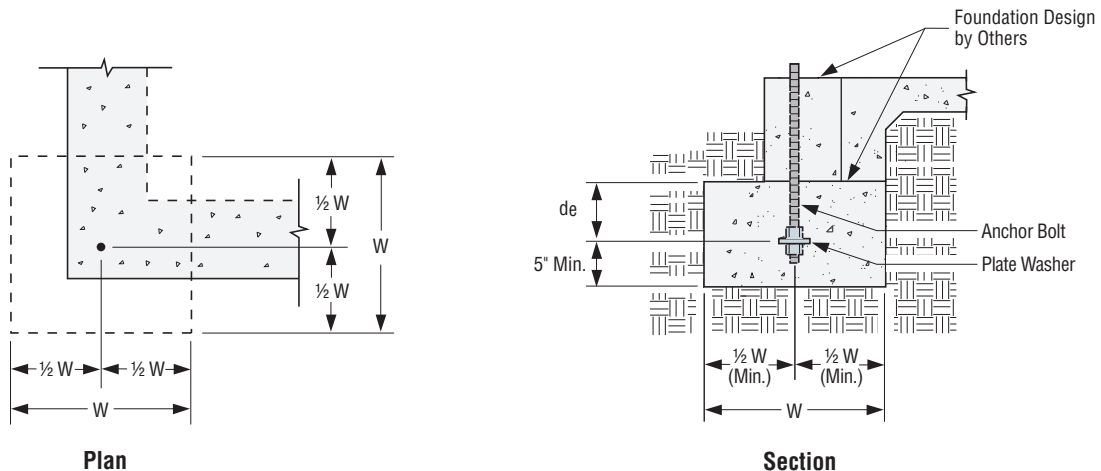
Anchor Rod Model No.	Minimum Anchorage Dimensions (in)					
	$f'_c = 20 \text{ MPa}$		$f'_c = 25 \text{ MPa}$		$f'_c = 30 \text{ MPa}$	
	d_e	W	d_e	W	d_e	W
ATS-AB5	5.5	18.0	5.0	16.5	4.5	15.0
ATS-AB7	8.0	26.0	7.5	24.5	7.0	23.0
ATS-AB9	11.5	37.0	10.5	34.0	10.0	32.5
ATS-AB5H	8.0	25.5	7.5	24.0	7.0	22.5
ATS-AB7H	13.0	41.0	12.0	38.0	11.5	36.5
ATS-AB9H	18.0	56.5	16.5	52.0	16.0	50.5

1. See notes below.

Concrete Anchorage for Seismic Design

Anchor Rod Model No.	Minimum Anchorage Dimensions (in)					
	$f'_c = 20 \text{ MPa}$		$f'_c = 25 \text{ MPa}$		$f'_c = 30 \text{ MPa}$	
	d_e	W	d_e	W	d_e	W
ATS-AB5	6.5	21.0	6.0	19.5	5.5	18.0
ATS-AB7	10.0	32.0	9.5	30.5	8.5	27.5
ATS-AB9	14.0	44.5	13.0	41.5	12.0	38.5
ATS-AB5H	10.0	31.5	9.0	28.5	8.5	27.0
ATS-AB7H	15.5	48.5	14.5	45.5	13.5	42.5
ATS-AB9H	22.0	68.5	20.0	62.5	19.0	59.5

- For designs in regions where $I_E F_a S_a(0.2) \geq 0.35$ and the load combinations include earthquake effects as per D.4.3.3 CSA A23.3-04. For regions where $I_E F_a S_a(0.2) < 0.35$, use the anchorage design for Wind.
- Anchorage dimensions have been calculated in accordance with CSA A23.3-04 Annex D assuming ductile steel failure and no supplementary reinforcing (Condition B).
- These tables are to be used with Simpson Strong-Tie® ATS-AB Anchor Bolts only.



Note:

- Refer to anchorage tables.
- Foundation and stemwall (*size and reinforcement*) by others.
- Alternate anchorage to be provided by Designer.