

22 05 Common Work Results for Plumbing

22 05 48 – Vibration and Seismic Controls for Plumbing Piping and Equipment

22 05 48.10 Seismic Bracing Supports				Daily Crew	Output	Labor- Hours	Unit	Material	2022 Bare Costs		Total	Total Incl O&P
									Labor	Equipment		
0010	SEISMIC BRACING SUPPORTS			R133113-90								
0020	Clamps											
0030	C-clamp, for mounting on steel beam											
0040	3/8" threaded rod			1 Skwk	160	.050	Ea.	4.35	2.95		7.30	9.20
0050	1/2" threaded rod				160	.050		5.40	2.95		8.35	10.35
0060	5/8" threaded rod				160	.050		7.25	2.95		10.20	12.40
0070	3/4" threaded rod			↓	160	.050	↓	9.50	2.95		12.45	14.85
0100	Brackets											
0110	Beam side or wall malleable iron											
0120	3/8" threaded rod			1 Skwk	48	.167	Ea.	6.10	9.80		15.90	21.50
0130	1/2" threaded rod				48	.167		10.35	9.80		20.15	26
0140	5/8" threaded rod				48	.167		18.50	9.80		28.30	35.50
0150	3/4" threaded rod				48	.167		24.50	9.80		34.30	41.50
0160	7/8" threaded rod			↓	48	.167	↓	16.75	9.80		26.55	33
0170	For concrete installation, add								30%			
0180	Wall, welded steel											
0190	0 size 12" wide 18" deep			1 Skwk	34	.235	Ea.	440	13.85		453.85	505
0200	1 size 18" wide 24" deep				34	.235		520	13.85		533.85	595
0210	2 size 24" wide 30" deep			↓	34	.235	↓	690	13.85		703.85	780
0300	Rod, carbon steel											
0310	Continuous thread											
0320	1/4" thread			1 Skwk	144	.056	L.F.	.43	3.27		3.70	5.40
0330	3/8" thread				144	.056		.46	3.27		3.73	5.40
0340	1/2" thread				144	.056		.72	3.27		3.99	5.70
0350	5/8" thread				144	.056		1.03	3.27		4.30	6.05
0360	3/4" thread				144	.056		1.81	3.27		5.08	6.90
0370	7/8" thread			↓	144	.056	↓	2.27	3.27		5.54	7.40
0380	For galvanized, add								30%			
0400	Channel, steel											
0410	3/4" x 1-1/2"			1 Skwk	80	.100	L.F.	3.80	5.90		9.70	13.05
0420	1-1/2" x 1-1/2"				70	.114		4.45	6.75		11.20	15
0430	1-7/8" x 1-1/2"				60	.133		24.50	7.85		32.35	39
0440	3" x 1-1/2"			↓	50	.160	↓	22	9.40		31.40	38
0450	Spring nuts											
0460	3/8"			1 Skwk	100	.080	Ea.	1.42	4.71		6.13	8.65
0470	1/2"			"	80	.100	"	1.91	5.90		7.81	10.95
0500	Welding, field											
0510	Cleaning and welding plates, bars, or rods											
0520	To existing beams, columns, or trusses											
0530	1" weld			1 Skwk	144	.056	Ea.	.31	3.27		3.58	5.25
0540	2" weld				72	.111		.62	6.55		7.17	10.55
0550	3" weld				54	.148		.94	8.75		9.69	14.15
0560	4" weld				36	.222		1.25	13.10		14.35	21
0570	5" weld				30	.267		1.56	15.70		17.26	25
0580	6" weld			↓	24	.333	↓	1.87	19.65		21.52	31.50
0600	Vibration absorbers											
0610	Hangers, neoprene flex											
0620	10-120 lb. capacity			1 Skwk	8	1	Ea.	24.50	59		83.50	116
0630	75-550 lb. capacity				8	1		41	59		100	134
0640	250-1,100 lb. capacity				6	1.333		86	78.50		164.50	213
0650	1,000-4,000 lb. capacity			↓	6	1.333	↓	135	78.50		213.50	267
0660	Spring flex											