



## Calculating Steam Main Warm Up Loads

Warm up load in pounds of steam per 100 feet of steam main --- *Ambient temperature 70°F\**  
Main Size

PSIG	2"	2.5"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	°F correction factor †
<b>0</b>	6.2	9.7	12.8	18.2	24.6	31.9	48	68	90	107	140	176	207	308	1.5
<b>5</b>	6.9	11.0	14.4	20.4	27.7	35.9	48	77	101	120	157	198	233	324	1.44
<b>10</b>	7.5	11.8	15.5	22.0	29.9	38.8	58	83	109	130	169	213	251	350	1.41
<b>20</b>	8.4	13.4	17.5	24.9	33.8	43.9	66	93	124	146	191	241	284	396	1.37
<b>40</b>	9.9	15.8	20.6	29.3	39.7	51.6	78	110	145	172	225	284	334	465	1.32
<b>60</b>	11.0	17.5	22.9	32.6	44.2	57.3	86	122	162	192	250	316	372	518	1.29
<b>80</b>	12.0	19.0	24.9	35.3	47.9	62.1	93	132	175	208	271	342	403	561	1.27
<b>100</b>	12.8	20.3	26.6	37.8	51.2	66.5	100	142	188	222	290	366	431	600	1.26
<b>125</b>	13.7	21.7	28.4	40.4	54.8	71.1	107	152	200	238	310	391	461	642	1.25
<b>150</b>	14.5	23.0	30.0	42.8	58.0	75.2	113	160	212	251	328	414	487	679	1.24
<b>175</b>	15.3	24.2	31.7	45.1	61.2	79.4	119	169	224	265	347	437	514	716	1.23
<b>200</b>	16.0	25.3	33.1	47.1	63.8	82.8	125	177	234	277	362	456	537	748	1.22
<b>250</b>	17.2	27.3	35.8	50.8	68.9	89.4	134	191	252	299	390	492	579	807	1.21
<b>300</b>	25.0	38.3	51.3	74.8	104.0	142.7	217	322	443	531	682	854	1045	1182	1.2
<b>400</b>	27.8	42.6	57.1	83.2	115.7	158.7	241	358	493	590	759	971	1163	1650	1.18
<b>500</b>	30.2	46.3	62.1	90.5	125.7	172.6	262	389	535	642	825	1033	1263	1793	1.17
<b>600</b>	32.7	50.1	67.1	97.9	136.0	186.6	284	421	579	694	893	1118	1367	1939	1.16

\*Loads based on Schedule 40 pipe for pressures up to and including 250 PSIG and on Schedule 80 Pipe for pressures above 250 PSIG.

†For outdoor temperature of 0° F, multiply load value in table for each main size by correction factor corresponding to steam pressure.