



SC601 & SC602

Loading Tables

Nullifire
Smart Protection

Beams: Critical Temperature: 620°C

Section Factor up to m ¹	30 minutes	60 minutes	90 minutes	120 minutes	Section Factor up to m ¹	30 minutes	60 minutes	90 minutes	120 minutes
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)		DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
30	0.239	0.239	0.239		200	0.239	0.501	1.394	
35	0.239	0.239	0.239		205	0.239	0.515	1.436	
40	0.239	0.239	0.241		210	0.239	0.529	1.478	
45	0.239	0.239	0.275		215	0.239	0.543	1.520	
50	0.239	0.239	0.309		220	0.239	0.557	1.561	
55	0.239	0.239	0.343		225	0.239	0.571	1.603	
60	0.239	0.239	0.378		230	0.239	0.585	1.645	
65	0.239	0.239	0.412		235	0.239	0.600	1.687	
70	0.239	0.239	0.446		240	0.239	0.614	1.729	
75	0.239	0.239	0.480		245	0.239	0.628	1.770	
80	0.239	0.239	0.515		250	0.239	0.642	1.812	
85	0.239	0.239	0.549		255	0.239	0.656	1.854	
90	0.239	0.239	0.583		260	0.239	0.670	1.896	
95	0.239	0.239	0.617		265	0.239	0.684	1.937	
100	0.239	0.239	0.652		270	0.239	0.698	1.979	
105	0.239	0.239	0.686		275	0.245	0.713	2.021	
110	0.239	0.246	0.720		280	0.251	0.727	2.063	
115	0.239	0.260	0.754		285	0.258	0.741	2.105	
120	0.239	0.275	0.789		290	0.264	0.755	2.146	
125	0.239	0.289	0.823		295	0.270	0.769	2.188	
130	0.239	0.303	0.857		300	0.277	0.783		
135	0.239	0.317	0.891		305	0.283	0.797		
140	0.239	0.331	0.926		310	0.290	0.811		
145	0.239	0.345	0.960		315	0.296	0.826		
150	0.239	0.359	0.994		320	0.302	0.840		
155	0.239	0.373	1.028		325	0.309	0.854		
160	0.239	0.388	1.063		330	0.315	0.868		
165	0.239	0.402	1.102		335	0.322	0.882		
170	0.239	0.416	1.144		340	0.328	0.896		
175	0.239	0.430	1.185		345	0.334	0.910		
180	0.239	0.444	1.227		350	0.341	0.925		
185	0.239	0.458	1.269						
190	0.239	0.472	1.311						
195	0.239	0.487	1.353						

PLEASE NOTE: The Critical Temperatures in this loading table are the generally accepted UK "default temperatures". The ASFP 5th Edition Yellow Book gives new Critical Temperatures to comply with either the Eurocodes for steel design, or BS 5950-8: 2003. Alternative loading tables to the new Critical Temperatures are available from the Nullifire Technical Desk on request. For time periods above 90 minutes and for Hp/A above 340 m¹ please refer to Nullifire Technical Desk.

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SC601 & SC602

Loading Tables

Nullifire
Smart Protection

Columns: Critical Temperature: 550°C

Section Factor up to m ²	30 minutes	60 minutes	90 minutes	120 minutes	Section Factor up to m ²	30 minutes	60 minutes	90 minutes	120 minutes
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)		DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
30	0.225	0.225	0.230	0.821	200	0.225	0.617		
35	0.225	0.225	0.303	1.016	205	0.225	0.635		
40	0.225	0.225	0.392	1.126	210	0.225	0.652		
45	0.225	0.225	0.482	1.204	215	0.225	0.670		
50	0.225	0.225	0.572	1.282	220	0.225	0.688		
55	0.225	0.225	0.661	1.360	225	0.225	0.706		
60	0.225	0.225	0.751	1.438	230	0.225	0.723		
65	0.225	0.225	0.840	1.516	235	0.225	0.741		
70	0.225	0.225	0.930	1.594	240	0.225	0.759		
75	0.225	0.225	1.019	1.672	245	0.225	0.777		
80	0.225	0.225	1.096	1.750	250	0.225	0.794		
85	0.225	0.225	1.157	1.828	255	0.225	0.812		
90	0.225	0.226	1.218	1.906	260	0.225	0.830		
95	0.225	0.244	1.279	1.984	265	0.225	0.848		
100	0.225	0.262	1.340	2.062	270	0.225	0.865		
105	0.225	0.280	1.401	2.140	275	0.225	0.883		
110	0.225	0.297	1.463	2.218	280	0.225	0.901		
115	0.225	0.315	1.524		285	0.225	0.919		
120	0.225	0.333	1.585		290	0.225	0.936		
125	0.225	0.351	1.646		295	0.225	0.954		
130	0.225	0.368	1.707		300	0.225	0.972		
135	0.225	0.386	1.768		305	0.228	0.989		
140	0.225	0.404	1.829		310	0.239	1.007		
145	0.225	0.422	1.890		315	0.249	1.025		
150	0.225	0.439	1.951		320	0.259	1.043		
155	0.225	0.457	2.012		325	0.270	1.060		
160	0.225	0.475	2.073		330	0.280	1.078		
165	0.225	0.493	2.134		335	0.290	1.096		
170	0.225	0.510	2.195		340	0.300	1.114		
175	0.225	0.528	2.256		345	0.311	1.131		
180	0.225	0.546			350	0.321	1.149		
185	0.225	0.564			355	0.331			
190	0.225	0.581			360	0.341			
195	0.225	0.599			365	0.352			

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SC601 & SC602 Loading Tables

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Smart Protection

4-Sided Hollow Columns & 4-Sided Hollow Beams*: Critical Temperature: 520°C

Section Factor up to m ¹	30 minutes	60 minutes	90 minutes	120 minutes	Section Factor up to m ¹	30 minutes	60 minutes	90 minutes	120 minutes
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)		DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
50	0.460	0.460	1.072		230	0.460	2.051		
55	0.460	0.523	1.146		235	0.460	2.129		
60	0.460	0.562	1.219		240	0.460	2.207		
65	0.460	0.601	1.293		245	0.460	2.285		
70	0.460	0.640	1.367		250	0.460	2.363		
75	0.460	0.679	1.441		255	0.460	2.441		
80	0.460	0.718	1.514		260	0.460	2.519		
85	0.460	0.757	1.588		265	0.460	2.597		
90	0.460	0.796	1.662		270	0.460	2.675		
95	0.460	0.835	1.762		275	0.460	2.753		
100	0.460	0.874	2.034		280	0.460	2.831		
105	0.460	0.913	2.306		285	0.460	2.909		
110	0.460	0.952	2.578		290	0.460	2.987		
115	0.460	0.991	2.850		295	0.460	3.065		
120	0.460	1.030	3.122		300	0.460	3.142		
125	0.460	1.069	3.394		305	0.460	3.220		
130	0.460	1.108			310	0.460	3.298		
135	0.460	1.148			315	0.460	3.376		
140	0.460	1.187			320	0.460	3.454		
145	0.460	1.226			325	0.487			
150	0.460	1.265			330	0.522			
155	0.460	1.304			335	0.557			
160	0.460	1.343			340	0.592			
165	0.460	1.382			345	0.628			
170	0.460	1.421			350	0.663			
175	0.460	1.460			355	0.698			
180	0.460	1.499			360	0.733			
185	0.460	1.538			365	0.768			
190	0.460	1.577			370	0.803			
195	0.460	1.616			375	0.838			
200	0.460	1.655			380	0.873			
205	0.460	1.694			385	0.908			
210	0.460	1.740			390	0.944			
215	0.460	1.817			395	0.979			
220	0.460	1.895			400	1.014			
225	0.460	1.973			405	1.049			

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*4 sided hollows beams upto 2.103 mm only

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Loading Tables



3-Sided Hollow Beams: Critical Temperature: 620°C

Section Factor up to m ¹	30 minutes	60 minutes	90 minutes	120 minutes	Section Factor up to m ¹	30 minutes	60 minutes	90 minutes	120 minutes
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)		DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
50	0.466	0.466	0.766	1.310	230	0.466	0.968	1.821	
55	0.466	0.466	0.803	1.387	235	0.466	1.001	1.840	
60	0.466	0.466	0.840	1.464	240	0.466	1.034	1.859	
65	0.466	0.466	0.878	1.532	245	0.466	1.067	1.878	
70	0.466	0.466	0.915	1.557	250	0.466	1.100	1.896	
75	0.466	0.466	0.952	1.581	255	0.466	1.133	1.915	
80	0.466	0.466	0.990	1.606	260	0.466	1.166	1.934	
85	0.466	0.466	1.027	1.630	265	0.466	1.199	1.953	
90	0.466	0.466	1.065	1.654	270	0.466	1.232	1.972	
95	0.466	0.466	1.102	1.679	275	0.466	1.265	1.990	
100	0.466	0.466	1.139	1.703	280	0.466	1.298	2.009	
105	0.466	0.466	1.177	1.728	285	0.466	1.331	2.028	
110	0.466	0.466	1.214	1.752	290	0.466	1.364	2.047	
115	0.466	0.466	1.252	1.777	295	0.466	1.396	2.066	
120	0.466	0.466	1.289	1.801	300	0.466	1.429	2.084	
125	0.466	0.466	1.326	1.826	305	0.466	1.462	2.103	
130	0.466	0.466	1.364	1.850					
135	0.466	0.466	1.401	1.875					
140	0.466	0.466	1.439	1.899					
145	0.466	0.466	1.476	1.924					
150	0.466	0.466	1.513	1.948					
155	0.466	0.474	1.539	1.973					
160	0.466	0.507	1.558	1.997					
165	0.466	0.540	1.577	2.022					
170	0.466	0.573	1.596	2.046					
175	0.466	0.605	1.615	2.071					
180	0.466	0.638	1.633	2.095					
185	0.466	0.671	1.652	2.120					
190	0.466	0.704	1.671	2.144					
195	0.466	0.737	1.690	2.169					
200	0.466	0.770	1.709						
205	0.466	0.803	1.727						
210	0.466	0.836	1.746						
215	0.466	0.869	1.765						
220	0.466	0.902	1.784						
225	0.466	0.935	1.802						

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