

TABLE PREPARED FOR SWIRIDOFF CONSTRUCTION COMPANY:

October 15, 2005

GENERIC CEILING SEISMIC COMPRESSION POST TABLE:

Not for submittal to Building Department

Table is for preliminary sizing and estimating purposes only and is not intended for specific projects. Compression post heights are limited to $KL/r = 200$

Following information is required to provide calculations for specific projects:

Design Code - 2001 CBC

Site specific seismic information including

Building Address

Occupancy Importance Factor

Soil Profile (or S_D Soil Profile will be assumed)

Building specific information

Minimum height of Roof

Maximum height of Ceiling

EMT SIZE	AREA	R	MAX. HEIGHT	
	sq. in.	in.	in.	ft. - in.
1/2"	0.088	0.238	48	4'-0"
3/4"	0.134	0.309	62	5'-2"
1"	0.198	0.392	78	6'-6"
1 1/4"	0.295	0.511	102	8'-6"
1 1/2"	0.342	0.593	119	9'-11"

SINGLE 25 GAGE STUDS WITH 1 1/4" FLANGES AND 3/16" MIN. FLANGE RETURNS				
	AREA	R_y	MAX. HEIGHT	
25 ga. X 1 5/8"	0.080	0.447	89	7'-5"
25 ga. X 2 1/2"	0.097	0.439	88	7'-4"
25 ga. X 3 1/2"	0.115	0.423	85	7'-1"

SINGLE 20 GAGE STUDS WITH 1 1/4" FLANGES AND 3/16" MIN. FLANGE RETURNS				
	AREA	R_y	MAX. HEIGHT	
20 ga. X 1 5/8"	0.145	0.440	88	7'-4"
20 ga. X 2 1/2"	0.176	0.431	86	7'-2"
20 ga. X 3 1/2"	0.210	0.415	83	6'-11"

SINGLE 20 GAGE STUDS WITH 1 5/8" FLANGES AND 1/2" MIN. FLANGE RETURNS				
	AREA	R_y	MAX. HEIGHT	
20 ga. X 2 1/2"	0.223	0.624	125	10'-5"
20 ga. X 3 1/2"	0.258	0.617	123	10'-3"

DOUBLE 25 GAGE STUDS WITH 1 1/4" FLANGES AND 3/16" MIN. FLANGE RETURNS				
	AREA	R_x	MAX. HEIGHT	
25 ga. X 2 1/2"	0.097	1.014	203	11'-5"
25 ga. X 3 1/2"	0.115	1.366	273	16'-11"
25 ga. X 4"	0.125	1.536	307	22'-8"

DOUBLE 20 GAGE STUDS WITH 1 1/4" FLANGES AND 3/16" MIN. FLANGE RETURNS				
	AREA	R_x	MAX. HEIGHT	
20 ga. X 1 5/8"	0.145	0.679	136	11'-4"
20 ga. X 2 1/2"	0.176	1.006	201	16'-9"
20 ga. X 3 1/2"	0.210	1.358	272	22'-8"

Connect double studs together with #6 screws at 18" o.c. to form tee section.