Load Charts*

** It is the responsibility of the building designer to determine appropriate head size for the beam support.*

LIGHT / MEDIUM DUTY MINI SERIES

Series	Maximum Height		Allowable Working Loads (Unfactored)		Limit States Design Values (Factored)		Column/ Base Plate	Head Dimensions (Adjustment Range 4.5")	Lateral Loading AWL/LSD	Label Colour Code
	Feet	Meters	Lbs	kN	Lbs	kN	Dimensions	Lag Bolts Included		
WMNA	8'-0" 8'-6" 9'-0"	2.44 2.59 2.74	10,500 10,000 9,600	46.6 44.5 42.7	15,200 14,500 13,920	67.6 64.5 61.8	2.5" x 2.5" Base 6" x 6"	Top 3.5" x 5.25" LVL	800/1200	**Magenta**
WMB	7'-6" 8'-0" 8'-6" 9'-0" 9'-6" 10'-0"	2.29 2.44 2.59 2.74 2.90 3.05	14,000 13,000 12,000 11,000 10,100 9,375	62.5 57.7 53.0 48.9 44.9 41.7	20,400 18,800 17,300 15,950 14,645 13,600	90.7 83.6 76.9 71.0 65.1 60.5	2.5" x 2.5" Base 6" x 6"			**Yellow**
WMC	7'-6" 8'-0" 8'-6" 9'-0" 9'-6" 10'-0"	2.29 2.44 2.59 2.74 2.90 3.05	16,000 15,500 14,000 13,000 12,000 11,500	71.1 68.9 62.3 57.8 53.4 51.2	23,200 22,475 20,300 18,850 17,400 16,675	103.2 100.0 90.3 83.9 77.4 74.2	2.5" x 2.5" Base 6" x 6"			**Black**
WMD	7'-6" 8'-0" 8'-6" 9'-0" 9'-6" 10'-0" 11'-0" 12'-0"	2.29 2.44 2.59 2.74 2.90 3.05 3.35 3.65	25,500 24,000 22,000 20,500 19,500 18,000 15,800 13,675	113.4 106.8 97.9 91.2 86.7 80.1 72.3 60.8	37,000 34,800 32,000 29,800 28,300 26,100 22,900 19,840	164.6 154.8 142.4 132.6 125.9 116.1 101.8 88.3	3" x 3" Base 6" x 6"	Top 6" x 7" LVL	1275/1900	**Lime Green**
WME	8'-0" 9'-0" 10'-0" 11'-0" 12'-0"	2.44 2.74 3.05 3.35 3.65	36,000 30,000 25,000 21,000 17,500	160.0 133.4 111.2 93.4 77.8	52,000 43,000 36,250 30,400 25,350	231.3 191.3 161.2 135.2 103.9	3" x 3" Base 6" x 6"	Top 6" x 8" LVL	1600/2320	**Purple**

MEDIUM DUTY SADDLE SERIES

Series	Maximum Height		Allowable Working Loads (Unfactored)		Limit States Design Values (Factored)		Column/ Base Plate	Saddle Head Dimensions (Adjustment Range 5.5")	Lateral Loading AWL/LSD	Label Colour Code
	Feet	Meters	Lbs	kN	Lbs	kN	Dimensions	In Matched Sets		
WS1	7'-5.5" 8'-5.5" 9'-5.5" 10'-5.5"	2.27 2.58 2.88 3.19	18,500 16,000 13,500 11,500	82.3 71.2 60.1 51.2	26,825 23,200 19,575 16,675	119.3 103.2 87.1 74.2	2.5" x 2.5" Base 6" x 6"	2 ply LVL 6" x 3.625" x 7.5" 3 ply LVL 6" x 5.375" x 6.1875" 4 ply DIM 6" x 6.25" x 6.125" Flat Top 4" x 6"	925/1385	**Light Blue**
WS2	8'-5.5" 9'-5.5" 10'-5.5" 12'-5.5"	2.58 2.88 3.19 3.79	24,000 20,500 18,000 13,750	106.8 91.2 80.1 61.2	34,800 29,725 26,100 19,950	154.8 132.2 116.1 88.8	3" x 3" Base 6" x 6"	2 ply LVL 8" x 3.625" x 7.5" 3 ply LVL 8" x 5.375" x 6.625" 4 ply DIM 8" x 6.25" x 6.125" 4 ply LVL 8" x 7.375" x 5.625" Flat Top 6" x 8"	1200/1800	**Orange**
WS2.5	8'-5.5" 9'-5.5" 10'-5.5" 12'-5.5" 14'-5.5"	2.58 2.88 3.19 3.79 4.40	34,000 29,000 25,000 19,000 14,750	151.3 129.0 111.2 84.5 65.6	49,300 42,000 36,250 27,550 21,390	219.3 186.8 161.3 122.6 95.0	3" x 3" Base 8" x 8" 4 x 0.625" Ø for anchor bolts 1" in from each edge of plate to center of hole	2 ply LVL 8" x 3.625" x 7.5" 3 ply LVL 8" x 5.375" x 6.625" 4 ply DIM 8" x 6.25" x 6.125" 4 ply LVL 8" x 7.375" x 5.625" Flat Top 6" x 8"	1700/2550	**Blue Grey**

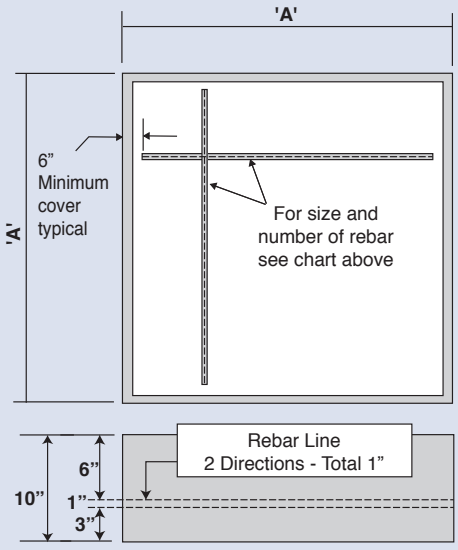
HEAVY / SUPER DUTY SADDLE SERIES

Series	Maximum Height		Allowable Working Loads (Unfactored)		Limit States Design Values (Factored)		Column/ Base Plate	Saddle Head Dimensions (Adjustment Range 5.5")	Lateral Loading AWL/LSD	Label Colour Code
	Feet	Meters	Lbs	kN	Lbs	kN	Dimensions	In Matched Sets		
WS3	8'-5.5" 9'-5.5" 10'-5.5" 12'-5.5" 14'-5.5" 16'-5.5"	2.58 2.88 3.19 3.79 4.4 5.02	41,000 35,500 30,500 23,000 18,000 14,000	182.4 157.9 135.7 102.3 80.1 62.3	59,450 51,475 44,225 33,350 26,100 20,300	264.5 229.0 196.7 148.4 116.1 90.3	3" x 3" Base 8" x 8" 4 x 0.625" Ø for anchor bolts 1" in from each edge of plate to center of hole	2 ply LVL 13" x 3.625" x 6" 3 ply LVL 13" x 5.375" x 6" 4 ply DIM 13" x 6.375" x 6" 4 ply LVL 13" x 7.375" x 6" Flat Top 6" x 8"	2050/3075	**Dark Blue**
WS4	8'-5.5" 9'-5.5" 10'-5.5" 12'-5.5" 14'-5.5" 16'-5.5" 20'-5.5" 24'-5.5"	2.58 2.88 3.19 3.79 4.4 5.02 6.24 7.45	61,000 55,500 50,000 40,500 33,000 27,000 18,500 13,500	271.4 246.9 222.4 180.2 146.8 120.1 82.3 60.1	88,450 80,500 72,500 58,750 47,850 39,150 26,825 19,575	393.5 358.1 322.5 261.3 212.9 174.2 119.3 87.1	4" x 4" Base 8" x 8" 4 x 0.625" Ø for anchor bolts 1" in from each edge of plate to center of hole	2 ply LVL 13" x 3.625" x 6" 3 ply LVL 13" x 5.375" x 6" 4 ply DIM 13" x 6.375" x 6" 4 ply LVL 13" x 7.375" x 6" Flat Top 8" x 10"	3050/4575	**Red**
WS5	8'-5.5" 12'-5.5" 16'-5.5" 20'-5.5" 24'-5.5"	2.58 3.79 5.02 6.24 7.45	90,000 67,500 48,500 35,000 26,000	400.4 300.3 215.7 155.7 115.7	130,500 97,875 70,325 50,750 37,700	580.5 435.4 312.8 225.8 167.7	5" x 5" Base 10" x 10" 4 x 0.625" Ø for anchor bolts 1" in from each edge of plate to center of hole	2 ply LVL 13" x 3.625" x 6" 3 ply LVL 13" x 5.375" x 6" 4 ply DIM 13" x 6.375" x 6" 4 ply LVL 13" x 7.375" x 6" 5 ply LVL 13" x 9" x 6" Flat Top as required	4500/6750	**Brown**
WS6	8'-5.5" 12'-5.5" 16'-5.5" 20'-5.5" 24'-5.5"	2.58 3.79 5.02 6.24 7.45	150,000 124,500 95,000 72,000 55,000	667.3 553.8 422.6 320.3 244.7	217,500 180,525 137,750 104,400 79,750	967.5 803.0 612.8 464.4 354.8	6" x 6" Base 10" x 10" 4 x 0.625" Ø for anchor bolts 1" in from each edge of plate to center of hole	2 ply LVL 20" x 3.625" x 10" 3 ply LVL 20" x 5.375" x 10" 4 ply DIM 20" x 6.375" x 10" 4 ply LVL 20" x 7.375" x 10" 5 ply LVL 20" x 9" x 10" Flat Top as required	7500/11250	**Purple**

Footing Chart**

FOOTING PAD REQUIREMENT(S) & SPECIFICATION(S):													
Allowable Soil Bearing Capacity:		2000 lbs.ft2 (2800 lbs/ft2 factored)				2500 lbs/ft2 (3500 lbs/ft2 factored)				3000 lbs/ft2 (4200 lbs/ft2 factored)			
Footing Dimensions (L x W x D)	Number & Size of Rebar	Maximum Footing Capacity											
		Allowable Working Loads (Unfactored)		Limit State Design (Factored)		Allowable Working Loads (Unfactored)		Limit State Design (Factored)		Allowable Working Loads (Unfactored)		Limit State Design (Factored)	
		lbs	kN	lbs	kN	lbs	kN	lbs	kN	lbs	kN	lbs	kN
24" x 24" x 10"	4-10M E/W	7,500	33.36	10,700	47.60	9,500	42.26	13,500	60.05	11,500	51.15	16,300	72.51
30" x 30" x 10"	4-10M E/W	11,719	52.13	16,719	74.37	14,844	66.03	21,094	93.83	17,969	79.93	25,469	113.29
36" x 36" x 10"	5-10M E/W	16,875	75.06	24,075	107.09	21,375	95.08	30,375	135.11	25,875	115.10	36,675	163.14
42" x 42" x 10"	6-10M E/W	22,969	102.17	32,769	145.76	29,094	129.42	41,344	183.91	35,219	156.66	49,919	222.05
48" x 48" x 10"	7-10M E/W	30,000	133.45	42,800	190.38	38,000	169.03	54,000	240.20	46,000	204.62	65,200	290.02
54" x 54" x 11"	8-10M E/W	37,716	167.77	53,916	239.83	47,841	212.81	68,091	302.88	57,966	257.85	82,266	365.94
60" x 60" x 12"	10-10M E/W	46,250	205.73	66,250	294.69	58,750	261.33	83,750	372.54	71,250	316.94	101,250	450.38
66" x 66" x 12"	6-15M E/W	55,963	248.94	80,163	356.58	71,088	316.22	101,338	450.77	86,213	383.49	122,513	544.96
72" x 72" x 14"	7-15M E/W	65,700	292.25	94,500	420.36	83,700	372.32	119,700	532.45	101,700	452.38	144,900	644.55
78" x 78" x 14"	8-15M E/W	77,106	342.98	110,906	493.33	98,231	436.95	140,481	624.89	119,356	530.92	170,056	756.45
84" x 84" x 16"	9-15M E/W	88,200	392.33	127,400	566.70	112,700	501.31	161,700	719.28	137,200	610.30	196,000	871.85
90" x 90" x 16"	10-15M E/W	101,250	450.38	146,250	650.55	129,375	575.49	185,625	825.70	157,500	700.59	225,000	1000.85
96" x 96" x 18"	12-15M E/W	113,600	505.32	164,800	733.07	145,600	647.66	209,600	932.35	177,600	790.00	254,400	1131.63
102" x 102" X 18"	12-15M E/W	128,244	570.46	186,044	827.56	164,369	731.15	236,619	1052.53	200,494	891.84	287,194	1277.50
108" x 108" x 20"	14-15M E/W	141,750	630.54	206,550	918.78	182,250	810.69	263,250	1170.99	222,750	990.84	319,950	1423.21
114" x 114" x 20"	15-15M E/W	157,938	702.54	230,138	1023.70	203,063	903.27	293,313	1304.72	248,188	1104.00	356,488	1585.74

**** The WESURE Support Systems suggested Footing design is designed for use with WESURE columns only. It is not compatible with other products.***



Notes:

A. Concrete to be a minimum of 3000p.s.i. (20Mpa), normal portland cement type 10 or type 50 as required, maximum 3/4" (20mm) aggregate, 3" (75MM) slump.

B. All rebar to be tied at intersections. Follow position diagram.

C. Footing meets or exceeds National and Alberta Building Code Section 9.

D. Load to be applied in the middle of the pad. Eccentric loading will significantly reduce the capacity of the footing.

E. Wesure Support Systems is not responsible for compliance or application of charts (charts supplied as information only).

F. The minimum 254mm footing thickness is Government (code) mandated.

G. The soil bearing load capacities have been adjusted to show the load on the columns alone. The total soil bearing capacity has been reduced by the self weight of the footing itself.

H. Determine the footing size according to Load. You must verify soil bearing capacity with engineer testing.

Structural Support Systems

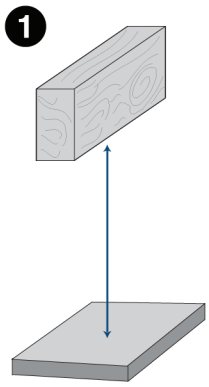
1-800-223-8806

www.wesure.com

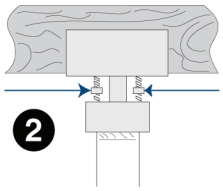
*This information is accurate as of the date of publication. Please refer to **www.wesure.com** for the most current specifications.*

Rev. January 2020

Assembly Instructions
Wesure Support Systems
WS1, WS2, WS2.5, WS3, WS4, WS5, WS6

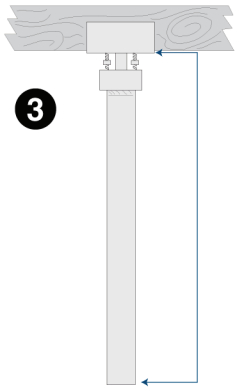


1. Measure from top of footing to UNDERSIDE of beam to be supported.



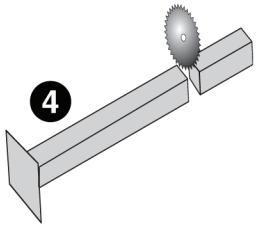
2. Ensure the threaded rod is clear. Should there be any welding slag* on the rod, simply brush it off using a wire brush. Twist the fine tuning adjustment nuts. to halfway position.

3. Place sliding circular tube of the head unit into square column. While assembled, measure from BOTTOM OF BASE PLATE TO INSIDE FLOOR OF SADDLE (or Flat Top).



4. Subtract this measurement (step 3) from footing to beam distance (step 1). After separating head unit and column, the DIFFERENCE (step 3 minus step 1) should be cut off the square column using a metal cutoff blade, ensuring cut is level and true. (ALWAYS wear safety glasses and gloves.)

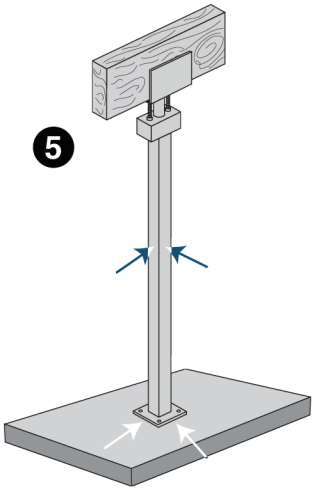
5. Place head unit back on column and position the assembly under the beam (beam resting in the saddle) and centered on the concrete footing. ENSURE COLUMN IS PLUMB IN BOTH DIRECTIONS (CONCENTRIC). For flat heads, ensure the head covers beam and the sliding circular tube is centered on the beam (concentric).



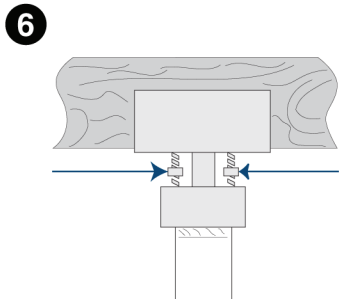
6. Turn adjusting nuts on the threaded rods to raise or lower head to desired position. (Turn in half-turn increments alternating between nuts.) Use a proper wrench (not a pipe wrench or vise grips). Do not over torque by using a wrench handle extension.

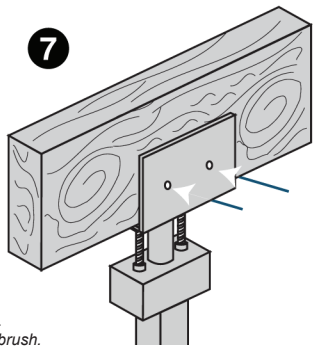
7. Secure head to beam through holes provided, using, as a minimum, 3 inch common nails. For WS3, WS4, WS5, use bolts provided, after drilling holes into the beam as per holes in the saddle. (YOU MUST USE LAG BOLTS FOR FLAT HEADS - NO NAILS.)

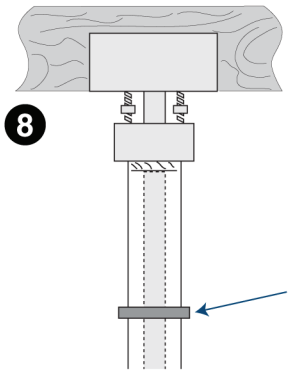
8. FOR EARTHQUAKE AND TORNADO RESISTANT INSTALLATIONS: Base plate must be bolted to footing. Saddle must be bolted to beam. 3/8 inch bolt must be drilled for and pass through square column and inner sliding circular tube. (Drill hole laterally centered).

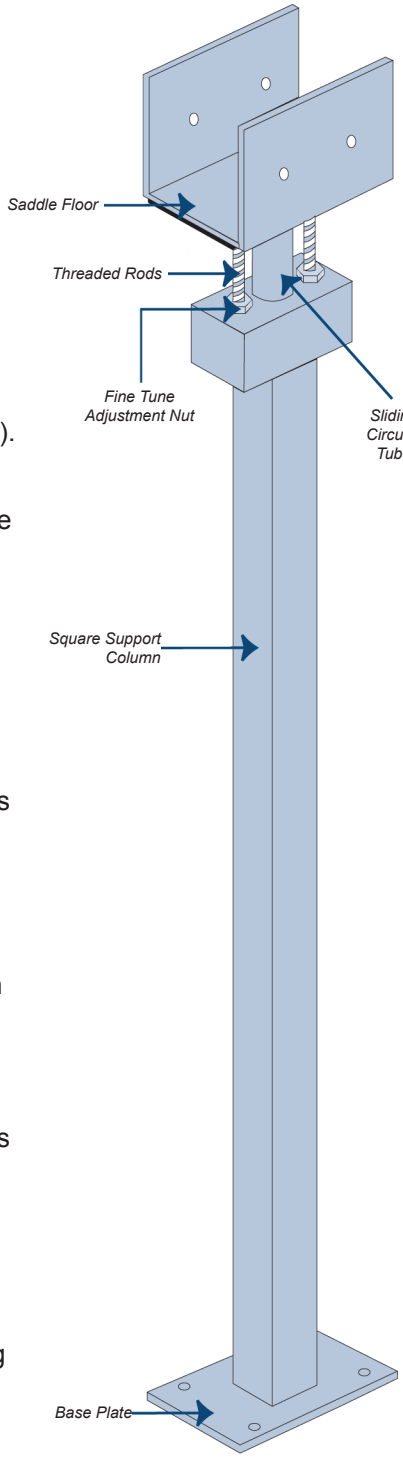


9. Concrete floor is then poured over footing and around base of column.



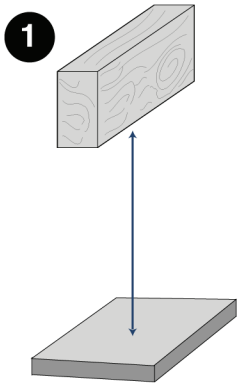






** Best efforts are made to protect threaded rods from welding slag. Any unintended slag on the rods should be easy to remove with a wire brush.*

Assembly Instructions
Wesure Support Systems
WMA, WMB, WMC, WMD



1. Measure from top of footing to UNDERSIDE of beam to be supported.

2. Ensure the threaded rod is clear. Should there be any welding slag* on the rod, simply brush it off using a wire brush. Twist the fine tuning adjustment nut to halfway position.

3. Place base plate (and adaptor plate - if used) in position. While assembled, measure from BOTTOM OF BASE PLATE TO TOP OF HEAD UNIT (INCLUDE ADAPTOR PLATE IF USED FOR DIMENSIONAL LUMBER).

4. Subtract this measurement (STEP 3) from footing to beam distance (step 1). The DIFFERENCE (step 3 minus step 1) should be cut off the square column at the bottom using a metal cutoff blade, ensuring cut is level and true. (ALWAYS wear safety glasses and gloves.)

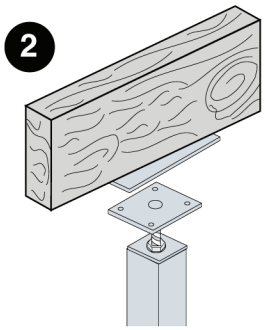
5. Place base plate under column and position the assembly under the beam (beam over the head unit completely) and centered on the concrete footing. ENSURE COLUMN IS PLUMB IN BOTH DIRECTIONS (CONCENTRIC).

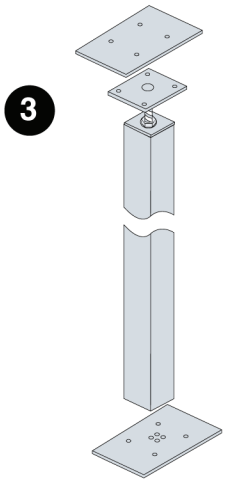
6. Turn head so it covers the beam completely and the threaded rod is centered on the beam. If supporting dimensional lumber beam, insert adaptor plate between head and beam, if necessary. Line up holes. Turn adjusting nut on the threaded rod to raise or lower head to desired position. Use a proper wrench (not a pipe wrench or vise grips). Do not over torque by using a wrench handle extension.

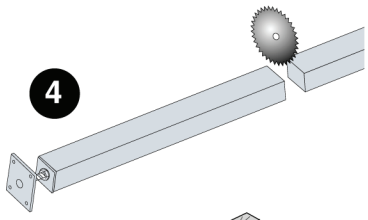
7. Secure head to beam through holes provided, using, AS A MINIMUM, 3 inch x 1/4 inch lag bolts. (After drilling holes into the beam as per holes in the head.)

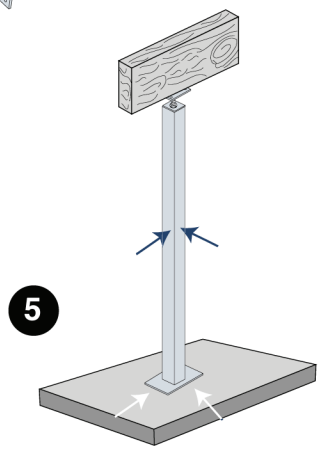
8. **FOR EARTHQUAKE AND TORNADO RESISTANT INSTALLATIONS:** Base plate must be bolted to footing. Head must be bolted to beam. 3/8 inch bolt must be drilled for and pass through square column and inner vertical plate welded to foot plate (Drill hole laterally centered).

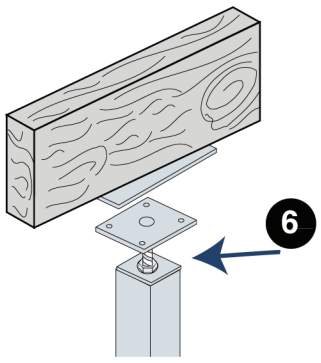
9. Concrete floor is then poured over footing and around base of column.

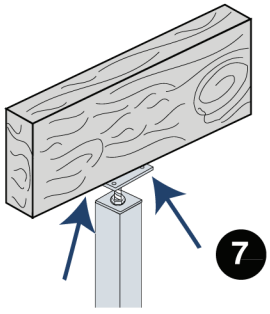


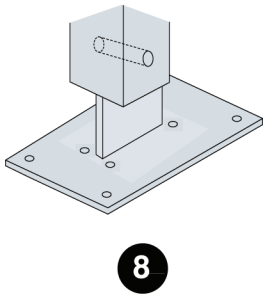


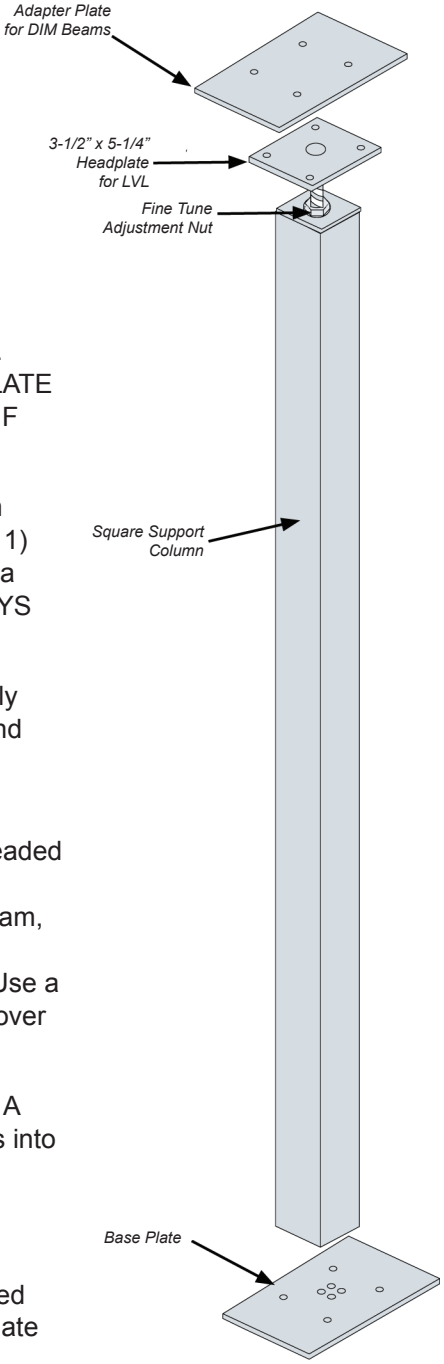












* *Best efforts are made to protect threaded rods from welding slag. Any unintended slag on the rods should be easy to remove with a wire brush.*