optimised for 120 mins

SC801 Loading Tables

SC801-120
Material Specification
Specific Gravity: 1.38
Volume Solids: 68% ± 3%

Nullifire
Smart Protection

CONTENTS

optimised for 120 mins

SC801 Loading Tables

SC801-120
Material Specification
Specific Gravity: 1.38
Volume Solids: 68% ± 3%

Nullifire
Smart Protection

Table 1: 3-Sided Beams
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
195	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
200	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
205	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
210	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
215	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
220	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
225	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 1: 3-Sided Beams
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
235	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
240	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
245	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
250	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
255	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
260	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
265	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
270	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
275	0.484	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
280	0.495	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
285	0.506	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
290	0.517	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
295	0.527	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
300	0.538	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
305	0.549	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
310	0.560	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
315	0.571	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
320	0.582	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
325	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
330	0.604	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
335	0.615	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
340	0.626	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
345	0.637	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
350	0.648	0.463	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
355	0.659	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
360	0.670	0.482	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 2: 3-Sided Beams
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	0.569	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	0.587	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	0.606	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	0.624	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	0.643	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	0.661	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	0.679	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	0.698	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	0.716	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	0.735	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	0.753	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	0.772	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	0.790	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	0.808	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	0.827	0.459	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	0.845	0.479	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	0.864	0.498	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	0.882	0.518	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	0.900	0.537	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	0.919	0.557	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
195	0.937	0.576	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
200	0.956	0.596	0.479	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
205	0.974	0.615	0.496	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
210	0.992	0.635	0.513	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
215	1.011	0.654	0.530	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
220	1.029	0.674	0.546	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
225	1.048	0.693	0.563	0.461	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

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Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	1.066	0.713	0.580	0.475	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
235	1.084	0.732	0.597	0.490	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
240	1.103	0.752	0.614	0.504	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
245	1.121	0.771	0.630	0.519	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
250	1.140	0.791	0.647	0.533	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
255	1.158	0.810	0.664	0.548	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
260	1.176	0.830	0.681	0.562	0.460	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
265	1.195	0.849	0.698	0.577	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
270	1.213	0.869	0.714	0.591	0.485	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
275	1.232	0.888	0.731	0.606	0.498	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
280	1.250	0.908	0.748	0.620	0.510	0.460	0.458	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
285	1.268	0.927	0.765	0.635	0.523	0.472	0.469	0.455	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
290	1.287	0.947	0.782	0.650	0.535	0.483	0.481	0.466	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
295	1.305	0.966	0.799	0.664	0.548	0.495	0.492	0.477	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454
300	1.324	0.986	0.815	0.679	0.560	0.506	0.504	0.488	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454
305	1.342	1.005	0.832	0.693	0.573	0.518	0.515	0.500	0.484	0.463	0.457	0.454	0.454	0.454	0.454	0.454
310	1.361	1.025	0.849	0.708	0.585	0.529	0.527	0.511	0.495	0.473	0.467	0.463	0.454	0.454	0.454	0.454
315	1.379	1.044	0.866	0.722	0.598	0.541	0.538	0.522	0.506	0.484	0.478	0.474	0.454	0.454	0.454	0.454
320	1.397	1.064	0.883	0.737	0.610	0.552	0.550	0.533	0.517	0.495	0.488	0.484	0.454	0.454	0.454	0.454
325	1.416	1.083	0.899	0.751	0.622	0.564	0.561	0.545	0.528	0.505	0.499	0.495	0.460	0.454	0.454	0.454
330	1.434	1.103	0.916	0.766	0.635	0.575	0.573	0.556	0.539	0.516	0.509	0.505	0.470	0.454	0.454	0.454
335	1.453	1.122	0.933	0.780	0.647	0.587	0.584	0.567	0.550	0.526	0.520	0.516	0.480	0.454	0.454	0.454
340	1.471	1.142	0.950	0.795	0.660	0.598	0.596	0.578	0.561	0.537	0.530	0.526	0.490	0.454	0.454	0.454
345	1.489	1.161	0.967	0.809	0.672	0.610	0.607	0.590	0.572	0.548	0.541	0.536	0.500	0.454	0.454	0.454
350	1.508	1.181	0.983	0.824	0.685	0.621	0.619	0.601	0.583	0.558	0.551	0.547	0.510	0.454	0.454	0.454
355	1.526	1.200	1.000	0.838	0.697	0.633	0.630	0.612	0.594	0.569	0.562	0.557	0.520	0.454	0.454	0.454
360	1.545	1.220	1.017	0.853	0.710	0.645	0.642	0.623	0.605	0.580	0.573	0.568	0.530	0.458	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 3: 3-Sided Beams
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	1.129	0.817	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	1.150	0.838	0.613	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	1.172	0.859	0.633	0.457	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	1.193	0.879	0.653	0.476	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	1.215	0.900	0.673	0.496	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	1.236	0.921	0.693	0.515	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	1.258	0.942	0.713	0.534	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	1.280	0.963	0.733	0.554	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	1.301	0.983	0.753	0.573	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	1.323	1.004	0.773	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	1.344	1.025	0.793	0.612	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	1.366	1.046	0.813	0.632	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	1.387	1.067	0.833	0.651	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	1.409	1.087	0.853	0.670	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	1.430	1.108	0.873	0.690	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	1.452	1.129	0.892	0.709	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	1.474	1.150	0.912	0.729	0.482	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	1.495	1.170	0.932	0.748	0.502	0.460	0.458	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	1.517	1.191	0.952	0.768	0.521	0.478	0.476	0.464	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	1.538	1.212	0.972	0.787	0.541	0.496	0.495	0.482	0.469	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	1.560	1.233	0.992	0.807	0.561	0.515	0.513	0.500	0.487	0.469	0.465	0.462	0.454	0.454	0.454	0.454
195	1.581	1.254	1.012	0.826	0.581	0.533	0.531	0.518	0.504	0.487	0.482	0.479	0.454	0.454	0.454	0.454
200	1.603	1.274	1.032	0.845	0.600	0.552	0.550	0.536	0.522	0.504	0.499	0.496	0.468	0.454	0.454	0.454
205	1.624	1.295	1.052	0.865	0.620	0.570	0.568	0.554	0.540	0.521	0.516	0.513	0.484	0.454	0.454	0.454
210	1.646	1.316	1.072	0.884	0.640	0.589	0.587	0.572	0.557	0.538	0.533	0.530	0.501	0.454	0.454	0.454
215	1.668	1.337	1.092	0.904	0.660	0.607	0.605	0.590	0.575	0.556	0.550	0.547	0.517	0.464	0.454	0.454
220	1.693	1.358	1.112	0.923	0.679	0.625	0.623	0.608	0.593	0.573	0.567	0.564	0.533	0.479	0.454	0.454
225	1.728	1.378	1.132	0.943	0.699	0.644	0.642	0.626	0.611	0.590	0.584	0.580	0.549	0.494	0.454	0.454

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In accordance with BS476: Part 21: 1987

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Table 3: 3-Sided Beams
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C DFT (mm)	400°C DFT (mm)	450°C DFT (mm)	500°C DFT (mm)	550°C DFT (mm)	575°C DFT (mm)	576°C DFT (mm)	583°C DFT (mm)	590°C DFT (mm)	600°C DFT (mm)	603°C DFT (mm)	605°C DFT (mm)	620°C DFT (mm)	650°C DFT (mm)	700°C DFT (mm)	750°C DFT (mm)
230	1.762	1.399	1.152	0.962	0.719	0.662	0.660	0.644	0.628	0.607	0.601	0.597	0.566	0.508	0.454	0.454
235	1.797	1.420	1.172	0.981	0.739	0.681	0.678	0.662	0.646	0.624	0.618	0.614	0.582	0.523	0.454	0.454
240	1.831	1.441	1.192	1.001	0.758	0.699	0.697	0.680	0.664	0.642	0.636	0.631	0.598	0.538	0.454	0.454
245	1.866	1.462	1.212	1.020	0.778	0.718	0.715	0.698	0.681	0.659	0.653	0.648	0.615	0.553	0.454	0.454
250	1.900	1.482	1.232	1.040	0.798	0.736	0.734	0.716	0.699	0.676	0.670	0.665	0.631	0.568	0.467	0.454
255	1.935	1.503	1.252	1.059	0.817	0.755	0.752	0.734	0.717	0.693	0.687	0.682	0.647	0.583	0.479	0.454
260	1.969	1.524	1.272	1.079	0.837	0.773	0.770	0.752	0.735	0.711	0.704	0.699	0.663	0.598	0.492	0.454
265	2.004	1.545	1.292	1.098	0.857	0.791	0.789	0.770	0.752	0.728	0.721	0.716	0.680	0.612	0.504	0.454
270	2.038	1.565	1.311	1.117	0.877	0.810	0.807	0.789	0.770	0.745	0.738	0.733	0.696	0.627	0.517	0.454
275	2.073	1.586	1.331	1.137	0.896	0.828	0.826	0.807	0.788	0.762	0.755	0.750	0.712	0.642	0.529	0.454
280	2.107	1.607	1.351	1.156	0.916	0.847	0.844	0.825	0.805	0.780	0.772	0.767	0.729	0.657	0.542	0.454
285	2.142	1.628	1.371	1.176	0.936	0.865	0.862	0.843	0.823	0.797	0.789	0.784	0.745	0.672	0.554	0.454
290	2.176	1.649	1.391	1.195	0.956	0.884	0.881	0.861	0.841	0.814	0.806	0.801	0.761	0.687	0.567	0.454
295	2.211	1.669	1.411	1.215	0.975	0.902	0.899	0.879	0.859	0.831	0.823	0.818	0.777	0.701	0.579	0.454
300	2.245	1.697	1.431	1.234	0.995	0.920	0.918	0.897	0.876	0.849	0.841	0.835	0.794	0.716	0.592	0.454
305	2.280	1.734	1.451	1.253	1.015	0.939	0.936	0.915	0.894	0.866	0.858	0.852	0.810	0.731	0.604	0.462
310	2.314	1.771	1.471	1.273	1.035	0.957	0.954	0.933	0.912	0.883	0.875	0.869	0.826	0.746	0.617	0.472
315	2.349	1.808	1.491	1.292	1.054	0.976	0.973	0.951	0.930	0.900	0.892	0.886	0.842	0.761	0.629	0.481
320	2.383	1.845	1.511	1.312	1.074	0.994	0.991	0.969	0.947	0.917	0.909	0.903	0.859	0.776	0.642	0.491
325	2.418	1.882	1.531	1.331	1.094	1.013	1.009	0.987	0.965	0.935	0.926	0.920	0.875	0.791	0.654	0.501
330	2.452	1.919	1.551	1.351	1.113	1.031	1.028	1.005	0.983	0.952	0.943	0.937	0.891	0.805	0.667	0.511
335	2.487	1.956	1.571	1.370	1.133	1.050	1.046	1.023	1.000	0.969	0.960	0.954	0.908	0.820	0.679	0.521
340	2.521	1.994	1.591	1.389	1.153	1.068	1.065	1.041	1.018	0.986	0.977	0.971	0.924	0.835	0.692	0.531
345	2.556	2.031	1.611	1.409	1.173	1.086	1.083	1.059	1.036	1.004	0.994	0.988	0.940	0.850	0.704	0.541
350	2.590	2.068	1.631	1.428	1.192	1.105	1.101	1.077	1.054	1.021	1.011	1.005	0.956	0.865	0.717	0.551
355	2.625	2.105	1.651	1.448	1.212	1.123	1.120	1.095	1.071	1.038	1.028	1.022	0.973	0.880	0.729	0.561
360	2.659	2.142	1.671	1.467	1.232	1.142	1.138	1.113	1.089	1.055	1.046	1.039	0.989	0.895	0.742	0.570

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In accordance with BS476: Part 21: 1987

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Table 4: 3-Sided Beams
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C DFT (mm)	400°C DFT (mm)	450°C DFT (mm)	500°C DFT (mm)	550°C DFT (mm)	575°C DFT (mm)	576°C DFT (mm)	583°C DFT (mm)	590°C DFT (mm)	600°C DFT (mm)	603°C DFT (mm)	605°C DFT (mm)	620°C DFT (mm)	650°C DFT (mm)	700°C DFT (mm)	750°C DFT (mm)
90	1.695	1.329	1.045	0.822	0.612	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	1.723	1.349	1.067	0.844	0.632	0.575	0.573	0.556	0.537	0.510	0.502	0.496	0.454	0.454	0.454	0.454
100	1.751	1.369	1.089	0.865	0.653	0.595	0.593	0.576	0.557	0.530	0.522	0.516	0.469	0.454	0.454	0.454
105	1.780	1.389	1.111	0.887	0.674	0.616	0.613	0.596	0.577	0.550	0.541	0.535	0.488	0.454	0.454	0.454
110	1.808	1.409	1.133	0.908	0.695	0.636	0.633	0.616	0.597	0.569	0.561	0.555	0.508	0.454	0.454	0.454
115	1.836	1.429	1.156	0.930	0.716	0.656	0.654	0.636	0.617	0.589	0.581	0.575	0.527	0.454	0.454	0.454
120	1.865	1.448	1.178	0.951	0.737	0.676	0.674	0.656	0.637	0.609	0.600	0.594	0.547	0.454	0.454	0.454
125	1.893	1.468	1.200	0.973	0.758	0.697	0.694	0.676	0.656	0.629	0.620	0.614	0.566	0.454	0.454	0.454
130	1.921	1.488	1.222	0.994	0.778	0.717	0.714	0.696	0.676	0.648	0.640	0.634	0.586	0.464	0.454	0.454
135	1.950	1.508	1.244	1.015	0.799	0.737	0.735	0.716	0.696	0.668	0.659	0.653	0.605	0.484	0.454	0.454
140	1.978	1.528	1.267	1.037	0.820	0.757	0.755	0.736	0.716	0.688	0.679	0.673	0.625	0.503	0.454	0.454
145	2.006	1.548	1.289	1.058	0.841	0.778	0.775	0.756	0.736	0.708	0.699	0.693	0.644	0.522	0.454	0.454
150	2.034	1.568	1.311	1.080	0.862	0.798	0.795	0.776	0.756	0.727	0.719	0.712	0.663	0.542	0.454	0.454
155	2.063	1.588	1.333	1.101	0.883	0.818	0.815	0.796	0.776	0.747	0.738	0.732	0.683	0.561	0.454	0.454
160	2.091	1.608	1.355	1.123	0.903	0.838	0.836	0.816	0.796	0.767	0.758	0.752	0.702	0.581	0.454	0.454
165	2.119	1.628	1.378	1.144	0.924	0.859	0.856	0.836	0.816	0.787	0.778	0.771	0.722	0.600	0.454	0.454
170	2.148	1.647	1.400	1.166	0.945	0.879	0.876	0.856	0.836	0.806	0.797	0.791	0.741	0.619	0.458	0.454
175	2.176	1.667	1.422	1.187	0.966	0.899	0.896	0.877	0.856	0.826	0.817	0.811	0.761	0.639	0.476	0.454
180	2.204	1.691	1.444	1.209	0.987	0.919	0.916	0.897	0.876	0.846	0.837	0.830	0.780	0.658	0.494	0.454
185	2.233	1.727	1.466	1.230	1.008	0.939	0.937	0.917	0.896	0.866	0.856	0.850	0.800	0.678	0.512	0.454
190	2.261	1.763	1.489	1.252	1.029	0.960	0.957	0.937	0.916	0.885	0.876	0.870	0.819	0.697	0.530	0.454
195	2.289	1.799	1.511	1.273	1.049	0.980	0.977	0.957	0.936	0.905	0.896	0.889	0.839	0.716	0.548	0.454
200	2.318	1.835	1.533	1.295	1.070	1.000	0.997	0.977	0.956	0.925	0.916	0.909	0.858	0.736	0.566	0.460
205	2.346	1.871	1.555	1.316	1.091	1.020	1.017	0.997	0.975	0.945	0.935	0.929	0.878	0.755	0.584	0.475
210	2.374	1.907	1.577	1.337	1.112	1.041	1.038	1.017	0.995	0.964	0.955	0.948	0.897	0.774	0.602	0.490
215	2.402	1.943	1.600	1.359	1.133	1.061	1.058	1.037	1.015	0.984	0.975	0.968	0.917	0.794	0.620	0.505
220	2.431	1.979	1.622	1.380	1.154	1.081	1.078	1.057	1.035	1.004	0.994	0.988	0.936	0.813	0.639	0.520
225	2.459	2.015	1.644	1.402	1.175	1.101	1.098	1.077	1.055	1.024	1.014	1.007	0.956	0.833	0.657	0.535

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Table 4: 3-Sided Beams
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C DFT (mm)	400°C DFT (mm)	450°C DFT (mm)	500°C DFT (mm)	550°C DFT (mm)	575°C DFT (mm)	576°C DFT (mm)	583°C DFT (mm)	590°C DFT (mm)	600°C DFT (mm)	603°C DFT (mm)	605°C DFT (mm)	620°C DFT (mm)	650°C DFT (mm)	700°C DFT (mm)	750°C DFT (mm)
230	2.487	2.051	1.666	1.423	1.195	1.122	1.119	1.097	1.075	1.043	1.034	1.027	0.975	0.852	0.675	0.550
235	2.516	2.087	1.693	1.445	1.216	1.142	1.139	1.117	1.095	1.063	1.053	1.047	0.994	0.871	0.693	0.565
240	2.544	2.122	1.732	1.466	1.237	1.162	1.159	1.137	1.115	1.083	1.073	1.066	1.014	0.891	0.711	0.580
245	2.572	2.158	1.770	1.488	1.258	1.182	1.179	1.157	1.135	1.103	1.093	1.086	1.033	0.910	0.729	0.595
250	2.601	2.194	1.809	1.509	1.279	1.202	1.199	1.177	1.155	1.122	1.113	1.106	1.053	0.930	0.747	0.610
255	2.629	2.230	1.848	1.531	1.300	1.223	1.220	1.197	1.175	1.142	1.132	1.125	1.072	0.949	0.765	0.625
260	2.657	2.266	1.886	1.552	1.321	1.243	1.240	1.217	1.195	1.162	1.152	1.145	1.092	0.968	0.783	0.640
265	2.686	2.302	1.925	1.574	1.341	1.263	1.260	1.238	1.215	1.182	1.172	1.165	1.111	0.988	0.801	0.655
270	2.714	2.338	1.964	1.595	1.362	1.283	1.280	1.258	1.235	1.201	1.191	1.184	1.131	1.007	0.820	0.671
275	2.742	2.374	2.003	1.617	1.383	1.304	1.300	1.278	1.255	1.221	1.211	1.204	1.150	1.027	0.838	0.686
280	2.770	2.410	2.041	1.638	1.404	1.324	1.321	1.298	1.274	1.241	1.231	1.224	1.170	1.046	0.856	0.701
285	2.810	2.446	2.080	1.659	1.425	1.344	1.341	1.318	1.294	1.261	1.250	1.243	1.189	1.065	0.874	0.716
290	2.859	2.482	2.119	1.681	1.446	1.364	1.361	1.338	1.314	1.280	1.270	1.263	1.209	1.085	0.892	0.731
295	2.908	2.518	2.157	1.722	1.466	1.385	1.381	1.358	1.334	1.300	1.290	1.283	1.228	1.104	0.910	0.746
300	2.957	2.554	2.196	1.763	1.487	1.405	1.401	1.378	1.354	1.320	1.310	1.302	1.248	1.124	0.928	0.761
305	3.006	2.590	2.235	1.805	1.508	1.425	1.422	1.398	1.374	1.340	1.329	1.322	1.267	1.143	0.946	0.776
310	3.055	2.625	2.273	1.846	1.529	1.445	1.442	1.418	1.394	1.359	1.349	1.342	1.287	1.162	0.964	0.791
315	3.104	2.661	2.312	1.888	1.550	1.466	1.462	1.438	1.414	1.379	1.369	1.361	1.306	1.182	0.982	0.806
320	3.153	2.697	2.351	1.930	1.571	1.486	1.482	1.458	1.434	1.399	1.388	1.381	1.326	1.201	1.001	0.821
325	3.203	2.733	2.389	1.971	1.592	1.506	1.503	1.478	1.454	1.419	1.408	1.401	1.345	1.221	1.019	0.836
330	3.252	2.769	2.428	2.013	1.612	1.526	1.523	1.498	1.474	1.438	1.428	1.420	1.364	1.240	1.037	0.851
335	3.301	2.819	2.467	2.055	1.633	1.546	1.543	1.518	1.494	1.458	1.447	1.440	1.384	1.259	1.055	0.866
340	3.350	2.878	2.505	2.096	1.654	1.567	1.563	1.538	1.514	1.478	1.467	1.460	1.403	1.279	1.073	0.881
345	3.399	2.937	2.544	2.138	1.675	1.587	1.583	1.558	1.534	1.498	1.487	1.479	1.423	1.298	1.091	0.896
350	3.448	2.997	2.583	2.180	1.711	1.607	1.604	1.578	1.554	1.517	1.506	1.499	1.442	1.318	1.109	0.911
355	3.497	3.056	2.621	2.221	1.755	1.627	1.624	1.598	1.573	1.537	1.526	1.519	1.462	1.337	1.127	0.926
360	3.546	3.115	2.660	2.263	1.798	1.648	1.644	1.619	1.593	1.557	1.546	1.538	1.481	1.356	1.145	0.941

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 5: 3-Sided Beams
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C DFT (mm)	400°C DFT (mm)	450°C DFT (mm)	500°C DFT (mm)	550°C DFT (mm)	575°C DFT (mm)	576°C DFT (mm)	583°C DFT (mm)	590°C DFT (mm)	600°C DFT (mm)	603°C DFT (mm)	605°C DFT (mm)	620°C DFT (mm)	650°C DFT (mm)	700°C DFT (mm)	750°C DFT (mm)
90	2.441	1.777	1.488	1.228	1.003	0.902	0.899	0.873	0.846	0.811	0.801	0.794	0.745	0.621	0.454	0.454
95	2.495	1.811	1.514	1.248	1.025	0.924	0.921	0.894	0.868	0.832	0.822	0.815	0.765	0.641	0.546	0.454
100	2.550	1.846	1.541	1.267	1.047	0.946	0.943	0.916	0.889	0.854	0.843	0.836	0.786	0.662	0.565	0.454
105	2.604	1.880	1.567	1.287	1.069	0.968	0.965	0.938	0.911	0.875	0.864	0.857	0.806	0.683	0.585	0.454
110	2.658	1.914	1.593	1.306	1.091	0.990	0.987	0.960	0.933	0.896	0.885	0.878	0.827	0.704	0.604	0.454
115	2.713	1.948	1.620	1.325	1.113	1.013	1.009	0.981	0.954	0.918	0.907	0.899	0.847	0.725	0.624	0.454
120	2.767	1.982	1.646	1.345	1.136	1.035	1.031	1.003	0.976	0.939	0.928	0.920	0.868	0.746	0.643	0.460
125	2.807	2.016	1.673	1.364	1.158	1.057	1.053	1.025	0.998	0.960	0.949	0.942	0.888	0.767	0.662	0.478
130	2.840	2.050	1.705	1.384	1.180	1.079	1.075	1.047	1.019	0.981	0.970	0.963	0.909	0.788	0.682	0.497
135	2.873	2.084	1.739	1.403	1.202	1.101	1.097	1.069	1.041	1.003	0.991	0.984	0.929	0.809	0.701	0.515
140	2.906	2.118	1.773	1.423	1.224	1.123	1.119	1.090	1.063	1.024	1.013	1.005	0.950	0.829	0.721	0.533
145	2.939	2.152	1.808	1.442	1.246	1.145	1.141	1.112	1.084	1.045	1.034	1.026	0.970	0.850	0.740	0.552
150	2.971	2.187	1.842	1.461	1.269	1.167	1.163	1.134	1.106	1.067	1.055	1.047	0.991	0.871	0.759	0.570
155	3.004	2.221	1.876	1.481	1.291	1.189	1.185	1.156	1.128	1.088	1.076	1.068	1.012	0.892	0.779	0.589
160	3.037	2.255	1.911	1.500	1.313	1.211	1.207	1.177	1.149	1.109	1.097	1.090	1.032	0.913	0.798	0.607
165	3.070	2.289	1.945	1.520	1.335	1.233	1.229	1.199	1.171	1.131	1.119	1.111	1.053	0.934	0.817	0.626
170	3.103	2.323	1.980	1.539	1.357	1.255	1.251	1.221	1.193	1.152	1.140	1.132	1.073	0.955	0.837	0.644
175	3.136	2.357	2.014	1.559	1.379	1.277	1.273	1.243	1.214	1.173	1.161	1.153	1.094	0.976	0.856	0.662
180	3.169	2.391	2.048	1.578	1.402	1.299	1.295	1.265	1.236	1.195	1.182	1.174	1.114	0.996	0.876	0.681
185	3.202	2.425	2.083	1.597	1.424	1.321	1.317	1.286	1.258	1.216	1.203	1.195	1.135	1.017	0.895	0.699
190	3.235	2.459	2.117	1.617	1.446	1.343	1.339	1.308	1.279	1.237	1.225	1.216	1.155	1.038	0.914	0.718
195	3.268	2.493	2.151	1.636	1.468	1.365	1.361	1.330	1.301	1.258	1.246	1.238	1.176	1.059	0.934	0.736
200	3.301	2.528	2.186	1.656	1.490	1.387	1.383	1.352	1.323	1.280	1.267	1.259	1.196	1.080	0.953	0.755
205	3.334	2.562	2.220	1.675	1.512	1.409	1.405	1.374	1.344	1.301	1.288	1.280	1.217	1.101	0.972	0.773
210	3.367	2.596	2.255	1.710	1.535	1.431	1.427	1.395	1.366	1.322	1.310	1.301	1.237	1.122	0.992	0.791
215	3.400	2.630	2.289	1.753	1.557	1.453	1.449	1.417	1.388	1.344	1.331	1.322	1.258	1.143	1.011	0.810
220	3.433	2.664	2.323	1.796	1.579	1.475	1.471	1.439	1.409	1.365	1.352	1.343	1.278	1.164	1.031	0.828
225	3.466	2.698	2.358	1.839	1.601	1.497	1.493	1.461	1.431	1.386	1.373	1.364	1.299	1.184	1.050	0.847

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 5: 3-Sided Beams
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	3.499	2.732	2.392	1.882	1.623	1.519	1.515	1.482	1.452	1.408	1.394	1.386	1.319	1.205	1.069	0.865
235	3.532	2.766	2.427	1.925	1.645	1.541	1.537	1.504	1.474	1.429	1.416	1.407	1.340	1.226	1.089	0.884
240	3.565	2.810	2.461	1.968	1.668	1.563	1.559	1.526	1.496	1.450	1.437	1.428	1.360	1.247	1.108	0.902
245	3.598	2.865	2.495	2.012	1.697	1.585	1.581	1.548	1.517	1.472	1.458	1.449	1.381	1.268	1.128	0.920
250	3.631	2.920	2.530	2.055	1.739	1.607	1.603	1.570	1.539	1.493	1.479	1.470	1.401	1.289	1.147	0.939
255	3.664	2.975	2.564	2.098	1.782	1.629	1.625	1.591	1.561	1.514	1.500	1.491	1.422	1.310	1.166	0.957
260	3.697	3.029	2.598	2.141	1.824	1.651	1.647	1.613	1.582	1.536	1.522	1.512	1.442	1.331	1.186	0.976
265	3.730	3.084	2.633	2.184	1.867	1.673	1.669	1.635	1.604	1.557	1.543	1.534	1.463	1.351	1.205	0.994
270	3.763	3.139	2.667	2.227	1.909	1.708	1.700	1.657	1.626	1.578	1.564	1.555	1.483	1.372	1.224	1.013
275	3.796	3.194	2.702	2.270	1.952	1.752	1.744	1.678	1.647	1.599	1.585	1.576	1.504	1.393	1.244	1.031
280	3.828	3.248	2.736	2.313	1.994	1.796	1.788	1.719	1.669	1.621	1.606	1.597	1.524	1.414	1.263	1.049
285	3.861	3.303	2.770	2.356	2.037	1.840	1.832	1.764	1.700	1.642	1.628	1.618	1.545	1.435	1.283	1.068
290	3.894	3.358	2.828	2.399	2.079	1.884	1.876	1.809	1.745	1.663	1.649	1.639	1.565	1.456	1.302	1.086
295	3.927	3.413	2.900	2.443	2.122	1.927	1.920	1.853	1.790	1.688	1.670	1.660	1.586	1.477	1.321	1.105
300	3.960	3.468	2.973	2.486	2.164	1.971	1.963	1.898	1.835	1.734	1.702	1.682	1.607	1.498	1.341	1.123
305	-	3.522	3.045	2.529	2.207	2.015	2.007	1.943	1.881	1.780	1.749	1.728	1.627	1.518	1.360	1.142
310	-	3.577	3.117	2.572	2.249	2.059	2.051	1.987	1.926	1.827	1.796	1.775	1.648	1.539	1.379	1.160
315	-	3.632	3.190	2.615	2.292	2.103	2.095	2.032	1.971	1.873	1.842	1.822	1.668	1.560	1.399	1.178
320	-	3.687	3.262	2.658	2.334	2.146	2.139	2.077	2.016	1.919	1.889	1.868	1.698	1.581	1.418	1.197
325	-	3.741	3.335	2.701	2.377	2.190	2.183	2.121	2.061	1.965	1.935	1.915	1.747	1.602	1.438	1.215
330	-	3.796	3.407	2.744	2.419	2.234	2.226	2.166	2.106	2.012	1.982	1.962	1.796	1.623	1.457	1.234
335	-	3.851	3.479	2.792	2.462	2.278	2.270	2.210	2.151	2.058	2.029	2.009	1.845	1.644	1.476	1.252
340	-	3.906	3.552	2.889	2.504	2.322	2.314	2.255	2.197	2.104	2.075	2.056	1.893	1.665	1.496	1.271
345	-	3.960	3.624	2.987	2.547	2.365	2.358	2.300	2.242	2.151	2.122	2.103	1.942	1.690	1.515	1.289
350	-	-	3.697	3.084	2.589	2.409	2.402	2.344	2.287	2.197	2.168	2.149	1.991	1.738	1.535	1.307
355	-	-	3.769	3.182	2.632	2.453	2.446	2.389	2.332	2.243	2.215	2.196	2.040	1.786	1.554	1.326
360	-	-	3.841	3.280	2.674	2.497	2.490	2.434	2.377	2.289	2.262	2.243	2.089	1.834	1.573	1.344

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

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Table 6: 3-Sided Beams
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	3.126	2.566	2.068	1.620	1.379	1.263	1.259	1.228	1.198	1.156	1.144	1.136	1.078	0.969	0.801	0.621
95	3.210	2.631	2.106	1.652	1.396	1.281	1.277	1.247	1.217	1.176	1.164	1.156	1.099	0.990	0.822	0.641
100	3.294	2.697	2.145	1.684	1.412	1.300	1.295	1.266	1.237	1.196	1.185	1.177	1.119	1.010	0.842	0.660
105	3.378	2.762	2.183	1.719	1.429	1.318	1.314	1.285	1.256	1.216	1.205	1.197	1.140	1.031	0.862	0.680
110	3.461	2.813	2.221	1.754	1.446	1.336	1.332	1.304	1.276	1.237	1.225	1.217	1.161	1.052	0.882	0.700
115	3.545	2.857	2.259	1.789	1.462	1.354	1.350	1.323	1.295	1.257	1.245	1.238	1.182	1.073	0.903	0.719
120	3.629	2.901	2.297	1.825	1.479	1.372	1.369	1.342	1.314	1.277	1.266	1.258	1.203	1.094	0.923	0.739
125	3.713	2.945	2.336	1.860	1.495	1.391	1.387	1.361	1.334	1.297	1.286	1.278	1.224	1.115	0.943	0.759
130	3.797	2.989	2.374	1.895	1.512	1.409	1.405	1.380	1.353	1.317	1.306	1.299	1.244	1.136	0.964	0.778
135	3.880	3.033	2.412	1.930	1.529	1.427	1.423	1.399	1.373	1.337	1.326	1.319	1.265	1.157	0.984	0.798
140	3.964	3.077	2.450	1.966	1.545	1.445	1.442	1.418	1.392	1.357	1.346	1.339	1.286	1.178	1.004	0.818
145	-	3.121	2.488	2.001	1.562	1.463	1.460	1.436	1.412	1.377	1.367	1.360	1.307	1.199	1.024	0.837
150	-	3.165	2.527	2.036	1.578	1.481	1.478	1.455	1.431	1.397	1.387	1.380	1.328	1.220	1.045	0.857
155	-	3.209	2.565	2.071	1.595	1.500	1.496	1.474	1.451	1.417	1.407	1.400	1.348	1.241	1.065	0.877
160	-	3.253	2.603	2.107	1.612	1.518	1.515	1.493	1.470	1.437	1.427	1.421	1.369	1.262	1.085	0.896
165	-	3.296	2.641	2.142	1.628	1.536	1.533	1.512	1.490	1.458	1.448	1.441	1.390	1.282	1.105	0.916
170	-	3.340	2.679	2.177	1.645	1.554	1.551	1.531	1.509	1.478	1.468	1.461	1.411	1.303	1.126	0.936
175	-	3.384	2.718	2.212	1.661	1.572	1.570	1.550	1.529	1.498	1.488	1.481	1.432	1.324	1.146	0.955
180	-	3.428	2.756	2.248	1.678	1.591	1.588	1.569	1.548	1.518	1.508	1.502	1.453	1.345	1.166	0.975
185	-	3.472	2.798	2.283	1.719	1.609	1.606	1.588	1.567	1.538	1.528	1.522	1.473	1.366	1.187	0.995
190	-	3.516	2.851	2.318	1.768	1.627	1.624	1.607	1.587	1.558	1.549	1.542	1.494	1.387	1.207	1.014
195	-	3.560	2.905	2.353	1.817	1.645	1.643	1.626	1.606	1.578	1.569	1.563	1.515	1.408	1.227	1.034
200	-	3.604	2.958	2.389	1.866	1.663	1.661	1.645	1.626	1.598	1.589	1.583	1.536	1.429	1.247	1.054
205	-	3.648	3.011	2.424	1.915	1.681	1.679	1.664	1.645	1.618	1.609	1.603	1.557	1.450	1.268	1.073
210	-	3.692	3.064	2.459	1.963	1.729	1.723	1.684	1.665	1.638	1.630	1.624	1.577	1.471	1.288	1.093
215	-	3.736	3.118	2.494	2.012	1.777	1.771	1.730	1.687	1.659	1.650	1.644	1.598	1.492	1.308	1.112
220	-	3.780	3.171	2.530	2.061	1.825	1.819	1.776	1.734	1.679	1.670	1.664	1.619	1.513	1.328	1.132
225	-	3.823	3.224	2.565	2.110	1.873	1.867	1.823	1.780	1.721	1.701	1.688	1.640	1.534	1.349	1.152

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 6: 3-Sided Beams
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	3.867	3.277	2.600	2.159	1.921	1.915	1.869	1.827	1.767	1.747	1.734	1.661	1.555	1.369	1.171
235	-	3.911	3.331	2.635	2.208	1.970	1.963	1.916	1.873	1.813	1.794	1.781	1.682	1.575	1.389	1.191
240	-	3.955	3.384	2.671	2.256	2.018	2.011	1.962	1.919	1.860	1.840	1.827	1.728	1.596	1.410	1.211
245	-	-	3.437	2.706	2.305	2.066	2.059	2.009	1.966	1.906	1.887	1.873	1.774	1.617	1.430	1.230
250	-	-	3.490	2.741	2.354	2.114	2.107	2.055	2.012	1.952	1.933	1.920	1.821	1.638	1.450	1.250
255	-	-	3.544	2.776	2.403	2.162	2.155	2.101	2.058	1.999	1.979	1.966	1.867	1.659	1.470	1.270
260	-	-	3.597	2.850	2.452	2.211	2.203	2.148	2.105	2.045	2.026	2.013	1.914	1.680	1.491	1.289
265	-	-	3.650	2.934	2.501	2.259	2.251	2.194	2.151	2.091	2.072	2.059	1.961	1.726	1.511	1.309
270	-	-	3.703	3.017	2.549	2.307	2.299	2.241	2.198	2.138	2.118	2.106	2.007	1.774	1.531	1.329
275	-	-	3.757	3.101	2.598	2.355	2.347	2.287	2.244	2.184	2.165	2.152	2.054	1.822	1.551	1.348
280	-	-	3.810	3.185	2.647	2.403	2.395	2.334	2.290	2.230	2.211	2.198	2.100	1.870	1.572	1.368
285	-	-	3.863	3.269	2.696	2.452	2.443	2.380	2.337	2.277	2.258	2.245	2.147	1.919	1.592	1.388
290	-	-	3.916	3.353	2.745	2.500	2.491	2.427	2.383	2.323	2.304	2.291	2.194	1.967	1.612	1.407
295	-	-	3.970	3.436	2.804	2.548	2.539	2.473	2.430	2.369	2.350	2.338	2.240	2.015	1.633	1.427
300	-	-	-	3.520	2.903	2.596	2.587	2.519	2.476	2.416	2.397	2.384	2.287	2.063	1.653	1.447
305	-	-	-	3.604	3.003	2.644	2.635	2.566	2.522	2.462	2.443	2.430	2.333	2.111	1.673	1.466
310	-	-	-	3.688	3.102	2.693	2.683	2.612	2.569	2.508	2.490	2.477	2.380	2.160	1.710	1.486
315	-	-	-	3.772	3.202	2.741	2.731	2.659	2.615	2.555	2.536	2.523	2.427	2.208	1.761	1.506
320	-	-	-	3.855	3.302	2.796	2.779	2.705	2.662	2.601	2.582	2.570	2.473	2.256	1.811	1.525
325	-	-	-	3.939	3.401	2.919	2.894	2.752	2.708	2.647	2.629	2.616	2.520	2.304	1.861	1.545
330	-	-	-	-	3.501	3.042	3.018	2.825	2.754	2.694	2.675	2.663	2.566	2.352	1.912	1.565
335	-	-	-	-	3.600	3.165	3.143	2.960	2.833	2.740	2.721	2.709	2.613	2.401	1.962	1.584
340	-	-	-	-	3.700	3.288	3.267	3.096	2.970	2.791	2.768	2.755	2.660	2.449	2.012	1.604
345	-	-	-	-	3.800	3.410	3.391	3.231	3.106	2.929	2.873	2.836	2.706	2.497	2.063	1.624
350	-	-	-	-	3.899	3.533	3.515	3.366	3.243	3.067	3.010	2.972	2.753	2.545	2.113	1.643
355	-	-	-	-	-	3.656	3.639	3.502	3.379	3.205	3.147	3.109	2.830	2.593	2.163	1.663
360	-	-	-	-	-	3.779	3.763	3.637	3.516	3.343	3.284	3.245	2.969	2.642	2.214	1.683

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 7: 3-Sided Beams
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	-	3.189	2.716	2.238	1.737	1.610	1.605	1.573	1.542	1.498	1.486	1.478	1.416	1.290	1.093	0.917
95	-	3.280	2.785	2.284	1.778	1.638	1.634	1.600	1.566	1.520	1.507	1.498	1.432	1.307	1.113	0.937
100	-	3.371	2.854	2.331	1.818	1.667	1.662	1.627	1.591	1.542	1.528	1.518	1.448	1.324	1.133	0.957
105	-	3.462	2.923	2.378	1.859	1.701	1.694	1.653	1.615	1.563	1.548	1.538	1.464	1.341	1.153	0.977
110	-	3.553	2.992	2.424	1.900	1.741	1.734	1.680	1.639	1.585	1.569	1.558	1.480	1.358	1.173	0.996
115	-	3.644	3.061	2.471	1.941	1.781	1.774	1.720	1.664	1.607	1.589	1.578	1.496	1.375	1.193	1.016
120	-	3.735	3.129	2.518	1.982	1.821	1.814	1.761	1.692	1.628	1.610	1.597	1.512	1.392	1.213	1.036
125	-	3.825	3.198	2.564	2.022	1.861	1.854	1.802	1.732	1.650	1.631	1.617	1.528	1.409	1.233	1.056
130	-	3.916	3.267	2.611	2.063	1.901	1.894	1.843	1.773	1.672	1.651	1.637	1.544	1.426	1.253	1.075
135	-	-	3.336	2.658	2.104	1.941	1.934	1.884	1.813	1.704	1.672	1.657	1.561	1.443	1.273	1.095
140	-	-	3.405	2.704	2.145	1.981	1.975	1.925	1.854	1.746	1.704	1.677	1.577	1.460	1.293	1.115
145	-	-	3.473	2.751	2.186	2.021	2.015	1.966	1.894	1.789	1.747	1.714	1.593	1.476	1.313	1.134
150	-	-	3.542	2.798	2.226	2.061	2.055	2.007	1.934	1.831	1.790	1.758	1.609	1.493	1.333	1.154
155	-	-	3.611	2.848	2.267	2.101	2.095	2.048	1.975	1.873	1.833	1.802	1.625	1.510	1.353	1.174
160	-	-	3.680	2.897	2.308	2.141	2.135	2.089	2.015	1.915	1.876	1.846	1.641	1.527	1.373	1.194
165	-	-	3.749	2.947	2.349	2.181	2.175	2.130	2.056	1.958	1.920	1.890	1.657	1.544	1.393	1.213
170	-	-	3.818	2.996	2.390	2.221	2.215	2.171	2.096	2.000	1.963	1.934	1.673	1.561	1.413	1.233
175	-	-	3.886	3.045	2.430	2.261	2.255	2.212	2.137	2.042	2.006	1.978	1.705	1.578	1.433	1.253
180	-	-	3.955	3.095	2.471	2.302	2.296	2.253	2.177	2.084	2.049	2.022	1.757	1.595	1.453	1.273
185	-	-	-	3.144	2.512	2.342	2.336	2.294	2.217	2.126	2.092	2.066	1.808	1.612	1.473	1.292
190	-	-	-	3.194	2.553	2.382	2.376	2.335	2.258	2.169	2.135	2.110	1.860	1.629	1.494	1.312
195	-	-	-	3.243	2.594	2.422	2.416	2.376	2.298	2.211	2.178	2.154	1.912	1.646	1.514	1.332
200	-	-	-	3.292	2.634	2.462	2.456	2.417	2.339	2.253	2.222	2.198	1.964	1.663	1.534	1.352
205	-	-	-	3.342	2.675	2.502	2.496	2.458	2.379	2.295	2.265	2.242	2.016	1.680	1.554	1.371
210	-	-	-	3.391	2.716	2.542	2.536	2.500	2.419	2.338	2.308	2.286	2.068	1.729	1.574	1.391
215	-	-	-	3.441	2.757	2.582	2.577	2.541	2.460	2.380	2.351	2.330	2.120	1.784	1.594	1.411
220	-	-	-	3.490	2.810	2.622	2.617	2.582	2.500	2.422	2.394	2.374	2.172	1.839	1.614	1.431
225	-	-	-	3.539	2.887	2.662	2.657	2.623	2.541	2.464	2.437	2.418	2.223	1.894	1.634	1.450

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 7: 3-Sided Beams
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	-	-	3.589	2.964	2.702	2.697	2.664	2.581	2.506	2.480	2.462	2.275	1.948	1.654	1.470
235	-	-	-	3.638	3.041	2.742	2.737	2.705	2.622	2.549	2.524	2.505	2.327	2.003	1.674	1.490
240	-	-	-	3.688	3.118	2.782	2.777	2.746	2.662	2.591	2.567	2.549	2.379	2.058	1.710	1.510
245	-	-	-	3.737	3.195	2.864	2.854	2.790	2.702	2.633	2.610	2.593	2.431	2.113	1.759	1.529
250	-	-	-	3.786	3.272	2.949	2.939	2.874	2.743	2.675	2.653	2.637	2.483	2.168	1.808	1.549
255	-	-	-	3.836	3.349	3.033	3.024	2.958	2.783	2.718	2.696	2.681	2.535	2.222	1.857	1.569
260	-	-	-	3.885	3.426	3.118	3.108	3.042	2.875	2.760	2.739	2.725	2.587	2.277	1.906	1.589
265	-	-	-	3.934	3.503	3.203	3.193	3.126	2.967	2.824	2.782	2.769	2.639	2.332	1.955	1.608
270	-	-	-	3.984	3.580	3.287	3.277	3.209	3.059	2.919	2.876	2.847	2.690	2.387	2.004	1.628
275	-	-	-	-	3.657	3.372	3.362	3.293	3.151	3.014	2.971	2.942	2.742	2.441	2.053	1.648
280	-	-	-	-	3.734	3.457	3.447	3.377	3.244	3.109	3.066	3.037	2.804	2.496	2.102	1.668
285	-	-	-	-	3.811	3.541	3.531	3.461	3.336	3.204	3.161	3.132	2.906	2.551	2.151	1.696
290	-	-	-	-	3.888	3.626	3.616	3.545	3.428	3.299	3.257	3.228	3.009	2.606	2.199	1.746
295	-	-	-	-	3.965	3.711	3.701	3.629	3.521	3.394	3.352	3.323	3.111	2.661	2.248	1.797
300	-	-	-	-	-	3.795	3.785	3.713	3.613	3.489	3.447	3.418	3.213	2.715	2.297	1.848
305	-	-	-	-	-	3.880	3.870	3.797	3.705	3.584	3.542	3.513	3.315	2.770	2.346	1.899
310	-	-	-	-	-	3.964	3.954	3.881	3.797	3.679	3.637	3.608	3.418	2.879	2.395	1.950
315	-	-	-	-	-	-	-	3.965	3.890	3.774	3.732	3.703	3.520	3.007	2.444	2.001
320	-	-	-	-	-	-	-	-	3.982	3.869	3.828	3.799	3.622	3.135	2.493	2.052
325	-	-	-	-	-	-	-	-	-	3.964	3.923	3.894	3.724	3.263	2.542	2.103
330	-	-	-	-	-	-	-	-	-	-	-	3.989	3.827	3.391	2.591	2.154
335	-	-	-	-	-	-	-	-	-	-	-	-	3.929	3.519	2.640	2.204
340	-	-	-	-	-	-	-	-	-	-	-	-	-	3.647	2.689	2.255
345	-	-	-	-	-	-	-	-	-	-	-	-	-	3.774	2.738	2.306
350	-	-	-	-	-	-	-	-	-	-	-	-	-	3.902	2.794	2.357
355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.983	2.408
360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.172	2.459

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 8: 3-Sided Beams
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	-	-	3.278	2.851	2.400	2.180	2.171	1.919	1.877	1.835	1.823	1.816	1.743	1.599	1.391	1.190
95	-	-	3.377	2.929	2.453	2.221	2.212	1.967	1.921	1.877	1.866	1.858	1.784	1.625	1.405	1.208
100	-	-	3.477	3.006	2.507	2.262	2.253	2.014	1.964	1.920	1.908	1.900	1.826	1.650	1.419	1.226
105	-	-	3.577	3.083	2.561	2.303	2.293	2.062	2.008	1.963	1.950	1.942	1.867	1.675	1.433	1.244
110	-	-	3.677	3.161	2.615	2.344	2.334	2.110	2.051	2.005	1.993	1.984	1.909	1.713	1.447	1.261
115	-	-	3.777	3.238	2.669	2.385	2.374	2.157	2.095	2.048	2.035	2.026	1.950	1.755	1.461	1.279
120	-	-	3.876	3.316	2.722	2.426	2.415	2.205	2.138	2.091	2.078	2.069	1.992	1.797	1.474	1.297
125	-	-	3.976	3.393	2.776	2.467	2.455	2.252	2.182	2.133	2.120	2.111	2.033	1.840	1.488	1.315
130	-	-	-	3.470	2.829	2.509	2.496	2.300	2.225	2.176	2.162	2.153	2.074	1.882	1.502	1.333
135	-	-	-	3.548	2.882	2.550	2.537	2.348	2.269	2.219	2.205	2.195	2.116	1.924	1.516	1.351
140	-	-	-	3.625	2.935	2.591	2.577	2.395	2.313	2.261	2.247	2.237	2.157	1.966	1.530	1.369
145	-	-	-	3.702	2.988	2.632	2.618	2.443	2.356	2.304	2.290	2.280	2.199	2.009	1.544	1.387
150	-	-	-	3.780	3.041	2.673	2.658	2.490	2.400	2.347	2.332	2.322	2.240	2.051	1.557	1.405
155	-	-	-	3.857	3.094	2.714	2.699	2.538	2.443	2.389	2.374	2.364	2.281	2.093	1.571	1.422
160	-	-	-	3.934	3.146	2.755	2.739	2.586	2.487	2.432	2.417	2.406	2.323	2.135	1.585	1.440
165	-	-	-	-	3.199	2.802	2.780	2.633	2.530	2.475	2.459	2.448	2.364	2.178	1.599	1.458
170	-	-	-	-	3.252	2.860	2.838	2.681	2.574	2.517	2.502	2.490	2.406	2.220	1.613	1.476
175	-	-	-	-	3.305	2.919	2.897	2.728	2.618	2.560	2.544	2.533	2.447	2.262	1.627	1.494
180	-	-	-	-	3.358	2.977	2.956	2.776	2.661	2.603	2.586	2.575	2.489	2.304	1.641	1.512
185	-	-	-	-	3.411	3.035	3.016	2.840	2.705	2.645	2.629	2.617	2.530	2.347	1.654	1.530
190	-	-	-	-	3.464	3.094	3.075	2.908	2.748	2.688	2.671	2.659	2.571	2.389	1.668	1.548
195	-	-	-	-	3.517	3.152	3.135	2.976	2.798	2.731	2.714	2.701	2.613	2.431	1.682	1.566
200	-	-	-	-	3.569	3.211	3.194	3.044	2.874	2.774	2.756	2.743	2.654	2.473	1.751	1.583
205	-	-	-	-	3.622	3.269	3.253	3.111	2.951	2.843	2.811	2.787	2.696	2.516	1.820	1.601
210	-	-	-	-	3.675	3.328	3.313	3.179	3.027	2.921	2.889	2.866	2.737	2.558	1.890	1.619
215	-	-	-	-	3.728	3.386	3.372	3.247	3.103	2.999	2.968	2.945	2.778	2.600	1.959	1.637
220	-	-	-	-	3.781	3.445	3.432	3.315	3.180	3.078	3.047	3.024	2.855	2.642	2.028	1.655
225	-	-	-	-	3.834	3.503	3.491	3.382	3.256	3.156	3.126	3.103	2.937	2.685	2.097	1.673

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 8: 3-Sided Beams
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	550°C	575°C	576°C	583°C	590°C	600°C	603°C	605°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	-	-	-	3.887	3.561	3.550	3.450	3.333	3.234	3.204	3.183	3.019	2.727	2.166	1.707
235	-	-	-	-	3.940	3.620	3.610	3.518	3.409	3.312	3.283	3.262	3.101	2.769	2.236	1.758
240	-	-	-	-	-	3.678	3.669	3.586	3.485	3.390	3.362	3.341	3.182	2.841	2.305	1.809
245	-	-	-	-	-	3.737	3.728	3.653	3.562	3.469	3.440	3.420	3.264	2.929	2.374	1.860
250	-	-	-	-	-	3.795	3.788	3.721	3.638	3.547	3.519	3.499	3.346	3.017	2.443	1.912
255	-	-	-	-	-	3.854	3.847	3.789	3.715	3.625	3.598	3.578	3.428	3.105	2.512	1.963
260	-	-	-	-	-	3.912	3.907	3.857	3.791	3.703	3.677	3.657	3.510	3.193	2.581	2.014
265	-	-	-	-	-	3.971	3.966	3.924	3.867	3.781	3.755	3.736	3.592	3.281	2.651	2.065
270	-	-	-	-	-	-	-	-	3.944	3.859	3.834	3.816	3.674	3.369	2.720	2.116
275	-	-	-	-	-	-	-	-	-	3.938	3.913	3.895	3.755	3.457	2.792	2.167
280	-	-	-	-	-	-	-	-	-	-	3.991	3.974	3.837	3.545	2.899	2.218
285	-	-	-	-	-	-	-	-	-	-	-	-	3.919	3.633	3.005	2.270
290	-	-	-	-	-	-	-	-	-	-	-	-	-	3.721	3.112	2.321
295	-	-	-	-	-	-	-	-	-	-	-	-	-	3.809	3.219	2.372
300	-	-	-	-	-	-	-	-	-	-	-	-	-	3.897	3.326	2.423
305	-	-	-	-	-	-	-	-	-	-	-	-	-	3.985	3.433	2.474
310	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.540	2.525
315	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.647	2.576
320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.754	2.628
325	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.861	2.679
330	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.968	2.730
335	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.781
340	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.085
345	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.406
350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.727
355	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

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Table 9: 4-Sided Columns
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
195	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
200	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
205	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
210	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
215	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
220	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
225	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 9: 4-Sided Columns
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
235	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
240	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
245	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
250	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
255	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
260	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
265	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
270	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
275	0.484	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
280	0.495	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
285	0.506	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
290	0.517	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
295	0.527	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
300	0.538	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
305	0.549	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
310	0.560	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
315	0.571	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
320	0.582	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
325	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
330	0.604	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
335	0.615	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
340	0.626	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
345	0.637	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
350	0.648	0.463	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
355	0.659	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
360	0.670	0.482	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 10: 4-Sided Columns
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	0.569	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	0.587	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	0.606	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	0.624	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	0.643	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	0.661	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	0.679	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	0.698	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	0.716	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	0.735	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	0.753	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	0.772	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	0.790	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	0.808	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	0.827	0.459	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	0.845	0.479	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	0.864	0.498	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	0.882	0.518	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	0.900	0.537	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	0.919	0.557	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
195	0.937	0.576	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
200	0.956	0.596	0.479	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
205	0.974	0.615	0.496	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
210	0.992	0.635	0.513	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
215	1.011	0.654	0.530	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
220	1.029	0.674	0.546	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
225	1.048	0.693	0.563	0.461	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

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Table 10: 4-Sided Columns
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	1.066	0.713	0.580	0.475	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
235	1.084	0.732	0.597	0.490	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
240	1.103	0.752	0.614	0.504	0.465	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
245	1.121	0.771	0.630	0.519	0.479	0.460	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
250	1.140	0.791	0.647	0.533	0.493	0.473	0.455	0.454	0.454	0.454	0.454	0.454	0.454	0.454
255	1.158	0.810	0.664	0.548	0.506	0.486	0.468	0.454	0.454	0.454	0.454	0.454	0.454	0.454
260	1.176	0.830	0.681	0.562	0.520	0.500	0.481	0.460	0.454	0.454	0.454	0.454	0.454	0.454
265	1.195	0.849	0.698	0.577	0.534	0.513	0.494	0.473	0.454	0.454	0.454	0.454	0.454	0.454
270	1.213	0.869	0.714	0.591	0.547	0.526	0.507	0.485	0.461	0.454	0.454	0.454	0.454	0.454
275	1.232	0.888	0.731	0.606	0.561	0.539	0.520	0.498	0.473	0.454	0.454	0.454	0.454	0.454
280	1.250	0.908	0.748	0.620	0.575	0.553	0.533	0.510	0.485	0.454	0.454	0.454	0.454	0.454
285	1.268	0.927	0.765	0.635	0.588	0.566	0.546	0.523	0.497	0.454	0.454	0.454	0.454	0.454
290	1.287	0.947	0.782	0.650	0.602	0.579	0.559	0.535	0.509	0.454	0.454	0.454	0.454	0.454
295	1.305	0.966	0.799	0.664	0.616	0.593	0.571	0.548	0.521	0.454	0.454	0.454	0.454	0.454
300	1.324	0.986	0.815	0.679	0.629	0.606	0.584	0.560	0.533	0.454	0.454	0.454	0.454	0.454
305	1.342	1.005	0.832	0.693	0.643	0.619	0.597	0.573	0.545	0.463	0.454	0.454	0.454	0.454
310	1.361	1.025	0.849	0.708	0.657	0.632	0.610	0.585	0.557	0.473	0.454	0.454	0.454	0.454
315	1.379	1.044	0.866	0.722	0.670	0.646	0.623	0.598	0.569	0.484	0.454	0.454	0.454	0.454
320	1.397	1.064	0.883	0.737	0.684	0.659	0.636	0.610	0.581	0.495	0.454	0.454	0.454	0.454
325	1.416	1.083	0.899	0.751	0.698	0.672	0.649	0.622	0.593	0.505	0.460	0.454	0.454	0.454
330	1.434	1.103	0.916	0.766	0.711	0.685	0.662	0.635	0.605	0.516	0.470	0.454	0.454	0.454
335	1.453	1.122	0.933	0.780	0.725	0.699	0.675	0.647	0.617	0.526	0.480	0.454	0.454	0.454
340	1.471	1.142	0.950	0.795	0.739	0.712	0.688	0.660	0.629	0.537	0.490	0.454	0.454	0.454
345	1.489	1.161	0.967	0.809	0.752	0.725	0.701	0.672	0.641	0.548	0.500	0.454	0.454	0.454
350	1.508	1.181	0.983	0.824	0.766	0.738	0.713	0.685	0.653	0.558	0.510	0.454	0.454	0.454
355	1.526	1.200	1.000	0.838	0.780	0.752	0.726	0.697	0.665	0.569	0.520	0.454	0.454	0.454
360	1.545	1.220	1.017	0.853	0.793	0.765	0.739	0.710	0.677	0.580	0.530	0.458	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table II: 4-Sided Columns
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	1.129	0.817	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	1.150	0.838	0.613	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	1.172	0.859	0.633	0.457	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	1.193	0.879	0.653	0.476	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	1.215	0.900	0.673	0.496	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	1.236	0.921	0.693	0.515	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	1.258	0.942	0.713	0.534	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	1.280	0.963	0.733	0.554	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	1.301	0.983	0.753	0.573	0.470	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	1.323	1.004	0.773	0.593	0.490	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	1.344	1.025	0.793	0.612	0.510	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	1.366	1.046	0.813	0.632	0.529	0.466	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	1.387	1.067	0.833	0.651	0.549	0.486	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	1.409	1.087	0.853	0.670	0.569	0.506	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	1.430	1.108	0.873	0.690	0.588	0.526	0.460	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	1.452	1.129	0.892	0.709	0.608	0.546	0.480	0.462	0.454	0.454	0.454	0.454	0.454	0.454
170	1.474	1.150	0.912	0.729	0.628	0.566	0.501	0.482	0.461	0.454	0.454	0.454	0.454	0.454
175	1.495	1.170	0.932	0.748	0.647	0.586	0.521	0.502	0.480	0.454	0.454	0.454	0.454	0.454
180	1.517	1.191	0.952	0.768	0.667	0.606	0.541	0.521	0.499	0.454	0.454	0.454	0.454	0.454
185	1.538	1.212	0.972	0.787	0.687	0.625	0.562	0.541	0.518	0.454	0.454	0.454	0.454	0.454
190	1.560	1.233	0.992	0.807	0.706	0.645	0.582	0.561	0.538	0.469	0.454	0.454	0.454	0.454
195	1.581	1.254	1.012	0.826	0.726	0.665	0.602	0.581	0.557	0.487	0.454	0.454	0.454	0.454
200	1.603	1.274	1.032	0.845	0.746	0.685	0.623	0.600	0.576	0.504	0.468	0.454	0.454	0.454
205	1.624	1.295	1.052	0.865	0.765	0.705	0.643	0.620	0.595	0.521	0.484	0.454	0.454	0.454
210	1.646	1.316	1.072	0.884	0.785	0.725	0.663	0.640	0.614	0.538	0.501	0.454	0.454	0.454
215	1.668	1.337	1.092	0.904	0.805	0.745	0.684	0.660	0.633	0.556	0.517	0.464	0.454	0.454
220	1.693	1.358	1.112	0.923	0.824	0.765	0.704	0.679	0.652	0.573	0.533	0.479	0.454	0.454
225	1.728	1.378	1.132	0.943	0.844	0.785	0.724	0.699	0.671	0.590	0.549	0.494	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table II: 4-Sided Columns
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	1.762	1.399	1.152	0.962	0.864	0.805	0.745	0.719	0.690	0.607	0.566	0.508	0.454	0.454
235	1.797	1.420	1.172	0.981	0.883	0.825	0.765	0.739	0.709	0.624	0.582	0.523	0.454	0.454
240	1.831	1.441	1.192	1.001	0.903	0.845	0.785	0.758	0.728	0.642	0.598	0.538	0.454	0.454
245	1.866	1.462	1.212	1.020	0.923	0.865	0.806	0.778	0.747	0.659	0.615	0.553	0.454	0.454
250	1.900	1.482	1.232	1.040	0.942	0.885	0.826	0.798	0.766	0.676	0.631	0.568	0.467	0.454
255	1.935	1.503	1.252	1.059	0.962	0.905	0.846	0.817	0.785	0.693	0.647	0.583	0.479	0.454
260	1.969	1.524	1.272	1.079	0.982	0.925	0.866	0.837	0.804	0.711	0.663	0.598	0.492	0.454
265	2.004	1.545	1.292	1.098	1.001	0.945	0.887	0.857	0.823	0.728	0.680	0.612	0.504	0.454
270	2.038	1.565	1.311	1.117	1.021	0.965	0.907	0.877	0.842	0.745	0.696	0.627	0.517	0.454
275	2.073	1.586	1.331	1.137	1.041	0.985	0.927	0.896	0.861	0.762	0.712	0.642	0.529	0.454
280	2.107	1.607	1.351	1.156	1.060	1.005	0.948	0.916	0.881	0.780	0.729	0.657	0.542	0.454
285	2.142	1.628	1.371	1.176	1.080	1.025	0.968	0.936	0.900	0.797	0.745	0.672	0.554	0.454
290	2.176	1.649	1.391	1.195	1.099	1.045	0.988	0.956	0.919	0.814	0.761	0.687	0.567	0.454
295	2.211	1.669	1.411	1.215	1.119	1.065	1.009	0.975	0.938	0.831	0.777	0.701	0.579	0.454
300	2.245	1.697	1.431	1.234	1.139	1.084	1.029	0.995	0.957	0.849	0.794	0.716	0.592	0.454
305	2.280	1.734	1.451	1.253	1.158	1.104	1.049	1.015	0.976	0.866	0.810	0.731	0.604	0.462
310	2.314	1.771	1.471	1.273	1.178	1.124	1.070	1.035	0.995	0.883	0.826	0.746	0.617	0.472
315	2.349	1.808	1.491	1.292	1.198	1.144	1.090	1.054	1.014	0.900	0.842	0.761	0.629	0.481
320	2.383	1.845	1.511	1.312	1.217	1.164	1.110	1.074	1.033	0.917	0.859	0.776	0.642	0.491
325	2.418	1.882	1.531	1.331	1.237	1.184	1.131	1.094	1.052	0.935	0.875	0.791	0.654	0.501
330	2.452	1.919	1.551	1.351	1.257	1.204	1.151	1.113	1.071	0.952	0.891	0.805	0.667	0.511
335	2.487	1.956	1.571	1.370	1.276	1.224	1.171	1.133	1.090	0.969	0.908	0.820	0.679	0.521
340	2.521	1.994	1.591	1.389	1.296	1.244	1.192	1.153	1.109	0.986	0.924	0.835	0.692	0.531
345	2.556	2.031	1.611	1.409	1.316	1.264	1.212	1.173	1.128	1.004	0.940	0.850	0.704	0.541
350	2.590	2.068	1.631	1.428	1.335	1.284	1.232	1.192	1.147	1.021	0.956	0.865	0.717	0.551
355	2.625	2.105	1.651	1.448	1.355	1.304	1.253	1.212	1.166	1.038	0.973	0.880	0.729	0.561
360	2.659	2.142	1.671	1.467	1.375	1.324	1.273	1.232	1.185	1.055	0.989	0.895	0.742	0.570

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 12: 4-Sided Columns
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	1.695	1.329	1.045	0.822	0.743	0.652	0.633	0.612	0.582	0.454	0.454	0.454	0.454	0.454
95	1.723	1.349	1.067	0.844	0.763	0.674	0.655	0.632	0.603	0.510	0.454	0.454	0.454	0.454
100	1.751	1.369	1.089	0.865	0.784	0.695	0.676	0.653	0.623	0.530	0.469	0.454	0.454	0.454
105	1.780	1.389	1.111	0.887	0.804	0.717	0.697	0.674	0.644	0.550	0.488	0.454	0.454	0.454
110	1.808	1.409	1.133	0.908	0.825	0.738	0.718	0.695	0.664	0.569	0.508	0.454	0.454	0.454
115	1.836	1.429	1.156	0.930	0.845	0.759	0.739	0.716	0.685	0.589	0.527	0.454	0.454	0.454
120	1.865	1.448	1.178	0.951	0.866	0.781	0.760	0.737	0.705	0.609	0.547	0.454	0.454	0.454
125	1.893	1.468	1.200	0.973	0.886	0.802	0.782	0.758	0.726	0.629	0.566	0.454	0.454	0.454
130	1.921	1.488	1.222	0.994	0.907	0.824	0.803	0.778	0.746	0.648	0.586	0.464	0.454	0.454
135	1.950	1.508	1.244	1.015	0.927	0.845	0.824	0.799	0.767	0.668	0.605	0.484	0.454	0.454
140	1.978	1.528	1.267	1.037	0.948	0.867	0.845	0.820	0.788	0.688	0.625	0.503	0.454	0.454
145	2.006	1.548	1.289	1.058	0.968	0.888	0.866	0.841	0.808	0.708	0.644	0.522	0.454	0.454
150	2.034	1.568	1.311	1.080	0.989	0.910	0.888	0.862	0.829	0.727	0.663	0.542	0.454	0.454
155	2.063	1.588	1.333	1.101	1.009	0.931	0.909	0.883	0.849	0.747	0.683	0.561	0.454	0.454
160	2.091	1.608	1.355	1.123	1.030	0.953	0.930	0.903	0.870	0.767	0.702	0.581	0.454	0.454
165	2.119	1.628	1.378	1.144	1.050	0.974	0.951	0.924	0.890	0.787	0.722	0.600	0.454	0.454
170	2.148	1.647	1.400	1.166	1.071	0.995	0.972	0.945	0.911	0.806	0.741	0.619	0.458	0.454
175	2.176	1.667	1.422	1.187	1.091	1.017	0.993	0.966	0.931	0.826	0.761	0.639	0.476	0.454
180	2.204	1.691	1.444	1.209	1.111	1.038	1.015	0.987	0.952	0.846	0.780	0.658	0.494	0.454
185	2.233	1.727	1.466	1.230	1.132	1.060	1.036	1.008	0.972	0.866	0.800	0.678	0.512	0.454
190	2.261	1.763	1.489	1.252	1.152	1.081	1.057	1.029	0.993	0.885	0.819	0.697	0.530	0.454
195	2.289	1.799	1.511	1.273	1.173	1.103	1.078	1.049	1.014	0.905	0.839	0.716	0.548	0.454
200	2.318	1.835	1.533	1.295	1.193	1.124	1.099	1.070	1.034	0.925	0.858	0.736	0.566	0.460
205	2.346	1.871	1.555	1.316	1.214	1.146	1.121	1.091	1.055	0.945	0.878	0.755	0.584	0.475
210	2.374	1.907	1.577	1.337	1.234	1.167	1.142	1.112	1.075	0.964	0.897	0.774	0.602	0.490
215	2.402	1.943	1.600	1.359	1.255	1.189	1.163	1.133	1.096	0.984	0.917	0.794	0.620	0.505
220	2.431	1.979	1.622	1.380	1.275	1.210	1.184	1.154	1.116	1.004	0.936	0.813	0.639	0.520
225	2.459	2.015	1.644	1.402	1.296	1.231	1.205	1.175	1.137	1.024	0.956	0.833	0.657	0.535

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 12: 4-Sided Columns
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	2.487	2.051	1.666	1.423	1.316	1.253	1.226	1.195	1.157	1.043	0.975	0.852	0.675	0.550
235	2.516	2.087	1.693	1.445	1.337	1.274	1.248	1.216	1.178	1.063	0.994	0.871	0.693	0.565
240	2.544	2.122	1.732	1.466	1.357	1.296	1.269	1.237	1.199	1.083	1.014	0.891	0.711	0.580
245	2.572	2.158	1.770	1.488	1.378	1.317	1.290	1.258	1.219	1.103	1.033	0.910	0.729	0.595
250	2.601	2.194	1.809	1.509	1.398	1.339	1.311	1.279	1.240	1.122	1.053	0.930	0.747	0.610
255	2.629	2.230	1.848	1.531	1.419	1.360	1.332	1.300	1.260	1.142	1.072	0.949	0.765	0.625
260	2.657	2.266	1.886	1.552	1.439	1.382	1.354	1.321	1.281	1.162	1.092	0.968	0.783	0.640
265	2.686	2.302	1.925	1.574	1.460	1.403	1.375	1.341	1.301	1.182	1.111	0.988	0.801	0.655
270	2.714	2.338	1.964	1.595	1.480	1.424	1.396	1.362	1.322	1.201	1.131	1.007	0.820	0.671
275	2.742	2.374	2.003	1.617	1.501	1.446	1.417	1.383	1.342	1.221	1.150	1.027	0.838	0.686
280	2.770	2.410	2.041	1.638	1.521	1.467	1.438	1.404	1.363	1.241	1.170	1.046	0.856	0.701
285	2.810	2.446	2.080	1.659	1.542	1.489	1.459	1.425	1.383	1.261	1.189	1.065	0.874	0.716
290	2.859	2.482	2.119	1.681	1.562	1.510	1.481	1.446	1.404	1.280	1.209	1.085	0.892	0.731
295	2.908	2.518	2.157	1.722	1.583	1.532	1.502	1.466	1.425	1.300	1.228	1.104	0.910	0.746
300	2.957	2.554	2.196	1.763	1.603	1.553	1.523	1.487	1.445	1.320	1.248	1.124	0.928	0.761
305	3.006	2.590	2.235	1.805	1.624	1.575	1.544	1.508	1.466	1.340	1.267	1.143	0.946	0.776
310	3.055	2.625	2.273	1.846	1.644	1.596	1.565	1.529	1.486	1.359	1.287	1.162	0.964	0.791
315	3.104	2.661	2.312	1.888	1.665	1.618	1.587	1.550	1.507	1.379	1.306	1.182	0.982	0.806
320	3.153	2.697	2.351	1.930	1.689	1.639	1.608	1.571	1.527	1.399	1.326	1.201	1.001	0.821
325	3.203	2.733	2.389	1.971	1.734	1.660	1.629	1.592	1.548	1.419	1.345	1.221	1.019	0.836
330	3.252	2.769	2.428	2.013	1.778	1.682	1.650	1.612	1.568	1.438	1.364	1.240	1.037	0.851
335	3.301	2.819	2.467	2.055	1.823	1.727	1.671	1.633	1.589	1.458	1.384	1.259	1.055	0.866
340	3.350	2.878	2.505	2.096	1.868	1.772	1.704	1.654	1.609	1.478	1.403	1.279	1.073	0.881
345	3.399	2.937	2.544	2.138	1.913	1.817	1.748	1.675	1.630	1.498	1.423	1.298	1.091	0.896
350	3.448	2.997	2.583	2.180	1.957	1.862	1.793	1.711	1.651	1.517	1.442	1.318	1.109	0.911
355	3.497	3.056	2.621	2.221	2.002	1.907	1.837	1.755	1.671	1.537	1.462	1.337	1.127	0.926
360	3.546	3.115	2.660	2.263	2.047	1.952	1.881	1.798	1.702	1.557	1.481	1.356	1.145	0.941

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 13: 4-Sided Columns
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	2.441	1.777	1.488	1.228	1.132	1.088	1.048	1.003	0.949	0.811	0.745	0.621	0.454	0.454
95	2.495	1.811	1.514	1.248	1.153	1.110	1.070	1.025	0.971	0.832	0.765	0.641	0.546	0.454
100	2.550	1.846	1.541	1.267	1.174	1.131	1.092	1.047	0.994	0.854	0.786	0.662	0.565	0.454
105	2.604	1.880	1.567	1.287	1.195	1.153	1.114	1.069	1.016	0.875	0.806	0.683	0.585	0.454
110	2.658	1.914	1.593	1.306	1.216	1.174	1.135	1.091	1.038	0.896	0.827	0.704	0.604	0.454
115	2.713	1.948	1.620	1.325	1.237	1.195	1.157	1.113	1.061	0.918	0.847	0.725	0.624	0.454
120	2.767	1.982	1.646	1.345	1.258	1.217	1.179	1.136	1.083	0.939	0.868	0.746	0.643	0.460
125	2.807	2.016	1.673	1.364	1.279	1.238	1.201	1.158	1.106	0.960	0.888	0.767	0.662	0.478
130	2.840	2.050	1.705	1.384	1.300	1.260	1.223	1.180	1.128	0.981	0.909	0.788	0.682	0.497
135	2.873	2.084	1.739	1.403	1.321	1.281	1.245	1.202	1.151	1.003	0.929	0.809	0.701	0.515
140	2.906	2.118	1.773	1.423	1.342	1.303	1.267	1.224	1.173	1.024	0.950	0.829	0.721	0.533
145	2.939	2.152	1.808	1.442	1.363	1.324	1.289	1.246	1.195	1.045	0.970	0.850	0.740	0.552
150	2.971	2.187	1.842	1.461	1.384	1.346	1.311	1.269	1.218	1.067	0.991	0.871	0.759	0.570
155	3.004	2.221	1.876	1.481	1.405	1.367	1.332	1.291	1.240	1.088	1.012	0.892	0.779	0.589
160	3.037	2.255	1.911	1.500	1.426	1.389	1.354	1.313	1.263	1.109	1.032	0.913	0.798	0.607
165	3.070	2.289	1.945	1.520	1.447	1.410	1.376	1.335	1.285	1.131	1.053	0.934	0.817	0.626
170	3.103	2.323	1.980	1.539	1.468	1.431	1.398	1.357	1.308	1.152	1.073	0.955	0.837	0.644
175	3.136	2.357	2.014	1.559	1.489	1.453	1.420	1.379	1.330	1.173	1.094	0.976	0.856	0.662
180	3.169	2.391	2.048	1.578	1.510	1.474	1.442	1.402	1.352	1.195	1.114	0.996	0.876	0.681
185	3.202	2.425	2.083	1.597	1.531	1.496	1.464	1.424	1.375	1.216	1.135	1.017	0.895	0.699
190	3.235	2.459	2.117	1.617	1.552	1.517	1.486	1.446	1.397	1.237	1.155	1.038	0.914	0.718
195	3.268	2.493	2.151	1.636	1.573	1.539	1.508	1.468	1.420	1.258	1.176	1.059	0.934	0.736
200	3.301	2.528	2.186	1.656	1.594	1.560	1.529	1.490	1.442	1.280	1.196	1.080	0.953	0.755
205	3.334	2.562	2.220	1.675	1.615	1.582	1.551	1.512	1.465	1.301	1.217	1.101	0.972	0.773
210	3.367	2.596	2.255	1.710	1.636	1.603	1.573	1.535	1.487	1.322	1.237	1.122	0.992	0.791
215	3.400	2.630	2.289	1.753	1.657	1.625	1.595	1.557	1.510	1.344	1.258	1.143	1.011	0.810
220	3.433	2.664	2.323	1.796	1.678	1.646	1.617	1.579	1.532	1.365	1.278	1.164	1.031	0.828
225	3.466	2.698	2.358	1.839	1.716	1.667	1.639	1.601	1.554	1.386	1.299	1.184	1.050	0.847

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 13: 4-Sided Columns
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	3.499	2.732	2.392	1.882	1.759	1.696	1.661	1.623	1.577	1.408	1.319	1.205	1.069	0.865
235	3.532	2.766	2.427	1.925	1.802	1.739	1.683	1.645	1.599	1.429	1.340	1.226	1.089	0.884
240	3.565	2.810	2.461	1.968	1.845	1.781	1.726	1.668	1.622	1.450	1.360	1.247	1.108	0.902
245	3.598	2.865	2.495	2.012	1.888	1.824	1.768	1.697	1.644	1.472	1.381	1.268	1.128	0.920
250	3.631	2.920	2.530	2.055	1.930	1.867	1.811	1.739	1.667	1.493	1.401	1.289	1.147	0.939
255	3.664	2.975	2.564	2.098	1.973	1.909	1.853	1.782	1.695	1.514	1.422	1.310	1.166	0.957
260	3.697	3.029	2.598	2.141	2.016	1.952	1.896	1.824	1.738	1.536	1.442	1.331	1.186	0.976
265	3.730	3.084	2.633	2.184	2.059	1.995	1.938	1.867	1.780	1.557	1.463	1.351	1.205	0.994
270	3.763	3.139	2.667	2.227	2.101	2.037	1.981	1.909	1.823	1.578	1.483	1.372	1.224	1.013
275	3.796	3.194	2.702	2.270	2.144	2.080	2.024	1.952	1.865	1.599	1.504	1.393	1.244	1.031
280	3.828	3.248	2.736	2.313	2.187	2.123	2.066	1.994	1.908	1.621	1.524	1.414	1.263	1.049
285	3.861	3.303	2.770	2.356	2.230	2.166	2.109	2.037	1.950	1.642	1.545	1.435	1.283	1.068
290	3.910	3.358	2.828	2.399	2.272	2.208	2.151	2.079	1.993	1.663	1.565	1.456	1.302	1.086
295	4.165	3.413	2.900	2.443	2.315	2.251	2.194	2.122	2.035	1.688	1.586	1.477	1.321	1.105
300	4.419	3.468	2.973	2.486	2.358	2.294	2.236	2.164	2.078	1.734	1.607	1.498	1.341	1.123
305	4.674	3.522	3.045	2.529	2.401	2.336	2.279	2.207	2.120	1.780	1.627	1.518	1.360	1.142
310	4.928	3.577	3.117	2.572	2.444	2.379	2.321	2.249	2.163	1.827	1.648	1.539	1.379	1.160
315	5.183	3.632	3.190	2.615	2.486	2.422	2.364	2.292	2.205	1.873	1.668	1.560	1.399	1.178
320	-	3.687	3.262	2.658	2.529	2.464	2.406	2.334	2.248	1.919	1.698	1.581	1.418	1.197
325	-	3.741	3.335	2.701	2.572	2.507	2.449	2.377	2.290	1.965	1.747	1.602	1.438	1.215
330	-	3.796	3.407	2.744	2.615	2.550	2.491	2.419	2.332	2.012	1.796	1.623	1.457	1.234
335	-	3.851	3.479	2.792	2.657	2.593	2.534	2.462	2.375	2.058	1.845	1.644	1.476	1.252
340	-	3.934	3.552	2.889	2.700	2.635	2.577	2.504	2.417	2.104	1.893	1.665	1.496	1.271
345	-	4.103	3.624	2.987	2.743	2.678	2.619	2.547	2.460	2.151	1.942	1.690	1.515	1.289
350	-	4.271	3.697	3.084	2.788	2.721	2.662	2.589	2.502	2.197	1.991	1.738	1.535	1.307
355	-	4.439	3.769	3.182	2.891	2.763	2.704	2.632	2.545	2.243	2.040	1.786	1.554	1.326
360	-	4.608	3.841	3.280	2.993	2.838	2.747	2.674	2.587	2.289	2.089	1.834	1.573	1.344

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 14: 4-Sided Columns
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	3.126	2.566	2.068	1.620	1.518	1.471	1.428	1.379	1.318	1.156	1.078	0.969	0.801	0.621
95	3.210	2.631	2.106	1.652	1.544	1.493	1.448	1.396	1.335	1.176	1.099	0.990	0.822	0.641
100	3.294	2.697	2.145	1.684	1.569	1.516	1.468	1.412	1.352	1.196	1.119	1.010	0.842	0.660
105	3.378	2.762	2.183	1.719	1.594	1.538	1.488	1.429	1.369	1.216	1.140	1.031	0.862	0.680
110	3.461	2.813	2.221	1.754	1.620	1.561	1.507	1.446	1.386	1.237	1.161	1.052	0.882	0.700
115	3.545	2.857	2.259	1.789	1.645	1.583	1.527	1.462	1.403	1.257	1.182	1.073	0.903	0.719
120	3.629	2.901	2.297	1.825	1.671	1.605	1.547	1.479	1.420	1.277	1.203	1.094	0.923	0.739
125	3.713	2.945	2.336	1.860	1.703	1.628	1.567	1.495	1.436	1.297	1.224	1.115	0.943	0.759
130	3.797	2.989	2.374	1.895	1.741	1.650	1.586	1.512	1.453	1.317	1.244	1.136	0.964	0.778
135	3.880	3.033	2.412	1.930	1.778	1.673	1.606	1.529	1.470	1.337	1.265	1.157	0.984	0.798
140	3.973	3.077	2.450	1.966	1.816	1.705	1.626	1.545	1.487	1.357	1.286	1.178	1.004	0.818
145	4.067	3.121	2.488	2.001	1.853	1.744	1.646	1.562	1.504	1.377	1.307	1.199	1.024	0.837
150	4.162	3.165	2.527	2.036	1.891	1.783	1.665	1.578	1.521	1.397	1.328	1.220	1.045	0.857
155	4.256	3.209	2.565	2.071	1.928	1.822	1.689	1.595	1.537	1.417	1.348	1.241	1.065	0.877
160	4.351	3.253	2.603	2.107	1.966	1.862	1.731	1.612	1.554	1.437	1.369	1.262	1.085	0.896
165	4.445	3.296	2.641	2.142	2.003	1.901	1.773	1.628	1.571	1.458	1.390	1.282	1.105	0.916
170	4.539	3.340	2.679	2.177	2.041	1.940	1.816	1.645	1.588	1.478	1.411	1.303	1.126	0.936
175	4.634	3.384	2.718	2.212	2.078	1.979	1.858	1.661	1.605	1.498	1.432	1.324	1.146	0.955
180	4.728	3.428	2.756	2.248	2.116	2.018	1.900	1.678	1.622	1.518	1.453	1.345	1.166	0.975
185	4.822	3.472	2.798	2.283	2.153	2.057	1.942	1.719	1.638	1.538	1.473	1.366	1.187	0.995
190	4.917	3.516	2.851	2.318	2.191	2.097	1.985	1.768	1.655	1.558	1.494	1.387	1.207	1.014
195	5.011	3.560	2.905	2.353	2.228	2.136	2.027	1.817	1.672	1.578	1.515	1.408	1.227	1.034
200	5.105	3.604	2.958	2.389	2.266	2.175	2.069	1.866	1.703	1.598	1.536	1.429	1.247	1.054
205	5.200	3.648	3.011	2.424	2.303	2.214	2.112	1.915	1.753	1.618	1.557	1.450	1.268	1.073
210	5.294	3.692	3.064	2.459	2.341	2.253	2.154	1.963	1.804	1.638	1.577	1.471	1.288	1.093
215	5.388	3.736	3.118	2.494	2.378	2.292	2.196	2.012	1.855	1.659	1.598	1.492	1.308	1.112
220	5.483	3.780	3.171	2.530	2.416	2.331	2.238	2.061	1.905	1.679	1.619	1.513	1.328	1.132
225	-	3.823	3.224	2.565	2.453	2.371	2.281	2.110	1.956	1.721	1.640	1.534	1.349	1.152

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 14: 4-Sided Columns
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	3.867	3.277	2.600	2.491	2.410	2.323	2.159	2.006	1.767	1.661	1.555	1.369	1.171
235	-	3.943	3.331	2.635	2.528	2.449	2.365	2.208	2.057	1.813	1.682	1.575	1.389	1.191
240	-	4.061	3.384	2.671	2.566	2.488	2.407	2.256	2.107	1.860	1.728	1.596	1.410	1.211
245	-	4.178	3.437	2.706	2.603	2.527	2.450	2.305	2.158	1.906	1.774	1.617	1.430	1.230
250	-	4.295	3.490	2.741	2.641	2.566	2.492	2.354	2.209	1.952	1.821	1.638	1.450	1.250
255	-	4.413	3.544	2.776	2.678	2.606	2.534	2.403	2.259	1.999	1.867	1.659	1.470	1.270
260	-	4.530	3.597	2.850	2.716	2.645	2.577	2.452	2.310	2.045	1.914	1.680	1.491	1.289
265	-	4.647	3.650	2.934	2.753	2.684	2.619	2.501	2.360	2.091	1.961	1.726	1.511	1.309
270	-	4.764	3.703	3.017	2.800	2.723	2.661	2.549	2.411	2.138	2.007	1.774	1.531	1.329
275	-	4.882	3.757	3.101	2.885	2.762	2.703	2.598	2.462	2.184	2.054	1.822	1.551	1.348
280	-	4.999	3.810	3.185	2.971	2.824	2.746	2.647	2.512	2.230	2.100	1.870	1.572	1.368
285	-	5.116	3.863	3.269	3.056	2.914	2.793	2.696	2.563	2.277	2.147	1.919	1.592	1.388
290	-	5.234	3.939	3.353	3.142	3.004	2.887	2.745	2.613	2.323	2.194	1.967	1.612	1.407
295	-	5.351	4.040	3.436	3.227	3.095	2.980	2.804	2.664	2.369	2.240	2.015	1.633	1.427
300	-	5.468	4.142	3.520	3.313	3.185	3.074	2.903	2.714	2.416	2.287	2.063	1.653	1.447
305	-	-	4.244	3.604	3.398	3.275	3.168	3.003	2.765	2.462	2.333	2.111	1.673	1.466
310	-	-	4.346	3.688	3.484	3.365	3.262	3.102	2.853	2.508	2.380	2.160	1.710	1.486
315	-	-	4.448	3.772	3.569	3.455	3.355	3.202	2.962	2.555	2.427	2.208	1.761	1.506
320	-	-	4.549	3.855	3.655	3.545	3.449	3.302	3.072	2.601	2.473	2.256	1.811	1.525
325	-	-	4.651	3.951	3.740	3.635	3.543	3.401	3.182	2.647	2.520	2.304	1.861	1.545
330	-	-	4.753	4.054	3.826	3.725	3.637	3.501	3.292	2.694	2.566	2.352	1.912	1.565
335	-	-	4.855	4.158	3.915	3.815	3.731	3.600	3.402	2.740	2.613	2.401	1.962	1.584
340	-	-	4.957	4.262	4.018	3.907	3.824	3.700	3.511	2.791	2.660	2.449	2.012	1.604
345	-	-	5.059	4.366	4.121	4.009	3.920	3.800	3.621	2.929	2.706	2.497	2.063	1.624
350	-	-	5.160	4.469	4.224	4.110	4.020	3.899	3.731	3.067	2.753	2.545	2.113	1.643
355	-	-	5.262	4.573	4.327	4.212	4.120	3.998	3.841	3.205	2.830	2.593	2.163	1.663
360	-	-	5.364	4.677	4.430	4.314	4.220	4.097	3.945	3.343	2.969	2.642	2.214	1.683

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 15: 4-Sided Columns
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	-	3.189	2.716	2.238	1.886	1.835	1.792	1.737	1.663	1.498	1.416	1.290	1.093	0.917
95	-	3.280	2.785	2.284	1.931	1.878	1.833	1.778	1.704	1.520	1.432	1.307	1.113	0.937
100	-	3.371	2.854	2.331	1.977	1.920	1.875	1.818	1.744	1.542	1.448	1.324	1.133	0.957
105	-	3.462	2.923	2.378	2.022	1.963	1.917	1.859	1.784	1.563	1.464	1.341	1.153	0.977
110	-	3.553	2.992	2.424	2.068	2.006	1.959	1.900	1.824	1.585	1.480	1.358	1.173	0.996
115	-	3.644	3.061	2.471	2.114	2.049	2.000	1.941	1.864	1.607	1.496	1.375	1.193	1.016
120	-	3.735	3.129	2.518	2.159	2.092	2.042	1.982	1.904	1.628	1.512	1.392	1.213	1.036
125	-	3.825	3.198	2.564	2.205	2.134	2.084	2.022	1.944	1.650	1.528	1.409	1.233	1.056
130	-	3.916	3.267	2.611	2.250	2.177	2.126	2.063	1.984	1.672	1.544	1.426	1.253	1.075
135	-	4.008	3.336	2.658	2.296	2.220	2.167	2.104	2.024	1.704	1.561	1.443	1.273	1.095
140	-	4.099	3.405	2.704	2.341	2.263	2.209	2.145	2.064	1.746	1.577	1.460	1.293	1.115
145	-	4.190	3.473	2.751	2.387	2.306	2.251	2.186	2.104	1.789	1.593	1.476	1.313	1.134
150	-	4.281	3.542	2.798	2.433	2.348	2.293	2.226	2.144	1.831	1.609	1.493	1.333	1.154
155	-	4.372	3.611	2.848	2.478	2.391	2.334	2.267	2.184	1.873	1.625	1.510	1.353	1.174
160	-	4.463	3.680	2.897	2.524	2.434	2.376	2.308	2.224	1.915	1.641	1.527	1.373	1.194
165	-	4.555	3.749	2.947	2.569	2.477	2.418	2.349	2.264	1.958	1.657	1.544	1.393	1.213
170	-	4.646	3.818	2.996	2.615	2.520	2.460	2.390	2.304	2.000	1.673	1.561	1.413	1.233
175	-	4.737	3.886	3.045	2.661	2.562	2.501	2.430	2.344	2.042	1.705	1.578	1.433	1.253
180	-	4.828	3.960	3.095	2.706	2.605	2.543	2.471	2.384	2.084	1.757	1.595	1.453	1.273
185	-	4.919	4.034	3.144	2.752	2.648	2.585	2.512	2.424	2.126	1.808	1.612	1.473	1.292
190	-	5.010	4.108	3.194	2.803	2.691	2.627	2.553	2.464	2.169	1.860	1.629	1.494	1.312
195	-	5.102	4.182	3.243	2.869	2.734	2.668	2.594	2.504	2.211	1.912	1.646	1.514	1.332
200	-	5.193	4.256	3.292	2.935	2.777	2.710	2.634	2.544	2.253	1.964	1.663	1.534	1.352
205	-	5.284	4.330	3.342	3.001	2.843	2.752	2.675	2.584	2.295	2.016	1.680	1.554	1.371
210	-	5.375	4.404	3.391	3.067	2.914	2.801	2.716	2.624	2.338	2.068	1.729	1.574	1.391
215	-	-	4.478	3.441	3.133	2.986	2.875	2.757	2.664	2.380	2.120	1.784	1.594	1.411
220	-	-	4.552	3.490	3.199	3.057	2.949	2.810	2.704	2.422	2.172	1.839	1.614	1.431
225	-	-	4.626	3.539	3.265	3.129	3.023	2.887	2.744	2.464	2.223	1.894	1.634	1.450

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 15: 4-Sided Columns
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	-	4.700	3.589	3.330	3.200	3.097	2.964	2.784	2.506	2.275	1.948	1.654	1.470
235	-	-	4.774	3.638	3.396	3.271	3.171	3.041	2.865	2.549	2.327	2.003	1.674	1.490
240	-	-	4.848	3.688	3.462	3.343	3.245	3.118	2.946	2.591	2.379	2.058	1.710	1.510
245	-	-	4.922	3.737	3.528	3.414	3.319	3.195	3.028	2.633	2.431	2.113	1.759	1.529
250	-	-	4.996	3.786	3.594	3.486	3.393	3.272	3.109	2.675	2.483	2.168	1.808	1.549
255	-	-	5.070	3.836	3.660	3.557	3.468	3.349	3.190	2.718	2.535	2.222	1.857	1.569
260	-	-	5.144	3.885	3.726	3.628	3.542	3.426	3.271	2.760	2.587	2.277	1.906	1.589
265	-	-	5.218	3.982	3.792	3.700	3.616	3.503	3.352	2.824	2.639	2.332	1.955	1.608
270	-	-	5.293	4.088	3.858	3.771	3.690	3.580	3.433	2.919	2.690	2.387	2.004	1.628
275	-	-	5.367	4.193	3.938	3.843	3.764	3.657	3.514	3.014	2.742	2.441	2.053	1.648
280	-	-	5.441	4.298	4.035	3.922	3.838	3.734	3.595	3.109	2.804	2.496	2.102	1.668
285	-	-	5.515	4.403	4.132	4.021	3.919	3.811	3.676	3.204	2.906	2.551	2.151	1.696
290	-	-	-	4.508	4.230	4.119	4.019	3.888	3.757	3.299	3.009	2.606	2.199	1.746
295	-	-	-	4.613	4.327	4.217	4.118	3.988	3.838	3.394	3.111	2.661	2.248	1.797
300	-	-	-	4.718	4.424	4.316	4.218	4.090	3.928	3.489	3.213	2.715	2.297	1.848
305	-	-	-	4.823	4.521	4.414	4.317	4.191	4.033	3.584	3.315	2.770	2.346	1.899
310	-	-	-	4.928	4.618	4.512	4.417	4.293	4.138	3.679	3.418	2.879	2.395	1.950
315	-	-	-	5.034	4.715	4.611	4.517	4.395	4.243	3.774	3.520	3.007	2.444	2.001
320	-	-	-	5.139	4.812	4.709	4.616	4.496	4.348	3.869	3.622	3.135	2.493	2.052
325	-	-	-	5.244	4.909	4.807	4.716	4.598	4.453	3.980	3.724	3.263	2.542	2.103
330	-	-	-	5.349	5.006	4.906	4.815	4.699	4.558	4.096	3.827	3.391	2.591	2.154
335	-	-	-	5.454	5.103	5.004	4.915	4.801	4.663	4.212	3.935	3.519	2.640	2.204
340	-	-	-	-	5.200	5.102	5.015	4.903	4.768	4.328	4.054	3.647	2.689	2.255
345	-	-	-	-	5.297	5.201	5.114	5.004	4.873	4.444	4.173	3.774	2.738	2.306
350	-	-	-	-	5.394	5.299	5.214	5.106	4.978	4.560	4.292	3.901	2.794	2.357
355	-	-	-	-	5.491	5.397	5.313	5.207	5.083	4.676	4.411	4.014	2.983	2.408
360	-	-	-	-	-	5.496	5.413	5.309	5.188	4.792	4.531	4.128	3.172	2.459

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 16: 4-Sided Columns
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	-	-	3.278	2.851	2.671	2.579	2.498	2.400	2.285	1.835	1.743	1.599	1.391	1.190
95	-	-	3.377	2.929	2.741	2.644	2.557	2.453	2.332	1.877	1.784	1.625	1.405	1.208
100	-	-	3.477	3.006	2.812	2.708	2.617	2.507	2.379	1.920	1.826	1.650	1.419	1.226
105	-	-	3.577	3.083	2.883	2.773	2.677	2.561	2.426	1.963	1.867	1.675	1.433	1.244
110	-	-	3.677	3.161	2.954	2.840	2.736	2.615	2.474	2.005	1.909	1.713	1.447	1.261
115	-	-	3.777	3.238	3.025	2.908	2.797	2.669	2.521	2.048	1.950	1.755	1.461	1.279
120	-	-	3.876	3.316	3.096	2.976	2.860	2.722	2.568	2.091	1.992	1.797	1.474	1.297
125	-	-	3.976	3.393	3.168	3.044	2.924	2.776	2.615	2.133	2.033	1.840	1.488	1.315
130	-	-	4.075	3.470	3.239	3.112	2.988	2.829	2.662	2.176	2.074	1.882	1.502	1.333
135	-	-	4.175	3.548	3.310	3.180	3.051	2.882	2.710	2.219	2.116	1.924	1.516	1.351
140	-	-	-	3.625	3.381	3.248	3.115	2.935	2.757	2.261	2.157	1.966	1.530	1.369
145	-	-	-	3.702	3.452	3.316	3.178	2.988	2.806	2.304	2.199	2.009	1.544	1.387
150	-	-	-	3.780	3.523	3.384	3.242	3.041	2.856	2.347	2.240	2.051	1.557	1.405
155	-	-	-	3.857	3.594	3.452	3.306	3.094	2.907	2.389	2.281	2.093	1.571	1.422
160	-	-	-	3.933	3.665	3.520	3.369	3.146	2.958	2.432	2.323	2.135	1.585	1.440
165	-	-	-	4.007	3.736	3.588	3.433	3.199	3.009	2.475	2.364	2.178	1.599	1.458
170	-	-	-	4.082	3.807	3.656	3.497	3.252	3.059	2.517	2.406	2.220	1.613	1.476
175	-	-	-	4.156	3.878	3.725	3.560	3.305	3.110	2.560	2.447	2.262	1.627	1.494
180	-	-	-	4.231	3.952	3.793	3.624	3.358	3.161	2.603	2.489	2.304	1.641	1.512
185	-	-	-	4.305	4.027	3.861	3.688	3.411	3.212	2.645	2.530	2.347	1.654	1.530
190	-	-	-	4.380	4.101	3.934	3.751	3.464	3.262	2.688	2.571	2.389	1.668	1.548
195	-	-	-	4.455	4.176	4.011	3.815	3.517	3.313	2.731	2.613	2.431	1.682	1.566
200	-	-	-	4.529	4.251	4.088	3.879	3.569	3.364	2.774	2.654	2.473	1.751	1.583
205	-	-	-	4.604	4.325	4.165	3.958	3.622	3.415	2.843	2.696	2.516	1.820	1.601
210	-	-	-	4.678	4.400	4.243	4.042	3.675	3.465	2.921	2.737	2.558	1.890	1.619
215	-	-	-	4.753	4.475	4.320	4.126	3.728	3.516	2.999	2.778	2.600	1.959	1.637
220	-	-	-	4.827	4.549	4.397	4.210	3.781	3.567	3.078	2.855	2.642	2.028	1.655
225	-	-	-	4.902	4.624	4.474	4.294	3.834	3.618	3.156	2.937	2.685	2.097	1.673

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 16: 4-Sided Columns
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	-	-	4.976	4.699	4.552	4.378	3.887	3.668	3.234	3.019	2.727	2.166	1.707
235	-	-	-	5.051	4.773	4.629	4.462	3.998	3.719	3.312	3.101	2.769	2.236	1.758
240	-	-	-	5.125	4.848	4.706	4.546	4.115	3.770	3.390	3.182	2.841	2.305	1.809
245	-	-	-	5.200	4.923	4.783	4.630	4.233	3.821	3.469	3.264	2.929	2.374	1.860
250	-	-	-	5.274	4.997	4.861	4.713	4.351	3.871	3.547	3.346	3.017	2.443	1.912
255	-	-	-	5.349	5.072	4.938	4.797	4.468	3.981	3.625	3.428	3.105	2.512	1.963
260	-	-	-	5.423	5.147	5.015	4.881	4.586	4.132	3.703	3.510	3.193	2.581	2.014
265	-	-	-	-	5.221	5.092	4.965	4.704	4.283	3.781	3.592	3.281	2.651	2.065
270	-	-	-	-	5.296	5.170	5.049	4.821	4.433	3.859	3.674	3.369	2.720	2.116
275	-	-	-	-	5.371	5.247	5.133	4.939	4.584	3.965	3.755	3.457	2.792	2.167
280	-	-	-	-	5.445	5.324	5.217	5.057	4.735	4.090	3.837	3.545	2.899	2.218
285	-	-	-	-	5.520	5.401	5.301	5.174	4.885	4.216	3.932	3.633	3.005	2.270
290	-	-	-	-	-	5.479	5.385	5.292	5.036	4.341	4.053	3.721	3.112	2.321
295	-	-	-	-	-	-	5.469	5.410	5.187	4.466	4.175	3.809	3.219	2.372
300	-	-	-	-	-	-	5.553	5.527	5.337	4.591	4.296	3.899	3.326	2.423
305	-	-	-	-	-	-	-	-	5.488	4.717	4.417	4.022	3.433	2.474
310	-	-	-	-	-	-	-	-	-	4.842	4.538	4.145	3.540	2.525
315	-	-	-	-	-	-	-	-	-	4.967	4.660	4.268	3.647	2.576
320	-	-	-	-	-	-	-	-	-	5.092	4.781	4.391	3.754	2.628
325	-	-	-	-	-	-	-	-	-	5.218	4.902	4.514	3.861	2.679
330	-	-	-	-	-	-	-	-	-	5.343	5.023	4.637	3.969	2.730
335	-	-	-	-	-	-	-	-	-	-	5.144	4.760	4.079	2.781
340	-	-	-	-	-	-	-	-	-	-	5.266	4.883	4.188	3.085
345	-	-	-	-	-	-	-	-	-	-	5.387	5.006	4.298	3.406
350	-	-	-	-	-	-	-	-	-	-	5.508	5.129	4.407	3.727
355	-	-	-	-	-	-	-	-	-	-	-	5.252	4.517	3.936
360	-	-	-	-	-	-	-	-	-	-	-	5.375	4.626	4.028

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 17: 4-Sided Beams
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
195	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
200	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
205	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
210	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
215	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
220	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
225	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 17: 4-Sided Beams
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
235	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
240	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
245	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
250	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
255	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
260	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
265	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
270	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
275	0.484	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
280	0.495	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
285	0.506	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
290	0.517	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
295	0.527	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
300	0.538	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
305	0.549	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
310	0.560	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
315	0.571	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
320	0.582	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
325	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
330	0.604	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
335	0.615	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
340	0.626	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
345	0.637	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
350	0.648	0.463	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
355	0.659	0.473	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
360	0.670	0.482	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 18: 4-Sided Beams
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	0.569	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	0.587	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	0.606	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	0.624	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	0.643	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	0.661	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	0.679	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	0.698	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	0.716	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	0.735	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	0.753	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	0.772	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	0.790	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	0.808	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	0.827	0.459	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
170	0.845	0.479	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
175	0.864	0.498	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
180	0.882	0.518	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
185	0.900	0.537	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
190	0.919	0.557	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
195	0.937	0.576	0.462	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
200	0.956	0.596	0.479	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
205	0.974	0.615	0.496	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
210	0.992	0.635	0.513	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
215	1.011	0.654	0.530	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
220	1.029	0.674	0.546	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
225	1.048	0.693	0.563	0.461	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

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certifire Cert. No. CF5365

Table 18: 4-Sided Beams
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	1.066	0.713	0.580	0.475	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
235	1.084	0.732	0.597	0.490	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
240	1.103	0.752	0.614	0.504	0.465	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
245	1.121	0.771	0.630	0.519	0.479	0.460	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
250	1.140	0.791	0.647	0.533	0.493	0.473	0.455	0.454	0.454	0.454	0.454	0.454	0.454	0.454
255	1.158	0.810	0.664	0.548	0.506	0.486	0.468	0.454	0.454	0.454	0.454	0.454	0.454	0.454
260	1.176	0.830	0.681	0.562	0.520	0.500	0.481	0.460	0.454	0.454	0.454	0.454	0.454	0.454
265	1.195	0.849	0.698	0.577	0.534	0.513	0.494	0.473	0.454	0.454	0.454	0.454	0.454	0.454
270	1.213	0.869	0.714	0.591	0.547	0.526	0.507	0.485	0.461	0.454	0.454	0.454	0.454	0.454
275	1.232	0.888	0.731	0.606	0.561	0.539	0.520	0.498	0.473	0.454	0.454	0.454	0.454	0.454
280	1.250	0.908	0.748	0.620	0.575	0.553	0.533	0.510	0.485	0.454	0.454	0.454	0.454	0.454
285	1.268	0.927	0.765	0.635	0.588	0.566	0.546	0.523	0.497	0.454	0.454	0.454	0.454	0.454
290	1.287	0.947	0.782	0.650	0.602	0.579	0.559	0.535	0.509	0.454	0.454	0.454	0.454	0.454
295	1.305	0.966	0.799	0.664	0.616	0.593	0.571	0.548	0.521	0.454	0.454	0.454	0.454	0.454
300	1.324	0.986	0.815	0.679	0.629	0.606	0.584	0.560	0.533	0.454	0.454	0.454	0.454	0.454
305	1.342	1.005	0.832	0.693	0.643	0.619	0.597	0.573	0.545	0.463	0.454	0.454	0.454	0.454
310	1.361	1.025	0.849	0.708	0.657	0.632	0.610	0.585	0.557	0.473	0.454	0.454	0.454	0.454
315	1.379	1.044	0.866	0.722	0.670	0.646	0.623	0.598	0.569	0.484	0.454	0.454	0.454	0.454
320	1.397	1.064	0.883	0.737	0.684	0.659	0.636	0.610	0.581	0.495	0.454	0.454	0.454	0.454
325	1.416	1.083	0.899	0.751	0.698	0.672	0.649	0.622	0.593	0.505	0.460	0.454	0.454	0.454
330	1.434	1.103	0.916	0.766	0.711	0.685	0.662	0.635	0.605	0.516	0.470	0.454	0.454	0.454
335	1.453	1.122	0.933	0.780	0.725	0.699	0.675	0.647	0.617	0.526	0.480	0.454	0.454	0.454
340	1.471	1.142	0.950	0.795	0.739	0.712	0.688	0.660	0.629	0.537	0.490	0.454	0.454	0.454
345	1.489	1.161	0.967	0.809	0.752	0.725	0.701	0.672	0.641	0.548	0.500	0.454	0.454	0.454
350	1.508	1.181	0.983	0.824	0.766	0.738	0.713	0.685	0.653	0.558	0.510	0.454	0.454	0.454
355	1.526	1.200	1.000	0.838	0.780	0.752	0.726	0.697	0.665	0.569	0.520	0.454	0.454	0.454
360	1.545	1.220	1.017	0.853	0.793	0.765	0.739	0.710	0.677	0.580	0.530	0.458	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 19: 4-Sided Beams
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	1.129	0.817	0.593	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
95	1.150	0.838	0.613	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
100	1.172	0.859	0.633	0.457	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
105	1.193	0.879	0.653	0.476	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
110	1.215	0.900	0.673	0.496	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
115	1.236	0.921	0.693	0.515	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
120	1.258	0.942	0.713	0.534	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
125	1.280	0.963	0.733	0.554	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
130	1.301	0.983	0.753	0.573	0.470	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
135	1.323	1.004	0.773	0.593	0.490	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
140	1.344	1.025	0.793	0.612	0.510	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
145	1.366	1.046	0.813	0.632	0.529	0.466	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
150	1.387	1.067	0.833	0.651	0.549	0.486	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
155	1.409	1.087	0.853	0.670	0.569	0.506	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
160	1.430	1.108	0.873	0.690	0.588	0.526	0.460	0.454	0.454	0.454	0.454	0.454	0.454	0.454
165	1.452	1.129	0.892	0.709	0.608	0.546	0.480	0.462	0.454	0.454	0.454	0.454	0.454	0.454
170	1.474	1.150	0.912	0.729	0.628	0.566	0.501	0.482	0.461	0.454	0.454	0.454	0.454	0.454
175	1.495	1.170	0.932	0.748	0.647	0.586	0.521	0.502	0.480	0.454	0.454	0.454	0.454	0.454
180	1.517	1.191	0.952	0.768	0.667	0.606	0.541	0.521	0.499	0.454	0.454	0.454	0.454	0.454
185	1.538	1.212	0.972	0.787	0.687	0.625	0.562	0.541	0.518	0.454	0.454	0.454	0.454	0.454
190	1.560	1.233	0.992	0.807	0.706	0.645	0.582	0.561	0.538	0.469	0.454	0.454	0.454	0.454
195	1.581	1.254	1.012	0.826	0.726	0.665	0.602	0.581	0.557	0.487	0.454	0.454	0.454	0.454
200	1.603	1.274	1.032	0.845	0.746	0.685	0.623	0.600	0.576	0.504	0.468	0.454	0.454	0.454
205	1.624	1.295	1.052	0.865	0.765	0.705	0.643	0.620	0.595	0.521	0.484	0.454	0.454	0.454
210	1.646	1.316	1.072	0.884	0.785	0.725	0.663	0.640	0.614	0.538	0.501	0.454	0.454	0.454
215	1.668	1.337	1.092	0.904	0.805	0.745	0.684	0.660	0.633	0.556	0.517	0.464	0.454	0.454
220	1.693	1.358	1.112	0.923	0.824	0.765	0.704	0.679	0.652	0.573	0.533	0.479	0.454	0.454
225	1.728	1.378	1.132	0.943	0.844	0.785	0.724	0.699	0.671	0.590	0.549	0.494	0.454	0.454

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 19: 4-Sided Beams
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	1.762	1.399	1.152	0.962	0.864	0.805	0.745	0.719	0.690	0.607	0.566	0.508	0.454	0.454
235	1.797	1.420	1.172	0.981	0.883	0.825	0.765	0.739	0.709	0.624	0.582	0.523	0.454	0.454
240	1.831	1.441	1.192	1.001	0.903	0.845	0.785	0.758	0.728	0.642	0.598	0.538	0.454	0.454
245	1.866	1.462	1.212	1.020	0.923	0.865	0.806	0.778	0.747	0.659	0.615	0.553	0.454	0.454
250	1.900	1.482	1.232	1.040	0.942	0.885	0.826	0.798	0.766	0.676	0.631	0.568	0.467	0.454
255	1.935	1.503	1.252	1.059	0.962	0.905	0.846	0.817	0.785	0.693	0.647	0.583	0.479	0.454
260	1.969	1.524	1.272	1.079	0.982	0.925	0.866	0.837	0.804	0.711	0.663	0.598	0.492	0.454
265	2.004	1.545	1.292	1.098	1.001	0.945	0.887	0.857	0.823	0.728	0.680	0.612	0.504	0.454
270	2.038	1.565	1.311	1.117	1.021	0.965	0.907	0.877	0.842	0.745	0.696	0.627	0.517	0.454
275	2.073	1.586	1.331	1.137	1.041	0.985	0.927	0.896	0.861	0.762	0.712	0.642	0.529	0.454
280	2.107	1.607	1.351	1.156	1.060	1.005	0.948	0.916	0.881	0.780	0.729	0.657	0.542	0.454
285	2.142	1.628	1.371	1.176	1.080	1.025	0.968	0.936	0.900	0.797	0.745	0.672	0.554	0.454
290	2.176	1.649	1.391	1.195	1.099	1.045	0.988	0.956	0.919	0.814	0.761	0.687	0.567	0.454
295	2.211	1.669	1.411	1.215	1.119	1.065	1.009	0.975	0.938	0.831	0.777	0.701	0.579	0.454
300	2.245	1.697	1.431	1.234	1.139	1.084	1.029	0.995	0.957	0.849	0.794	0.716	0.592	0.454
305	2.280	1.734	1.451	1.253	1.158	1.104	1.049	1.015	0.976	0.866	0.810	0.731	0.604	0.462
310	2.314	1.771	1.471	1.273	1.178	1.124	1.070	1.035	0.995	0.883	0.826	0.746	0.617	0.472
315	2.349	1.808	1.491	1.292	1.198	1.144	1.090	1.054	1.014	0.900	0.842	0.761	0.629	0.481
320	2.383	1.845	1.511	1.312	1.217	1.164	1.110	1.074	1.033	0.917	0.859	0.776	0.642	0.491
325	2.418	1.882	1.531	1.331	1.237	1.184	1.131	1.094	1.052	0.935	0.875	0.791	0.654	0.501
330	2.452	1.919	1.551	1.351	1.257	1.204	1.151	1.113	1.071	0.952	0.891	0.805	0.667	0.511
335	2.487	1.956	1.571	1.370	1.276	1.224	1.171	1.133	1.090	0.969	0.908	0.820	0.679	0.521
340	2.521	1.994	1.591	1.389	1.296	1.244	1.192	1.153	1.109	0.986	0.924	0.835	0.692	0.531
345	2.556	2.031	1.611	1.409	1.316	1.264	1.212	1.173	1.128	1.004	0.940	0.850	0.704	0.541
350	2.590	2.068	1.631	1.428	1.335	1.284	1.232	1.192	1.147	1.021	0.956	0.865	0.717	0.551
355	2.625	2.105	1.651	1.448	1.355	1.304	1.253	1.212	1.166	1.038	0.973	0.880	0.729	0.561
360	2.659	2.142	1.671	1.467	1.375	1.324	1.273	1.232	1.185	1.055	0.989	0.895	0.742	0.570

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 20: 4-Sided Beams
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	1.695	1.329	1.045	0.822	0.743	0.652	0.633	0.612	0.582	0.454	0.454	0.454	0.454	0.454
95	1.723	1.349	1.067	0.844	0.763	0.674	0.655	0.632	0.603	0.510	0.454	0.454	0.454	0.454
100	1.751	1.369	1.089	0.865	0.784	0.695	0.676	0.653	0.623	0.530	0.469	0.454	0.454	0.454
105	1.780	1.389	1.111	0.887	0.804	0.717	0.697	0.674	0.644	0.550	0.488	0.454	0.454	0.454
110	1.808	1.409	1.133	0.908	0.825	0.738	0.718	0.695	0.664	0.569	0.508	0.454	0.454	0.454
115	1.836	1.429	1.156	0.930	0.845	0.759	0.739	0.716	0.685	0.589	0.527	0.454	0.454	0.454
120	1.865	1.448	1.178	0.951	0.866	0.781	0.760	0.737	0.705	0.609	0.547	0.454	0.454	0.454
125	1.893	1.468	1.200	0.973	0.886	0.802	0.782	0.758	0.726	0.629	0.566	0.454	0.454	0.454
130	1.921	1.488	1.222	0.994	0.907	0.824	0.803	0.778	0.746	0.648	0.586	0.464	0.454	0.454
135	1.950	1.508	1.244	1.015	0.927	0.845	0.824	0.799	0.767	0.668	0.605	0.484	0.454	0.454
140	1.978	1.528	1.267	1.037	0.948	0.867	0.845	0.820	0.788	0.688	0.625	0.503	0.454	0.454
145	2.006	1.548	1.289	1.058	0.968	0.888	0.866	0.841	0.808	0.708	0.644	0.522	0.454	0.454
150	2.034	1.568	1.311	1.080	0.989	0.910	0.888	0.862	0.829	0.727	0.663	0.542	0.454	0.454
155	2.063	1.588	1.333	1.101	1.009	0.931	0.909	0.883	0.849	0.747	0.683	0.561	0.454	0.454
160	2.091	1.608	1.355	1.123	1.030	0.953	0.930	0.903	0.870	0.767	0.702	0.581	0.454	0.454
165	2.119	1.628	1.378	1.144	1.050	0.974	0.951	0.924	0.890	0.787	0.722	0.600	0.454	0.454
170	2.148	1.647	1.400	1.166	1.071	0.995	0.972	0.945	0.911	0.806	0.741	0.619	0.458	0.454
175	2.176	1.667	1.422	1.187	1.091	1.017	0.993	0.966	0.931	0.826	0.761	0.639	0.476	0.454
180	2.204	1.691	1.444	1.209	1.111	1.038	1.015	0.987	0.952	0.846	0.780	0.658	0.494	0.454
185	2.233	1.727	1.466	1.230	1.132	1.060	1.036	1.008	0.972	0.866	0.800	0.678	0.512	0.454
190	2.261	1.763	1.489	1.252	1.152	1.081	1.057	1.029	0.993	0.885	0.819	0.697	0.530	0.454
195	2.289	1.799	1.511	1.273	1.173	1.103	1.078	1.049	1.014	0.905	0.839	0.716	0.548	0.454
200	2.318	1.835	1.533	1.295	1.193	1.124	1.099	1.070	1.034	0.925	0.858	0.736	0.566	0.460
205	2.346	1.871	1.555	1.316	1.214	1.146	1.121	1.091	1.055	0.945	0.878	0.755	0.584	0.475
210	2.374	1.907	1.577	1.337	1.234	1.167	1.142	1.112	1.075	0.964	0.897	0.774	0.602	0.490
215	2.402	1.943	1.600	1.359	1.255	1.189	1.163	1.133	1.096	0.984	0.917	0.794	0.620	0.505
220	2.431	1.979	1.622	1.380	1.275	1.210	1.184	1.154	1.116	1.004	0.936	0.813	0.639	0.520
225	2.459	2.015	1.644	1.402	1.296	1.231	1.205	1.175	1.137	1.024	0.956	0.833	0.657	0.535

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 20: 4-Sided Beams
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	2.487	2.051	1.666	1.423	1.316	1.253	1.226	1.195	1.157	1.043	0.975	0.852	0.675	0.550
235	2.516	2.087	1.693	1.445	1.337	1.274	1.248	1.216	1.178	1.063	0.994	0.871	0.693	0.565
240	2.544	2.122	1.732	1.466	1.357	1.296	1.269	1.237	1.199	1.083	1.014	0.891	0.711	0.580
245	2.572	2.158	1.770	1.488	1.378	1.317	1.290	1.258	1.219	1.103	1.033	0.910	0.729	0.595
250	2.601	2.194	1.809	1.509	1.398	1.339	1.311	1.279	1.240	1.122	1.053	0.930	0.747	0.610
255	2.629	2.230	1.848	1.531	1.419	1.360	1.332	1.300	1.260	1.142	1.072	0.949	0.765	0.625
260	2.657	2.266	1.886	1.552	1.439	1.382	1.354	1.321	1.281	1.162	1.092	0.968	0.783	0.640
265	2.686	2.302	1.925	1.574	1.460	1.403	1.375	1.341	1.301	1.182	1.111	0.988	0.801	0.655
270	2.714	2.338	1.964	1.595	1.480	1.424	1.396	1.362	1.322	1.201	1.131	1.007	0.820	0.671
275	2.742	2.374	2.003	1.617	1.501	1.446	1.417	1.383	1.342	1.221	1.150	1.027	0.838	0.686
280	2.770	2.410	2.041	1.638	1.521	1.467	1.438	1.404	1.363	1.241	1.170	1.046	0.856	0.701
285	2.810	2.446	2.080	1.659	1.542	1.489	1.459	1.425	1.383	1.261	1.189	1.065	0.874	0.716
290	2.859	2.482	2.119	1.681	1.562	1.510	1.481	1.446	1.404	1.280	1.209	1.085	0.892	0.731
295	2.908	2.518	2.157	1.722	1.583	1.532	1.502	1.466	1.425	1.300	1.228	1.104	0.910	0.746
300	2.957	2.554	2.196	1.763	1.603	1.553	1.523	1.487	1.445	1.320	1.248	1.124	0.928	0.761
305	3.006	2.590	2.235	1.805	1.624	1.575	1.544	1.508	1.466	1.340	1.267	1.143	0.946	0.776
310	3.055	2.625	2.273	1.846	1.644	1.596	1.565	1.529	1.486	1.359	1.287	1.162	0.964	0.791
315	3.104	2.661	2.312	1.888	1.665	1.618	1.587	1.550	1.507	1.379	1.306	1.182	0.982	0.806
320	3.153	2.697	2.351	1.930	1.689	1.639	1.608	1.571	1.527	1.399	1.326	1.201	1.001	0.821
325	3.203	2.733	2.389	1.971	1.734	1.660	1.629	1.592	1.548	1.419	1.345	1.221	1.019	0.836
330	3.252	2.769	2.428	2.013	1.778	1.682	1.650	1.612	1.568	1.438	1.364	1.240	1.037	0.851
335	3.301	2.819	2.467	2.055	1.823	1.727	1.671	1.633	1.589	1.458	1.384	1.259	1.055	0.866
340	3.350	2.878	2.505	2.096	1.868	1.772	1.704	1.654	1.609	1.478	1.403	1.279	1.073	0.881
345	3.399	2.937	2.544	2.138	1.913	1.817	1.748	1.675	1.630	1.498	1.423	1.298	1.091	0.896
350	3.448	2.997	2.583	2.180	1.957	1.862	1.793	1.711	1.651	1.517	1.442	1.318	1.109	0.911
355	3.497	3.056	2.621	2.221	2.002	1.907	1.837	1.755	1.671	1.537	1.462	1.337	1.127	0.926
360	3.546	3.115	2.660	2.263	2.047	1.952	1.881	1.798	1.702	1.557	1.481	1.356	1.145	0.941

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 21: 4-Sided Beams
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	2.441	1.777	1.488	1.228	1.132	1.088	1.048	1.003	0.949	0.811	0.745	0.621	0.454	0.454
95	2.495	1.811	1.514	1.248	1.153	1.110	1.070	1.025	0.971	0.832	0.765	0.641	0.546	0.454
100	2.550	1.846	1.541	1.267	1.174	1.131	1.092	1.047	0.994	0.854	0.786	0.662	0.565	0.454
105	2.604	1.880	1.567	1.287	1.195	1.153	1.114	1.069	1.016	0.875	0.806	0.683	0.585	0.454
110	2.658	1.914	1.593	1.306	1.216	1.174	1.135	1.091	1.038	0.896	0.827	0.704	0.604	0.454
115	2.713	1.948	1.620	1.325	1.237	1.195	1.157	1.113	1.061	0.918	0.847	0.725	0.624	0.454
120	2.767	1.982	1.646	1.345	1.258	1.217	1.179	1.136	1.083	0.939	0.868	0.746	0.643	0.460
125	2.807	2.016	1.673	1.364	1.279	1.238	1.201	1.158	1.106	0.960	0.888	0.767	0.662	0.478
130	2.840	2.050	1.705	1.384	1.300	1.260	1.223	1.180	1.128	0.981	0.909	0.788	0.682	0.497
135	2.873	2.084	1.739	1.403	1.321	1.281	1.245	1.202	1.151	1.003	0.929	0.809	0.701	0.515
140	2.906	2.118	1.773	1.423	1.342	1.303	1.267	1.224	1.173	1.024	0.950	0.829	0.721	0.533
145	2.939	2.152	1.808	1.442	1.363	1.324	1.289	1.246	1.195	1.045	0.970	0.850	0.740	0.552
150	2.971	2.187	1.842	1.461	1.384	1.346	1.311	1.269	1.218	1.067	0.991	0.871	0.759	0.570
155	3.004	2.221	1.876	1.481	1.405	1.367	1.332	1.291	1.240	1.088	1.012	0.892	0.779	0.589
160	3.037	2.255	1.911	1.500	1.426	1.389	1.354	1.313	1.263	1.109	1.032	0.913	0.798	0.607
165	3.070	2.289	1.945	1.520	1.447	1.410	1.376	1.335	1.285	1.131	1.053	0.934	0.817	0.626
170	3.103	2.323	1.980	1.539	1.468	1.431	1.398	1.357	1.308	1.152	1.073	0.955	0.837	0.644
175	3.136	2.357	2.014	1.559	1.489	1.453	1.420	1.379	1.330	1.173	1.094	0.976	0.856	0.662
180	3.169	2.391	2.048	1.578	1.510	1.474	1.442	1.402	1.352	1.195	1.114	0.996	0.876	0.681
185	3.202	2.425	2.083	1.597	1.531	1.496	1.464	1.424	1.375	1.216	1.135	1.017	0.895	0.699
190	3.235	2.459	2.117	1.617	1.552	1.517	1.486	1.446	1.397	1.237	1.155	1.038	0.914	0.718
195	3.268	2.493	2.151	1.636	1.573	1.539	1.508	1.468	1.420	1.258	1.176	1.059	0.934	0.736
200	3.301	2.528	2.186	1.656	1.594	1.560	1.529	1.490	1.442	1.280	1.196	1.080	0.953	0.755
205	3.334	2.562	2.220	1.675	1.615	1.582	1.551	1.512	1.465	1.301	1.217	1.101	0.972	0.773
210	3.367	2.596	2.255	1.710	1.636	1.603	1.573	1.535	1.487	1.322	1.237	1.122	0.992	0.791
215	3.400	2.630	2.289	1.753	1.657	1.625	1.595	1.557	1.510	1.344	1.258	1.143	1.011	0.810
220	3.433	2.664	2.323	1.796	1.678	1.646	1.617	1.579	1.532	1.365	1.278	1.164	1.031	0.828
225	3.466	2.698	2.358	1.839	1.716	1.667	1.639	1.601	1.554	1.386	1.299	1.184	1.050	0.847

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 21: 4-Sided Beams
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	3.499	2.732	2.392	1.882	1.759	1.696	1.661	1.623	1.577	1.408	1.319	1.205	1.069	0.865
235	3.532	2.766	2.427	1.925	1.802	1.739	1.683	1.645	1.599	1.429	1.340	1.226	1.089	0.884
240	3.565	2.810	2.461	1.968	1.845	1.781	1.726	1.668	1.622	1.450	1.360	1.247	1.108	0.902
245	3.598	2.865	2.495	2.012	1.888	1.824	1.768	1.697	1.644	1.472	1.381	1.268	1.128	0.920
250	3.631	2.920	2.530	2.055	1.930	1.867	1.811	1.739	1.667	1.493	1.401	1.289	1.147	0.939
255	3.664	2.975	2.564	2.098	1.973	1.909	1.853	1.782	1.695	1.514	1.422	1.310	1.166	0.957
260	3.697	3.029	2.598	2.141	2.016	1.952	1.896	1.824	1.738	1.536	1.442	1.331	1.186	0.976
265	3.730	3.084	2.633	2.184	2.059	1.995	1.938	1.867	1.780	1.557	1.463	1.351	1.205	0.994
270	3.763	3.139	2.667	2.227	2.101	2.037	1.981	1.909	1.823	1.578	1.483	1.372	1.224	1.013
275	3.796	3.194	2.702	2.270	2.144	2.080	2.024	1.952	1.865	1.599	1.504	1.393	1.244	1.031
280	3.828	3.248	2.736	2.313	2.187	2.123	2.066	1.994	1.908	1.621	1.524	1.414	1.263	1.049
285	3.861	3.303	2.770	2.356	2.230	2.166	2.109	2.037	1.950	1.642	1.545	1.435	1.283	1.068
290	3.910	3.358	2.828	2.399	2.272	2.208	2.151	2.079	1.993	1.663	1.565	1.456	1.302	1.086
295	-	3.413	2.900	2.443	2.315	2.251	2.194	2.122	2.035	1.688	1.586	1.477	1.321	1.105
300	-	3.468	2.973	2.486	2.358	2.294	2.236	2.164	2.078	1.734	1.607	1.498	1.341	1.123
305	-	3.522	3.045	2.529	2.401	2.336	2.279	2.207	2.120	1.780	1.627	1.518	1.360	1.142
310	-	3.577	3.117	2.572	2.444	2.379	2.321	2.249	2.163	1.827	1.648	1.539	1.379	1.160
315	-	3.632	3.190	2.615	2.486	2.422	2.364	2.292	2.205	1.873	1.668	1.560	1.399	1.178
320	-	3.687	3.262	2.658	2.529	2.464	2.406	2.334	2.248	1.919	1.698	1.581	1.418	1.197
325	-	3.741	3.335	2.701	2.572	2.507	2.449	2.377	2.290	1.965	1.747	1.602	1.438	1.215
330	-	3.796	3.407	2.744	2.615	2.550	2.491	2.419	2.332	2.012	1.796	1.623	1.457	1.234
335	-	3.851	3.479	2.792	2.657	2.593	2.534	2.462	2.375	2.058	1.845	1.644	1.476	1.252
340	-	3.934	3.552	2.889	2.700	2.635	2.577	2.504	2.417	2.104	1.893	1.665	1.496	1.271
345	-	-	3.624	2.987	2.743	2.678	2.619	2.547	2.460	2.151	1.942	1.690	1.515	1.289
350	-	-	3.697	3.084	2.788	2.721	2.662	2.589	2.502	2.197	1.991	1.738	1.535	1.307
355	-	-	3.769	3.182	2.891	2.763	2.704	2.632	2.545	2.243	2.040	1.786	1.554	1.326
360	-	-	3.841	3.280	2.993	2.838	2.747	2.674	2.587	2.289	2.089	1.834	1.573	1.344

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 22: 4-Sided Beams
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	3.126	2.566	2.068	1.620	1.518	1.471	1.428	1.379	1.318	1.156	1.078	0.969	0.801	0.621
95	3.210	2.631	2.106	1.652	1.544	1.493	1.448	1.396	1.335	1.176	1.099	0.990	0.822	0.641
100	3.294	2.697	2.145	1.684	1.569	1.516	1.468	1.412	1.352	1.196	1.119	1.010	0.842	0.660
105	3.378	2.762	2.183	1.719	1.594	1.538	1.488	1.429	1.369	1.216	1.140	1.031	0.862	0.680
110	3.461	2.813	2.221	1.754	1.620	1.561	1.507	1.446	1.386	1.237	1.161	1.052	0.882	0.700
115	3.545	2.857	2.259	1.789	1.645	1.583	1.527	1.462	1.403	1.257	1.182	1.073	0.903	0.719
120	3.629	2.901	2.297	1.825	1.671	1.605	1.547	1.479	1.420	1.277	1.203	1.094	0.923	0.739
125	3.713	2.945	2.336	1.860	1.703	1.628	1.567	1.495	1.436	1.297	1.224	1.115	0.943	0.759
130	3.797	2.989	2.374	1.895	1.741	1.650	1.586	1.512	1.453	1.317	1.244	1.136	0.964	0.778
135	3.880	3.033	2.412	1.930	1.778	1.673	1.606	1.529	1.470	1.337	1.265	1.157	0.984	0.798
140	3.973	3.077	2.450	1.966	1.816	1.705	1.626	1.545	1.487	1.357	1.286	1.178	1.004	0.818
145	-	3.121	2.488	2.001	1.853	1.744	1.646	1.562	1.504	1.377	1.307	1.199	1.024	0.837
150	-	3.165	2.527	2.036	1.891	1.783	1.665	1.578	1.521	1.397	1.328	1.220	1.045	0.857
155	-	3.209	2.565	2.071	1.928	1.822	1.689	1.595	1.537	1.417	1.348	1.241	1.065	0.877
160	-	3.253	2.603	2.107	1.966	1.862	1.731	1.612	1.554	1.437	1.369	1.262	1.085	0.896
165	-	3.296	2.641	2.142	2.003	1.901	1.773	1.628	1.571	1.458	1.390	1.282	1.105	0.916
170	-	3.340	2.679	2.177	2.041	1.940	1.816	1.645	1.588	1.478	1.411	1.303	1.126	0.936
175	-	3.384	2.718	2.212	2.078	1.979	1.858	1.661	1.605	1.498	1.432	1.324	1.146	0.955
180	-	3.428	2.756	2.248	2.116	2.018	1.900	1.678	1.622	1.518	1.453	1.345	1.166	0.975
185	-	3.472	2.798	2.283	2.153	2.057	1.942	1.719	1.638	1.538	1.473	1.366	1.187	0.995
190	-	3.516	2.851	2.318	2.191	2.097	1.985	1.768	1.655	1.558	1.494	1.387	1.207	1.014
195	-	3.560	2.905	2.353	2.228	2.136	2.027	1.817	1.672	1.578	1.515	1.408	1.227	1.034
200	-	3.604	2.958	2.389	2.266	2.175	2.069	1.866	1.703	1.598	1.536	1.429	1.247	1.054
205	-	3.648	3.011	2.424	2.303	2.214	2.112	1.915	1.753	1.618	1.557	1.450	1.268	1.073
210	-	3.692	3.064	2.459	2.341	2.253	2.154	1.963	1.804	1.638	1.577	1.471	1.288	1.093
215	-	3.736	3.118	2.494	2.378	2.292	2.196	2.012	1.855	1.659	1.598	1.492	1.308	1.112
220	-	3.780	3.171	2.530	2.416	2.331	2.238	2.061	1.905	1.679	1.619	1.513	1.328	1.132
225	-	3.823	3.224	2.565	2.453	2.371	2.281	2.110	1.956	1.721	1.640	1.534	1.349	1.152

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 22: 4-Sided Beams
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	3.867	3.277	2.600	2.491	2.410	2.323	2.159	2.006	1.767	1.661	1.555	1.369	1.171
235	-	3.943	3.331	2.635	2.528	2.449	2.365	2.208	2.057	1.813	1.682	1.575	1.389	1.191
240	-	-	3.384	2.671	2.566	2.488	2.407	2.256	2.107	1.860	1.728	1.596	1.410	1.211
245	-	-	3.437	2.706	2.603	2.527	2.450	2.305	2.158	1.906	1.774	1.617	1.430	1.230
250	-	-	3.490	2.741	2.641	2.566	2.492	2.354	2.209	1.952	1.821	1.638	1.450	1.250
255	-	-	3.544	2.776	2.678	2.606	2.534	2.403	2.259	1.999	1.867	1.659	1.470	1.270
260	-	-	3.597	2.850	2.716	2.645	2.577	2.452	2.310	2.045	1.914	1.680	1.491	1.289
265	-	-	3.650	2.934	2.753	2.684	2.619	2.501	2.360	2.091	1.961	1.726	1.511	1.309
270	-	-	3.703	3.017	2.800	2.723	2.661	2.549	2.411	2.138	2.007	1.774	1.531	1.329
275	-	-	3.757	3.101	2.885	2.762	2.703	2.598	2.462	2.184	2.054	1.822	1.551	1.348
280	-	-	3.810	3.185	2.971	2.824	2.746	2.647	2.512	2.230	2.100	1.870	1.572	1.368
285	-	-	3.863	3.269	3.056	2.914	2.793	2.696	2.563	2.277	2.147	1.919	1.592	1.388
290	-	-	3.939	3.353	3.142	3.004	2.887	2.745	2.613	2.323	2.194	1.967	1.612	1.407
295	-	-	-	3.436	3.227	3.095	2.980	2.804	2.664	2.369	2.240	2.015	1.633	1.427
300	-	-	-	3.520	3.313	3.185	3.074	2.903	2.714	2.416	2.287	2.063	1.653	1.447
305	-	-	-	3.604	3.398	3.275	3.168	3.003	2.765	2.462	2.333	2.111	1.673	1.466
310	-	-	-	3.688	3.484	3.365	3.262	3.102	2.853	2.508	2.380	2.160	1.710	1.486
315	-	-	-	3.772	3.569	3.455	3.355	3.202	2.962	2.555	2.427	2.208	1.761	1.506
320	-	-	-	3.855	3.655	3.545	3.449	3.302	3.072	2.601	2.473	2.256	1.811	1.525
325	-	-	-	3.951	3.740	3.635	3.543	3.401	3.182	2.647	2.520	2.304	1.861	1.545
330	-	-	-	-	3.826	3.725	3.637	3.501	3.292	2.694	2.566	2.352	1.912	1.565
335	-	-	-	-	3.915	3.815	3.731	3.600	3.402	2.740	2.613	2.401	1.962	1.584
340	-	-	-	-	-	3.907	3.824	3.700	3.511	2.791	2.660	2.449	2.012	1.604
345	-	-	-	-	-	-	3.920	3.800	3.621	2.929	2.706	2.497	2.063	1.624
350	-	-	-	-	-	-	-	3.899	3.731	3.067	2.753	2.545	2.113	1.643
355	-	-	-	-	-	-	-	-	3.841	3.205	2.830	2.593	2.163	1.663
360	-	-	-	-	-	-	-	-	3.945	3.343	2.969	2.642	2.214	1.683

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 23: 4-Sided Beams
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	-	3.189	2.716	2.238	1.886	1.835	1.792	1.737	1.663	1.498	1.416	1.290	1.093	0.917
95	-	3.280	2.785	2.284	1.931	1.878	1.833	1.778	1.704	1.520	1.432	1.307	1.113	0.937
100	-	3.371	2.854	2.331	1.977	1.920	1.875	1.818	1.744	1.542	1.448	1.324	1.133	0.957
105	-	3.462	2.923	2.378	2.022	1.963	1.917	1.859	1.784	1.563	1.464	1.341	1.153	0.977
110	-	3.553	2.992	2.424	2.068	2.006	1.959	1.900	1.824	1.585	1.480	1.358	1.173	0.996
115	-	3.644	3.061	2.471	2.114	2.049	2.000	1.941	1.864	1.607	1.496	1.375	1.193	1.016
120	-	3.735	3.129	2.518	2.159	2.092	2.042	1.982	1.904	1.628	1.512	1.392	1.213	1.036
125	-	3.825	3.198	2.564	2.205	2.134	2.084	2.022	1.944	1.650	1.528	1.409	1.233	1.056
130	-	3.916	3.267	2.611	2.250	2.177	2.126	2.063	1.984	1.672	1.544	1.426	1.253	1.075
135	-	-	3.336	2.658	2.296	2.220	2.167	2.104	2.024	1.704	1.561	1.443	1.273	1.095
140	-	-	3.405	2.704	2.341	2.263	2.209	2.145	2.064	1.746	1.577	1.460	1.293	1.115
145	-	-	3.473	2.751	2.387	2.306	2.251	2.186	2.104	1.789	1.593	1.476	1.313	1.134
150	-	-	3.542	2.798	2.433	2.348	2.293	2.226	2.144	1.831	1.609	1.493	1.333	1.154
155	-	-	3.611	2.848	2.478	2.391	2.334	2.267	2.184	1.873	1.625	1.510	1.353	1.174
160	-	-	3.680	2.897	2.524	2.434	2.376	2.308	2.224	1.915	1.641	1.527	1.373	1.194
165	-	-	3.749	2.947	2.569	2.477	2.418	2.349	2.264	1.958	1.657	1.544	1.393	1.213
170	-	-	3.818	2.996	2.615	2.520	2.460	2.390	2.304	2.000	1.673	1.561	1.413	1.233
175	-	-	3.886	3.045	2.661	2.562	2.501	2.430	2.344	2.042	1.705	1.578	1.433	1.253
180	-	-	3.960	3.095	2.706	2.605	2.543	2.471	2.384	2.084	1.757	1.595	1.453	1.273
185	-	-	-	3.144	2.752	2.648	2.585	2.512	2.424	2.126	1.808	1.612	1.473	1.292
190	-	-	-	3.194	2.803	2.691	2.627	2.553	2.464	2.169	1.860	1.629	1.494	1.312
195	-	-	-	3.243	2.869	2.734	2.668	2.594	2.504	2.211	1.912	1.646	1.514	1.332
200	-	-	-	3.292	2.935	2.777	2.710	2.634	2.544	2.253	1.964	1.663	1.534	1.352
205	-	-	-	3.342	3.001	2.843	2.752	2.675	2.584	2.295	2.016	1.680	1.554	1.371
210	-	-	-	3.391	3.067	2.914	2.801	2.716	2.624	2.338	2.068	1.729	1.574	1.391
215	-	-	-	3.441	3.133	2.986	2.875	2.757	2.664	2.380	2.120	1.784	1.594	1.411
220	-	-	-	3.490	3.199	3.057	2.949	2.810	2.704	2.422	2.172	1.839	1.614	1.431
225	-	-	-	3.539	3.265	3.129	3.023	2.887	2.744	2.464	2.223	1.894	1.634	1.450

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 23: 4-Sided Beams
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	-	-	3.589	3.330	3.200	3.097	2.964	2.784	2.506	2.275	1.948	1.654	1.470
235	-	-	-	3.638	3.396	3.271	3.171	3.041	2.865	2.549	2.327	2.003	1.674	1.490
240	-	-	-	3.688	3.462	3.343	3.245	3.118	2.946	2.591	2.379	2.058	1.710	1.510
245	-	-	-	3.737	3.528	3.414	3.319	3.195	3.028	2.633	2.431	2.113	1.759	1.529
250	-	-	-	3.786	3.594	3.486	3.393	3.272	3.109	2.675	2.483	2.168	1.808	1.549
255	-	-	-	3.836	3.660	3.557	3.468	3.349	3.190	2.718	2.535	2.222	1.857	1.569
260	-	-	-	3.885	3.726	3.628	3.542	3.426	3.271	2.760	2.587	2.277	1.906	1.589
265	-	-	-	3.982	3.792	3.700	3.616	3.503	3.352	2.824	2.639	2.332	1.955	1.608
270	-	-	-	-	3.858	3.771	3.690	3.580	3.433	2.919	2.690	2.387	2.004	1.628
275	-	-	-	-	3.938	3.843	3.764	3.657	3.514	3.014	2.742	2.441	2.053	1.648
280	-	-	-	-	-	3.922	3.838	3.734	3.595	3.109	2.804	2.496	2.102	1.668
285	-	-	-	-	-	-	3.919	3.811	3.676	3.204	2.906	2.551	2.151	1.696
290	-	-	-	-	-	-	-	3.888	3.757	3.299	3.009	2.606	2.199	1.746
295	-	-	-	-	-	-	-	3.988	3.838	3.394	3.111	2.661	2.248	1.797
300	-	-	-	-	-	-	-	-	3.928	3.489	3.213	2.715	2.297	1.848
305	-	-	-	-	-	-	-	-	-	3.584	3.315	2.770	2.346	1.899
310	-	-	-	-	-	-	-	-	-	3.679	3.418	2.879	2.395	1.950
315	-	-	-	-	-	-	-	-	-	3.774	3.520	3.007	2.444	2.001
320	-	-	-	-	-	-	-	-	-	3.869	3.622	3.135	2.493	2.052
325	-	-	-	-	-	-	-	-	-	3.980	3.724	3.263	2.542	2.103
330	-	-	-	-	-	-	-	-	-	-	3.827	3.391	2.591	2.154
335	-	-	-	-	-	-	-	-	-	-	3.935	3.519	2.640	2.204
340	-	-	-	-	-	-	-	-	-	-	-	3.647	2.689	2.255
345	-	-	-	-	-	-	-	-	-	-	-	3.774	2.738	2.306
350	-	-	-	-	-	-	-	-	-	-	-	3.901	2.794	2.357
355	-	-	-	-	-	-	-	-	-	-	-	-	2.983	2.408
360	-	-	-	-	-	-	-	-	-	-	-	-	3.172	2.459

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 24: 4-Sided Beams
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
90	-	-	3.278	2.851	2.671	2.579	2.498	2.400	2.285	1.835	1.743	1.599	1.391	1.190
95	-	-	3.377	2.929	2.741	2.644	2.557	2.453	2.332	1.877	1.784	1.625	1.405	1.208
100	-	-	3.477	3.006	2.812	2.708	2.617	2.507	2.379	1.920	1.826	1.650	1.419	1.226
105	-	-	3.577	3.083	2.883	2.773	2.677	2.561	2.426	1.963	1.867	1.675	1.433	1.244
110	-	-	3.677	3.161	2.954	2.840	2.736	2.615	2.474	2.005	1.909	1.713	1.447	1.261
115	-	-	3.777	3.238	3.025	2.908	2.797	2.669	2.521	2.048	1.950	1.755	1.461	1.279
120	-	-	3.876	3.316	3.096	2.976	2.860	2.722	2.568	2.091	1.992	1.797	1.474	1.297
125	-	-	3.976	3.393	3.168	3.044	2.924	2.776	2.615	2.133	2.033	1.840	1.488	1.315
130	-	-	-	3.470	3.239	3.112	2.988	2.829	2.662	2.176	2.074	1.882	1.502	1.333
135	-	-	-	3.548	3.310	3.180	3.051	2.882	2.710	2.219	2.116	1.924	1.516	1.351
140	-	-	-	3.625	3.381	3.248	3.115	2.935	2.757	2.261	2.157	1.966	1.530	1.369
145	-	-	-	3.702	3.452	3.316	3.178	2.988	2.806	2.304	2.199	2.009	1.544	1.387
150	-	-	-	3.780	3.523	3.384	3.242	3.041	2.856	2.347	2.240	2.051	1.557	1.405
155	-	-	-	3.857	3.594	3.452	3.306	3.094	2.907	2.389	2.281	2.093	1.571	1.422
160	-	-	-	3.933	3.665	3.520	3.369	3.146	2.958	2.432	2.323	2.135	1.585	1.440
165	-	-	-	-	3.736	3.588	3.433	3.199	3.009	2.475	2.364	2.178	1.599	1.458
170	-	-	-	-	3.807	3.656	3.497	3.252	3.059	2.517	2.406	2.220	1.613	1.476
175	-	-	-	-	3.878	3.725	3.560	3.305	3.110	2.560	2.447	2.262	1.627	1.494
180	-	-	-	-	3.952	3.793	3.624	3.358	3.161	2.603	2.489	2.304	1.641	1.512
185	-	-	-	-	-	3.861	3.688	3.411	3.212	2.645	2.530	2.347	1.654	1.530
190	-	-	-	-	-	3.934	3.751	3.464	3.262	2.688	2.571	2.389	1.668	1.548
195	-	-	-	-	-	-	3.815	3.517	3.313	2.731	2.613	2.431	1.682	1.566
200	-	-	-	-	-	-	3.879	3.569	3.364	2.774	2.654	2.473	1.751	1.583
205	-	-	-	-	-	-	3.958	3.622	3.415	2.843	2.696	2.516	1.820	1.601
210	-	-	-	-	-	-	-	3.675	3.465	2.921	2.737	2.558	1.890	1.619
215	-	-	-	-	-	-	-	3.728	3.516	2.999	2.778	2.600	1.959	1.637
220	-	-	-	-	-	-	-	3.781	3.567	3.078	2.855	2.642	2.028	1.655
225	-	-	-	-	-	-	-	3.834	3.618	3.156	2.937	2.685	2.097	1.673

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 24: 4-Sided Beams
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	520°C	530°C	539°C	550°C	563°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
230	-	-	-	-	-	-	-	3.887	3.668	3.234	3.019	2.727	2.166	1.707
235	-	-	-	-	-	-	-	-	3.719	3.312	3.101	2.769	2.236	1.758
240	-	-	-	-	-	-	-	-	3.770	3.390	3.182	2.841	2.305	1.809
245	-	-	-	-	-	-	-	-	3.821	3.469	3.264	2.929	2.374	1.860
250	-	-	-	-	-	-	-	-	3.871	3.547	3.346	3.017	2.443	1.912
255	-	-	-	-	-	-	-	-	3.981	3.625	3.428	3.105	2.512	1.963
260	-	-	-	-	-	-	-	-	-	3.703	3.510	3.193	2.581	2.014
265	-	-	-	-	-	-	-	-	-	3.781	3.592	3.281	2.651	2.065
270	-	-	-	-	-	-	-	-	-	3.859	3.674	3.369	2.720	2.116
275	-	-	-	-	-	-	-	-	-	3.965	3.755	3.457	2.792	2.167
280	-	-	-	-	-	-	-	-	-	-	3.837	3.545	2.899	2.218
285	-	-	-	-	-	-	-	-	-	-	3.932	3.633	3.005	2.270
290	-	-	-	-	-	-	-	-	-	-	-	3.721	3.112	2.321
295	-	-	-	-	-	-	-	-	-	-	-	3.809	3.219	2.372
300	-	-	-	-	-	-	-	-	-	-	-	3.899	3.326	2.423
305	-	-	-	-	-	-	-	-	-	-	-	-	3.433	2.474
310	-	-	-	-	-	-	-	-	-	-	-	-	3.540	2.525
315	-	-	-	-	-	-	-	-	-	-	-	-	3.647	2.576
320	-	-	-	-	-	-	-	-	-	-	-	-	3.754	2.628
325	-	-	-	-	-	-	-	-	-	-	-	-	3.861	2.679
330	-	-	-	-	-	-	-	-	-	-	-	-	3.969	2.730
335	-	-	-	-	-	-	-	-	-	-	-	-	-	2.781
340	-	-	-	-	-	-	-	-	-	-	-	-	-	3.085
345	-	-	-	-	-	-	-	-	-	-	-	-	-	3.406
350	-	-	-	-	-	-	-	-	-	-	-	-	-	3.727
355	-	-	-	-	-	-	-	-	-	-	-	-	-	3.936
360	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 25: Hollow Columns
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
70	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
75	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
80	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
85	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
90	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
95	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
100	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
105	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
110	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
115	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
120	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
125	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
130	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
135	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
140	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
145	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
150	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
155	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
160	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
165	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
170	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
175	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
180	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
185	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
190	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
195	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
200	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
205	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
210	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
215	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
220	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
225	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
230	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
235	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 25: Hollow Columns
Fire Resistance Period: 15 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
245	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
250	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
255	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
260	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
265	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
270	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
275	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
280	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
285	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
290	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
295	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
300	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
305	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
310	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
315	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
320	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
325	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
330	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
335	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
340	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
345	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
350	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
355	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
360	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
365	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
370	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
375	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
380	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
385	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
390	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
395	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
400	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
405	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
410	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
415	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
420	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
425	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
430	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
435	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 26: Hollow Columns
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
70	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
75	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
80	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
85	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
90	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
95	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
100	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
105	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
110	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
115	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
120	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
125	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
130	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
135	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
140	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
145	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
150	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
155	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
160	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
165	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
170	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
175	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
180	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
185	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
190	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
195	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
200	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
205	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
210	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
215	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
220	1.805	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
225	1.839	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
230	1.874	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
235	1.908	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 26: Hollow Columns
Fire Resistance Period: 30 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	1.942	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
245	1.976	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
250	2.011	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
255	2.045	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
260	2.079	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
265	2.114	1.809	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
270	2.148	1.844	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
275	2.182	1.880	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
280	2.216	1.916	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
285	2.251	1.951	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
290	2.285	1.987	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
295	2.319	2.022	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
300	2.353	2.058	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
305	2.388	2.093	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
310	2.422	2.129	1.801	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
315	2.456	2.164	1.838	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
320	2.491	2.200	1.874	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
325	2.525	2.235	1.910	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
330	2.559	2.271	1.946	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
335	2.593	2.306	1.982	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
340	2.628	2.342	2.018	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
345	2.662	2.377	2.055	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
350	2.696	2.413	2.091	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
355	2.731	2.449	2.127	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
360	2.765	2.484	2.163	1.792	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
365	2.799	2.520	2.199	1.828	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
370	2.833	2.555	2.235	1.863	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
375	2.868	2.591	2.272	1.898	1.805	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
380	2.902	2.626	2.308	1.934	1.840	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
385	2.936	2.662	2.344	1.969	1.875	1.804	1.797	1.781	1.781	1.781	1.781	1.781	1.781	1.781
390	2.970	2.697	2.380	2.005	1.910	1.838	1.831	1.781	1.781	1.781	1.781	1.781	1.781	1.781
395	3.005	2.733	2.416	2.040	1.945	1.873	1.866	1.781	1.781	1.781	1.781	1.781	1.781	1.781
400	3.039	2.768	2.453	2.075	1.980	1.908	1.900	1.781	1.781	1.781	1.781	1.781	1.781	1.781
405	3.073	2.804	2.489	2.111	2.015	1.942	1.935	1.781	1.781	1.781	1.781	1.781	1.781	1.781
410	3.108	2.839	2.525	2.146	2.050	1.977	1.969	1.781	1.781	1.781	1.781	1.781	1.781	1.781
415	3.142	2.875	2.561	2.181	2.084	2.011	2.004	1.786	1.781	1.781	1.781	1.781	1.781	1.781
420	3.176	2.910	2.597	2.217	2.119	2.046	2.038	1.819	1.795	1.781	1.781	1.781	1.781	1.781
425	3.210	2.946	2.633	2.252	2.154	2.080	2.072	1.852	1.827	1.781	1.781	1.781	1.781	1.781
430	3.245	2.982	2.670	2.287	2.189	2.115	2.107	1.885	1.860	1.781	1.781	1.781	1.781	1.781
435	3.279	3.017	2.706	2.323	2.224	2.149	2.141	1.918	1.893	1.781	1.781	1.781	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 27: Hollow Columns
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
70	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
75	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
80	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
85	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
90	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
95	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
100	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
105	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
110	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
115	1.811	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
120	1.902	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
125	1.993	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
130	2.084	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
135	2.175	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
140	2.265	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
145	2.356	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
150	2.447	1.815	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
155	2.538	1.933	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
160	2.628	2.052	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
165	2.719	2.170	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
170	2.810	2.288	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
175	2.901	2.407	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
180	2.991	2.525	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
185	3.082	2.644	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
190	3.173	2.762	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
195	3.264	2.881	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
200	3.354	2.999	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
205	3.445	3.118	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
210	3.489	3.236	1.818	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
215	3.530	3.354	1.934	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
220	3.571	3.457	2.051	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
225	3.612	3.491	2.167	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
230	3.653	3.525	2.284	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
235	3.694	3.558	2.400	1.795	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 27: Hollow Columns
Fire Resistance Period: 45 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	3.734	3.592	2.517	1.861	1.789	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
245	3.775	3.626	2.633	1.928	1.846	1.791	1.785	1.781	1.781	1.781	1.781	1.781	1.781	1.781
250	3.816	3.659	2.749	1.994	1.904	1.845	1.839	1.781	1.781	1.781	1.781	1.781	1.781	1.781
255	3.857	3.693	2.866	2.061	1.962	1.899	1.893	1.781	1.781	1.781	1.781	1.781	1.781	1.781
260	3.898	3.727	2.982	2.127	2.020	1.953	1.946	1.781	1.781	1.781	1.781	1.781	1.781	1.781
265	3.939	3.760	3.099	2.194	2.078	2.007	2.000	1.808	1.787	1.781	1.781	1.781	1.781	1.781
270	3.980	3.794	3.215	2.260	2.136	2.061	2.054	1.860	1.839	1.781	1.781	1.781	1.781	1.781
275	4.021	3.828	3.332	2.327	2.193	2.115	2.108	1.912	1.891	1.781	1.781	1.781	1.781	1.781
280	4.061	3.862	3.448	2.394	2.251	2.169	2.162	1.964	1.942	1.781	1.781	1.781	1.781	1.781
285	4.102	3.895	3.488	2.460	2.309	2.223	2.216	2.016	1.994	1.781	1.781	1.781	1.781	1.781
290	4.143	3.929	3.525	2.527	2.367	2.277	2.270	2.068	2.046	1.781	1.781	1.781	1.781	1.781
295	4.184	3.963	3.563	2.593	2.425	2.331	2.323	2.121	2.097	1.781	1.781	1.781	1.781	1.781
300	4.225	3.996	3.601	2.660	2.483	2.385	2.377	2.173	2.149	1.781	1.781	1.781	1.781	1.781
305	4.266	4.030	3.638	2.726	2.540	2.439	2.431	2.225	2.200	1.801	1.781	1.781	1.781	1.781
310	4.307	4.064	3.676	2.793	2.598	2.493	2.485	2.277	2.252	1.845	1.781	1.781	1.781	1.781
315	4.348	4.097	3.714	2.859	2.656	2.547	2.539	2.329	2.304	1.890	1.781	1.781	1.781	1.781
320	4.388	4.131	3.751	2.926	2.714	2.601	2.593	2.381	2.355	1.935	1.781	1.781	1.781	1.781
325	4.429	4.165	3.789	2.992	2.772	2.655	2.647	2.433	2.407	1.980	1.813	1.781	1.781	1.781
330	4.470	4.198	3.827	3.059	2.830	2.709	2.701	2.485	2.459	2.024	1.855	1.781	1.781	1.781
335	4.511	4.232	3.864	3.125	2.887	2.763	2.754	2.537	2.510	2.069	1.896	1.781	1.781	1.781
340	4.552	4.266	3.902	3.192	2.945	2.817	2.808	2.589	2.562	2.114	1.938	1.781	1.781	1.781
345	4.593	4.300	3.940	3.259	3.003	2.871	2.862	2.641	2.614	2.158	1.979	1.781	1.781	1.781
350	4.634	4.333	3.977	3.325	3.061	2.925	2.916	2.693	2.665	2.203	2.021	1.781	1.781	1.781
355	4.674	4.367	4.015	3.392	3.119	2.979	2.970	2.745	2.717	2.248	2.062	1.781	1.781	1.781
360	4.715	4.401	4.053	3.456	3.177	3.033	3.024	2.797	2.768	2.293	2.104	1.798	1.781	1.781
365	4.756	4.434	4.090	3.503	3.235	3.087	3.078	2.849	2.820	2.337	2.145	1.835	1.781	1.781
370	4.797	4.468	4.128	3.550	3.292	3.141	3.131	2.901	2.872	2.382	2.186	1.871	1.781	1.781
375	4.838	4.502	4.166	3.597	3.350	3.195	3.185	2.953	2.923	2.427	2.228	1.908	1.781	1.781
380	4.879	4.535	4.203	3.644	3.408	3.249	3.239	3.005	2.975	2.471	2.269	1.945	1.781	1.781
385	4.925	4.569	4.241	3.691	3.464	3.303	3.293	3.057	3.027	2.516	2.311	1.982	1.781	1.781
390	4.975	4.603	4.279	3.738	3.515	3.357	3.347	3.109	3.078	2.561	2.352	2.019	1.781	1.781
395	5.025	4.637	4.316	3.785	3.567	3.411	3.401	3.161	3.130	2.606	2.394	2.055	1.781	1.781
400	5.075	4.670	4.354	3.832	3.618	3.465	3.455	3.213	3.181	2.650	2.435	2.092	1.781	1.781
405	5.125	4.704	4.392	3.879	3.669	3.519	3.509	3.265	3.233	2.695	2.477	2.129	1.781	1.781
410	5.174	4.738	4.429	3.926	3.720	3.574	3.564	3.317	3.285	2.740	2.518	2.166	1.781	1.781
415	5.224	4.771	4.467	3.973	3.772	3.628	3.618	3.369	3.336	2.784	2.560	2.203	1.781	1.781
420	5.274	4.805	4.505	4.019	3.823	3.683	3.672	3.421	3.388	2.829	2.601	2.239	1.781	1.781
425	5.324	4.839	4.542	4.066	3.874	3.737	3.727	3.474	3.440	2.874	2.642	2.276	1.781	1.781
430	5.374	4.872	4.580	4.113	3.926	3.792	3.781	3.528	3.493	2.919	2.684	2.313	1.781	1.781
435	5.424	4.912	4.617	4.160	3.977	3.846	3.836	3.581	3.546	2.963	2.725	2.350	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

In accordance with BS476: Part 21: 1987

certifire Cert. No. CF5365

Table 28: Hollow Columns
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
70	1.854	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
75	1.944	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
80	2.034	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
85	2.124	1.812	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
90	2.215	1.893	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
95	2.305	1.973	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
100	2.395	2.053	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
105	2.485	2.134	1.845	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
110	2.575	2.214	1.931	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
115	2.666	2.295	2.017	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
120	2.756	2.375	2.103	1.793	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
125	2.846	2.455	2.188	1.885	1.808	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
130	2.936	2.536	2.274	1.977	1.902	1.783	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
135	3.027	2.616	2.360	2.069	1.995	1.882	1.864	1.781	1.781	1.781	1.781	1.781	1.781	1.781
140	3.117	2.697	2.446	2.161	2.089	1.980	1.963	1.781	1.781	1.781	1.781	1.781	1.781	1.781
145	3.207	2.777	2.532	2.253	2.182	2.079	2.063	1.781	1.781	1.781	1.781	1.781	1.781	1.781
150	3.297	2.857	2.617	2.346	2.276	2.177	2.162	1.781	1.781	1.781	1.781	1.781	1.781	1.781
155	3.388	2.938	2.703	2.438	2.369	2.276	2.261	1.781	1.781	1.781	1.781	1.781	1.781	1.781
160	3.498	3.018	2.789	2.530	2.463	2.374	2.361	1.781	1.781	1.781	1.781	1.781	1.781	1.781
165	3.657	3.099	2.875	2.622	2.556	2.473	2.460	1.845	1.781	1.781	1.781	1.781	1.781	1.781
170	3.815	3.179	2.960	2.714	2.650	2.572	2.560	1.983	1.865	1.781	1.781	1.781	1.781	1.781
175	3.974	3.259	3.046	2.807	2.744	2.670	2.659	2.120	2.006	1.781	1.781	1.781	1.781	1.781
180	4.132	3.340	3.132	2.899	2.837	2.769	2.759	2.257	2.146	1.781	1.781	1.781	1.781	1.781
185	4.291	3.420	3.218	2.991	2.931	2.867	2.858	2.395	2.286	1.781	1.781	1.781	1.781	1.781
190	4.449	3.612	3.303	3.083	3.024	2.966	2.957	2.532	2.427	1.781	1.781	1.781	1.781	1.781
195	4.608	3.874	3.389	3.175	3.118	3.064	3.057	2.669	2.567	1.781	1.781	1.781	1.781	1.781
200	4.767	4.135	3.491	3.267	3.211	3.163	3.156	2.806	2.707	1.781	1.781	1.781	1.781	1.781
205	4.903	4.397	3.635	3.360	3.305	3.261	3.256	2.944	2.847	1.781	1.781	1.781	1.781	1.781
210	4.946	4.658	3.780	3.451	3.398	3.360	3.355	3.081	2.988	1.781	1.781	1.781	1.781	1.781
215	4.989	4.898	3.924	3.510	3.473	3.454	3.453	3.218	3.128	1.781	1.781	1.781	1.781	1.781
220	5.032	4.932	4.068	3.569	3.522	3.499	3.497	3.356	3.268	1.781	1.781	1.781	1.781	1.781
225	5.076	4.966	4.212	3.628	3.572	3.544	3.541	3.463	3.409	1.781	1.781	1.781	1.781	1.781
230	5.119	5.000	4.356	3.687	3.621	3.589	3.586	3.502	3.478	1.827	1.781	1.781	1.781	1.781
235	5.162	5.034	4.500	3.746	3.671	3.634	3.630	3.541	3.518	1.960	1.781	1.781	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 28: Hollow Columns
Fire Resistance Period: 60 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	5.205	5.069	4.644	3.805	3.720	3.679	3.675	3.580	3.557	2.093	1.839	1.781	1.781	1.781
245	5.248	5.103	4.788	3.864	3.770	3.724	3.719	3.619	3.596	2.226	1.923	1.781	1.781	1.781
250	5.291	5.137	4.904	3.922	3.819	3.769	3.763	3.659	3.636	2.359	2.007	1.781	1.781	1.781
255	5.334	5.171	4.938	3.981	3.869	3.814	3.808	3.698	3.675	2.492	2.091	1.791	1.781	1.781
260	5.377	5.205	4.972	4.040	3.918	3.859	3.852	3.737	3.714	2.625	2.175	1.843	1.781	1.781
265	5.420	5.239	5.007	4.099	3.968	3.904	3.896	3.776	3.754	2.759	2.259	1.895	1.781	1.781
270	5.463	5.273	5.041	4.158	4.017	3.949	3.941	3.815	3.793	2.892	2.343	1.946	1.781	1.781
275	5.506	5.307	5.075	4.217	4.067	3.994	3.985	3.854	3.832	3.025	2.427	1.998	1.781	1.781
280	5.549	5.341	5.109	4.276	4.116	4.039	4.030	3.893	3.872	3.158	2.511	2.050	1.781	1.781
285	5.593	5.375	5.143	4.335	4.166	4.084	4.074	3.933	3.911	3.291	2.595	2.102	1.781	1.781
290	5.636	5.409	5.178	4.393	4.215	4.129	4.118	3.972	3.950	3.424	2.679	2.154	1.781	1.781
295	5.679	5.443	5.212	4.452	4.265	4.174	4.163	4.011	3.990	3.488	2.763	2.206	1.781	1.781
300	5.722	5.477	5.246	4.511	4.314	4.219	4.207	4.050	4.029	3.534	2.847	2.257	1.781	1.781
305	5.765	5.511	5.280	4.570	4.364	4.264	4.252	4.089	4.068	3.581	2.931	2.309	1.813	1.781
310	5.808	5.545	5.315	4.629	4.413	4.309	4.296	4.128	4.108	3.627	3.015	2.361	1.855	1.781
315	5.851	5.579	5.349	4.688	4.463	4.354	4.340	4.167	4.147	3.674	3.099	2.413	1.897	1.781
320	5.894	5.614	5.383	4.747	4.512	4.399	4.385	4.206	4.186	3.720	3.183	2.465	1.939	1.781
325	5.937	5.648	5.417	4.806	4.562	4.444	4.429	4.246	4.226	3.766	3.267	2.517	1.982	1.781
330	5.980	5.682	5.451	4.864	4.611	4.489	4.473	4.285	4.265	3.813	3.351	2.568	2.024	1.781
335	6.023	5.716	5.486	4.916	4.661	4.534	4.518	4.324	4.304	3.859	3.436	2.620	2.066	1.781
340	6.066	5.750	5.520	4.961	4.710	4.579	4.562	4.363	4.344	3.905	3.497	2.672	2.108	1.784
345	6.110	5.784	5.554	5.005	4.760	4.623	4.607	4.402	4.383	3.952	3.554	2.724	2.150	1.813
350	6.153	5.818	5.588	5.049	4.809	4.668	4.651	4.441	4.422	3.998	3.611	2.776	2.192	1.843
355	6.196	5.852	5.623	5.093	4.859	4.713	4.695	4.480	4.462	4.045	3.668	2.828	2.234	1.872
360	6.239	5.886	5.657	5.138	4.908	4.758	4.740	4.519	4.501	4.091	3.725	2.879	2.276	1.902
365	6.282	5.920	5.691	5.182	4.958	4.803	4.784	4.559	4.540	4.137	3.782	2.931	2.319	1.931
370	6.325	5.954	5.725	5.226	5.007	4.848	4.829	4.598	4.580	4.184	3.839	2.983	2.361	1.961
375	6.429	5.988	5.759	5.270	5.057	4.893	4.873	4.637	4.619	4.230	3.896	3.035	2.403	1.990
380	6.547	6.022	5.794	5.315	5.106	4.946	4.922	4.676	4.658	4.277	3.953	3.087	2.445	2.020
385	6.666	6.056	5.828	5.359	5.156	5.000	4.976	4.715	4.698	4.323	4.010	3.139	2.487	2.049
390	6.784	6.090	5.862	5.403	5.205	5.053	5.030	4.754	4.737	4.369	4.067	3.190	2.529	2.079
395	6.902	6.125	5.896	5.447	5.255	5.106	5.084	4.793	4.776	4.416	4.123	3.242	2.571	2.108
400	7.021	6.159	5.931	5.492	5.304	5.159	5.138	4.832	4.816	4.462	4.180	3.294	2.613	2.137
405	7.139	6.193	5.965	5.536	5.354	5.213	5.192	4.872	4.855	4.509	4.237	3.346	2.655	2.167
410	7.257	6.227	5.999	5.580	5.403	5.266	5.246	4.918	4.894	4.555	4.294	3.398	2.698	2.196
415	7.375	6.261	6.033	5.624	5.452	5.319	5.300	4.976	4.951	4.601	4.351	3.450	2.740	2.226
420	7.494	6.295	6.067	5.669	5.502	5.373	5.354	5.034	5.009	4.648	4.408	3.545	2.782	2.255
425	7.612	6.329	6.102	5.713	5.551	5.426	5.407	5.092	5.067	4.694	4.465	3.641	2.824	2.285
430	7.730	6.462	6.136	5.757	5.601	5.479	5.461	5.150	5.125	4.740	4.522	3.738	2.866	2.314
435	7.849	6.608	6.170	5.801	5.650	5.533	5.515	5.207	5.182	4.787	4.579	3.834	2.908	2.344

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 29: Hollow Columns
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	1.892	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	2.020	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	2.148	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	2.277	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	2.405	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	2.533	1.860	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
70	2.661	1.985	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
75	2.790	2.110	1.833	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
80	2.918	2.235	1.929	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
85	3.046	2.360	2.024	1.808	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
90	3.175	2.485	2.120	1.890	1.841	1.804	1.799	1.781	1.781	1.781	1.781	1.781	1.781	1.781
95	3.303	2.610	2.215	1.973	1.924	1.887	1.883	1.781	1.781	1.781	1.781	1.781	1.781	1.781
100	3.431	2.735	2.310	2.055	2.007	1.970	1.966	1.851	1.838	1.781	1.781	1.781	1.781	1.781
105	3.650	2.860	2.406	2.138	2.090	2.054	2.050	1.936	1.923	1.781	1.781	1.781	1.781	1.781
110	3.885	2.985	2.501	2.220	2.173	2.137	2.133	2.020	2.007	1.781	1.781	1.781	1.781	1.781
115	4.120	3.110	2.597	2.302	2.255	2.220	2.216	2.105	2.092	1.850	1.781	1.781	1.781	1.781
120	4.356	3.235	2.692	2.385	2.338	2.304	2.300	2.190	2.177	1.938	1.822	1.781	1.781	1.781
125	4.591	3.360	2.787	2.467	2.421	2.387	2.383	2.274	2.261	2.026	1.912	1.781	1.781	1.781
130	4.826	3.482	2.883	2.550	2.504	2.470	2.467	2.359	2.346	2.113	2.002	1.781	1.781	1.781
135	5.061	3.597	2.978	2.632	2.587	2.554	2.550	2.443	2.430	2.201	2.091	1.781	1.781	1.781
140	5.297	3.711	3.074	2.715	2.669	2.637	2.633	2.528	2.515	2.289	2.181	1.781	1.781	1.781
145	5.532	3.826	3.169	2.797	2.752	2.720	2.717	2.612	2.600	2.377	2.271	1.781	1.781	1.781
150	5.767	3.941	3.265	2.879	2.835	2.804	2.800	2.697	2.684	2.465	2.361	1.781	1.781	1.781
155	6.002	4.055	3.360	2.962	2.918	2.887	2.884	2.781	2.769	2.552	2.450	1.797	1.781	1.781
160	6.238	4.170	3.459	3.044	3.001	2.971	2.967	2.866	2.854	2.640	2.540	1.928	1.781	1.781
165	6.364	4.285	3.634	3.127	3.083	3.054	3.050	2.950	2.938	2.728	2.630	2.058	1.781	1.781
170	6.416	4.399	3.809	3.209	3.166	3.137	3.134	3.035	3.023	2.816	2.720	2.188	1.781	1.781
175	6.468	4.514	3.983	3.292	3.249	3.221	3.217	3.119	3.108	2.904	2.810	2.318	1.781	1.781
180	6.521	4.628	4.158	3.374	3.332	3.304	3.300	3.204	3.192	2.992	2.899	2.448	1.781	1.781
185	6.573	4.743	4.333	3.470	3.415	3.387	3.384	3.288	3.277	3.079	2.989	2.578	1.781	1.781
190	6.625	4.858	4.508	3.752	3.611	3.519	3.507	3.373	3.361	3.167	3.079	2.708	1.781	1.781
195	6.677	5.438	4.683	4.034	3.897	3.807	3.795	3.473	3.446	3.255	3.169	2.838	1.781	1.781
200	6.729	6.243	4.857	4.316	4.183	4.095	4.084	3.769	3.731	3.343	3.258	2.969	1.781	1.781
205	6.781	6.375	4.984	4.599	4.470	4.383	4.372	4.066	4.028	3.431	3.348	3.099	1.781	1.781
210	6.834	6.422	5.098	4.881	4.756	4.671	4.660	4.362	4.325	3.531	3.438	3.229	1.781	1.781
215	6.886	6.469	5.211	4.936	4.915	4.903	4.902	4.659	4.623	3.636	3.518	3.359	1.781	1.781
220	6.938	6.516	5.325	4.980	4.953	4.941	4.940	4.902	4.898	3.741	3.597	3.467	1.781	1.781
225	6.990	6.563	5.438	5.024	4.992	4.979	4.978	4.938	4.934	3.846	3.676	3.522	1.781	1.781
230	7.042	6.610	5.552	5.068	5.031	5.017	5.016	4.974	4.969	3.950	3.754	3.576	1.781	1.781
235	7.094	6.657	5.665	5.111	5.069	5.055	5.054	5.010	5.005	4.055	3.833	3.631	1.781	1.781

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 29: Hollow Columns
Fire Resistance Period: 75 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	7.147	6.704	5.779	5.155	5.108	5.093	5.091	5.046	5.040	4.160	3.912	3.686	1.838	1.781
245	7.199	6.751	5.892	5.199	5.146	5.131	5.129	5.081	5.076	4.265	3.990	3.740	1.921	1.781
250	7.251	6.798	6.006	5.242	5.185	5.169	5.167	5.117	5.112	4.370	4.069	3.795	2.004	1.781
255	7.303	6.845	6.120	5.286	5.224	5.207	5.205	5.153	5.147	4.474	4.148	3.850	2.087	1.798
260	7.355	6.892	6.233	5.330	5.262	5.245	5.243	5.189	5.183	4.579	4.226	3.904	2.170	1.837
265	7.407	6.939	6.341	5.373	5.301	5.283	5.281	5.225	5.218	4.684	4.305	3.959	2.253	1.877
270	7.460	6.986	6.403	5.417	5.339	5.321	5.319	5.261	5.254	4.789	4.384	4.013	2.336	1.916
275	7.512	7.033	6.465	5.461	5.378	5.359	5.357	5.296	5.290	4.893	4.462	4.068	2.419	1.956
280	7.564	7.080	6.528	5.504	5.417	5.397	5.395	5.332	5.325	4.935	4.541	4.123	2.501	1.995
285	7.616	7.127	6.590	5.548	5.455	5.435	5.433	5.368	5.361	4.975	4.620	4.177	2.584	2.035
290	7.668	7.174	6.652	5.592	5.494	5.473	5.470	5.404	5.396	5.015	4.698	4.232	2.667	2.075
295	7.720	7.221	6.715	5.635	5.532	5.511	5.508	5.440	5.432	5.055	4.777	4.287	2.750	2.114
300	7.773	7.268	6.777	5.679	5.571	5.549	5.546	5.475	5.468	5.095	4.856	4.341	2.833	2.154
305	7.825	7.315	6.840	5.723	5.610	5.587	5.584	5.511	5.503	5.136	4.917	4.396	2.916	2.193
310	7.877	7.362	6.902	5.766	5.648	5.625	5.622	5.547	5.539	5.176	4.960	4.451	2.999	2.233
315	7.929	7.409	6.964	5.810	5.687	5.663	5.660	5.583	5.575	5.216	5.003	4.505	3.082	2.272
320	7.981	7.456	7.027	5.854	5.725	5.701	5.698	5.619	5.610	5.256	5.047	4.560	3.165	2.312
325	8.033	7.503	7.089	5.897	5.764	5.739	5.736	5.655	5.646	5.296	5.090	4.615	3.248	2.351
330	8.086	7.551	7.152	5.941	5.803	5.777	5.774	5.690	5.681	5.336	5.133	4.669	3.331	2.391
335	8.138	7.598	7.214	5.985	5.841	5.815	5.812	5.726	5.717	5.377	5.177	4.724	3.413	2.431
340	8.190	7.645	7.276	6.028	5.880	5.853	5.849	5.762	5.753	5.417	5.220	4.778	3.500	2.470
345	8.242	7.692	7.339	6.072	5.918	5.891	5.887	5.798	5.788	5.457	5.263	4.833	3.591	2.510
350	-	7.739	7.401	6.116	5.957	5.929	5.925	5.834	5.824	5.497	5.306	4.888	3.681	2.549
355	-	7.786	7.464	6.159	5.996	5.967	5.963	5.869	5.859	5.537	5.350	4.939	3.771	2.589
360	-	7.833	7.526	6.203	6.034	6.005	6.001	5.905	5.895	5.578	5.393	4.989	3.862	2.628
365	-	7.880	7.588	6.247	6.073	6.043	6.039	5.941	5.931	5.618	5.436	5.040	3.952	2.668
370	-	7.927	7.651	6.290	6.111	6.081	6.077	5.977	5.966	5.658	5.480	5.091	4.042	2.708
375	-	7.974	7.713	6.338	6.150	6.119	6.115	6.013	6.002	5.698	5.523	5.141	4.132	2.747
380	-	8.021	7.776	6.526	6.189	6.157	6.153	6.049	6.037	5.738	5.566	5.192	4.223	2.787
385	-	8.068	7.838	6.714	6.227	6.195	6.191	6.084	6.073	5.779	5.610	5.242	4.313	2.826
390	-	8.115	7.900	6.902	6.266	6.233	6.228	6.120	6.109	5.819	5.653	5.293	4.403	2.866
395	-	8.162	7.963	7.091	6.304	6.271	6.266	6.156	6.144	5.859	5.696	5.344	4.494	2.905
400	-	8.209	8.025	7.279	6.418	6.309	6.304	6.192	6.180	5.899	5.740	5.394	4.584	2.945
405	-	8.256	8.088	7.467	6.749	6.451	6.413	6.228	6.215	5.939	5.783	5.445	4.674	2.984
410	-	-	8.150	7.655	7.080	6.784	6.745	6.263	6.251	5.979	5.826	5.495	4.765	3.024
415	-	-	8.212	7.843	7.411	7.116	7.077	6.299	6.287	6.020	5.870	5.546	4.855	3.064
420	-	-	8.275	8.032	7.741	7.449	7.409	6.354	6.322	6.060	5.913	5.597	4.927	3.103
425	-	-	8.337	8.220	8.072	7.781	7.741	6.708	6.581	6.100	5.956	5.647	4.984	3.143
430	-	-	8.400	8.408	8.403	8.114	8.073	7.062	6.937	6.140	6.000	5.698	5.041	3.182
435	-	-	-	-	-	8.447	8.404	7.415	7.292	6.180	6.043	5.748	5.098	3.222

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 30: Hollow Columns
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	2.875	2.043	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	2.967	2.181	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	3.058	2.320	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	3.150	2.458	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	3.241	2.596	1.866	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	3.333	2.734	2.018	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
70	3.424	2.873	2.170	1.838	1.793	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
75	3.581	3.011	2.322	1.963	1.911	1.874	1.870	1.785	1.781	1.781	1.781	1.781	1.781	1.781
80	3.764	3.149	2.474	2.089	2.029	1.988	1.984	1.883	1.872	1.781	1.781	1.781	1.781	1.781
85	3.947	3.287	2.626	2.215	2.147	2.102	2.097	1.981	1.968	1.793	1.781	1.781	1.781	1.781
90	4.130	3.426	2.778	2.340	2.265	2.215	2.210	2.079	2.065	1.877	1.794	1.781	1.781	1.781
95	4.313	3.728	2.930	2.466	2.383	2.329	2.323	2.177	2.162	1.960	1.878	1.781	1.781	1.781
100	4.496	4.068	3.082	2.591	2.500	2.443	2.436	2.275	2.259	2.044	1.962	1.835	1.781	1.781
105	4.679	4.408	3.234	2.717	2.618	2.557	2.549	2.374	2.355	2.127	2.047	1.921	1.781	1.781
110	4.862	4.747	3.386	2.843	2.736	2.670	2.662	2.472	2.452	2.211	2.131	2.006	1.781	1.781
115	5.087	5.087	3.630	2.968	2.854	2.784	2.776	2.570	2.549	2.295	2.216	2.092	1.826	1.781
120	5.228	5.426	3.943	3.094	2.972	2.898	2.889	2.668	2.645	2.378	2.300	2.177	1.912	1.781
125	-	5.766	4.256	3.220	3.089	3.012	3.002	2.766	2.742	2.462	2.385	2.262	1.999	1.781
130	-	6.106	4.569	3.345	3.207	3.125	3.115	2.864	2.839	2.545	2.469	2.348	2.086	1.781
135	-	6.353	4.881	3.493	3.325	3.239	3.228	2.962	2.935	2.629	2.554	2.433	2.173	1.781
140	-	6.413	5.194	3.753	3.443	3.353	3.341	3.061	3.032	2.712	2.638	2.518	2.260	1.781
145	-	6.473	5.507	4.014	3.578	3.471	3.455	3.159	3.129	2.796	2.722	2.604	2.346	1.781
150	-	6.534	5.820	4.274	3.714	3.614	3.599	3.257	3.225	2.879	2.807	2.689	2.433	1.781
155	-	6.594	6.133	4.535	3.850	3.756	3.743	3.355	3.322	2.963	2.891	2.775	2.520	1.781
160	-	6.654	6.355	4.796	3.986	3.899	3.887	3.455	3.419	3.046	2.976	2.860	2.607	1.781
165	-	6.714	6.417	5.056	4.122	4.042	4.031	3.636	3.575	3.130	3.060	2.945	2.693	1.781
170	-	6.775	6.479	5.317	4.259	4.185	4.175	3.817	3.762	3.213	3.145	3.031	2.780	1.781
175	-	6.835	6.541	5.578	4.395	4.328	4.319	3.999	3.949	3.297	3.229	3.116	2.867	1.781
180	-	6.895	6.602	5.838	4.531	4.471	4.463	4.180	4.136	3.380	3.313	3.202	2.954	1.781
185	-	6.955	6.664	6.099	4.667	4.613	4.606	4.361	4.322	3.494	3.398	3.287	3.041	1.781
190	-	7.016	6.726	6.339	4.803	4.756	4.750	4.542	4.509	3.778	3.557	3.372	3.127	1.781
195	-	7.076	6.788	6.403	5.378	4.916	4.894	4.723	4.696	4.061	3.841	3.474	3.214	1.781
200	-	7.136	6.849	6.466	6.356	5.668	5.591	4.907	4.882	4.344	4.126	3.767	3.301	1.781
205	-	7.196	6.911	6.529	6.420	6.340	6.291	5.136	5.089	4.628	4.411	4.061	3.388	1.781
210	-	7.257	6.973	6.592	6.484	6.405	6.394	5.365	5.298	4.899	4.696	4.354	3.482	1.781
215	-	7.317	7.035	6.655	6.548	6.469	6.458	5.595	5.506	4.971	4.911	4.647	3.597	1.781
220	-	7.377	7.096	6.718	6.612	6.534	6.523	5.824	5.714	5.044	4.964	4.901	3.712	1.907
225	-	7.437	7.158	6.781	6.676	6.598	6.587	6.053	5.923	5.116	5.018	4.940	3.827	2.043
230	-	7.498	7.220	6.844	6.739	6.663	6.652	6.283	6.131	5.189	5.071	4.980	3.941	2.178
235	-	7.558	7.282	6.907	6.803	6.727	6.717	6.387	6.335	5.261	5.125	5.019	4.056	2.313

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 30: Hollow Columns
Fire Resistance Period: 90 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	-	7.618	7.343	6.970	6.867	6.792	6.781	6.456	6.405	5.333	5.178	5.058	4.171	2.448
245	-	7.678	7.405	7.034	6.931	6.856	6.846	6.526	6.476	5.406	5.232	5.097	4.286	2.583
250	-	7.739	7.467	7.097	6.995	6.921	6.910	6.595	6.546	5.478	5.285	5.137	4.401	2.719
255	-	7.799	7.529	7.160	7.059	6.985	6.975	6.664	6.616	5.551	5.338	5.176	4.515	2.854
260	-	7.859	7.590	7.223	7.123	7.050	7.040	6.734	6.687	5.623	5.392	5.215	4.630	2.989
265	-	7.919	7.652	7.286	7.187	7.114	7.104	6.803	6.757	5.695	5.445	5.254	4.745	3.124
270	-	7.980	7.714	7.349	7.251	7.179	7.169	6.872	6.827	5.768	5.499	5.294	4.860	3.260
275	-	8.040	7.776	7.412	7.315	7.244	7.233	6.942	6.898	5.840	5.552	5.333	4.925	3.395
280	-	8.100	7.837	7.475	7.379	7.308	7.298	7.011	6.968	5.913	5.605	5.372	4.968	3.508
285	-	8.160	7.899	7.538	7.443	7.373	7.362	7.080	7.038	5.985	5.659	5.412	5.011	3.605
290	-	8.221	7.961	7.602	7.507	7.437	7.427	7.150	7.109	6.057	5.712	5.451	5.053	3.703
295	-	-	8.023	7.665	7.571	7.502	7.492	7.219	7.179	6.130	5.766	5.490	5.096	3.800
300	-	-	8.084	7.728	7.635	7.566	7.556	7.288	7.249	6.202	5.819	5.529	5.139	3.897
305	-	-	8.146	7.791	7.699	7.631	7.621	7.358	7.320	6.274	5.873	5.569	5.182	3.995
310	-	-	8.208	7.854	7.763	7.695	7.685	7.427	7.390	6.353	5.926	5.608	5.225	4.092
315	-	-	8.270	7.917	7.827	7.760	7.750	7.496	7.460	6.456	5.979	5.647	5.268	4.189
320	-	-	-	7.980	7.891	7.824	7.815	7.566	7.531	6.559	6.033	5.686	5.311	4.287
325	-	-	-	8.043	7.955	7.889	7.879	7.635	7.601	6.662	6.086	5.726	5.354	4.384
330	-	-	-	8.106	8.019	7.953	7.944	7.704	7.671	6.766	6.140	5.765	5.397	4.481
335	-	-	-	8.169	8.083	8.018	8.008	7.774	7.742	6.869	6.193	5.804	5.440	4.579
340	-	-	-	8.233	8.147	8.082	8.073	7.843	7.812	6.972	6.247	5.843	5.482	4.676
345	-	-	-	8.296	8.211	8.147	8.137	7.912	7.882	7.075	6.300	5.883	5.525	4.773
350	-	-	-	-	8.275	8.211	8.202	7.982	7.953	7.179	6.389	5.922	5.568	4.871
355	-	-	-	-	8.338	8.276	8.267	8.051	8.023	7.282	6.537	5.961	5.611	4.936
360	-	-	-	-	-	8.340	8.331	8.120	8.093	7.385	6.684	6.000	5.654	4.990
365	-	-	-	-	-	-	-	8.190	8.164	7.488	6.832	6.040	5.697	5.044
370	-	-	-	-	-	-	-	8.259	8.234	7.592	6.979	6.079	5.740	5.099
375	-	-	-	-	-	-	-	8.328	8.304	7.695	7.127	6.118	5.783	5.153
380	-	-	-	-	-	-	-	-	8.375	7.798	7.274	6.158	5.826	5.207
385	-	-	-	-	-	-	-	-	8.445	7.901	7.422	6.197	5.869	5.262
390	-	-	-	-	-	-	-	-	-	8.005	7.569	6.236	5.912	5.316
395	-	-	-	-	-	-	-	-	-	8.108	7.717	6.275	5.954	5.371
400	-	-	-	-	-	-	-	-	-	8.211	7.864	6.315	5.997	5.425
405	-	-	-	-	-	-	-	-	-	8.314	8.012	6.559	6.040	5.479
410	-	-	-	-	-	-	-	-	-	8.418	8.160	6.986	6.083	5.534
415	-	-	-	-	-	-	-	-	-	8.521	8.307	7.413	6.126	5.588
420	-	-	-	-	-	-	-	-	-	8.624	8.455	7.840	6.169	5.642
425	-	-	-	-	-	-	-	-	-	-	8.602	8.267	6.212	5.697
430	-	-	-	-	-	-	-	-	-	-	-	-	6.255	5.751
435	-	-	-	-	-	-	-	-	-	-	-	-	6.298	5.805

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 31: Hollow Columns
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	3.893	2.968	2.177	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
45	4.076	3.049	2.320	1.786	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
50	4.260	3.131	2.462	1.935	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
55	4.443	3.212	2.605	2.084	1.855	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
60	4.627	3.294	2.748	2.234	2.014	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781	1.781
65	4.810	3.376	2.890	2.383	2.174	1.948	1.938	1.811	1.796	1.781	1.781	1.781	1.781	1.781
70	4.984	3.476	3.033	2.533	2.333	2.124	2.113	1.967	1.950	1.781	1.781	1.781	1.781	1.781
75	5.149	3.806	3.175	2.682	2.493	2.300	2.289	2.124	2.105	1.871	1.795	1.781	1.781	1.781
80	5.314	4.137	3.318	2.832	2.652	2.476	2.465	2.280	2.260	1.992	1.906	1.806	1.781	1.781
85	5.480	4.467	3.482	2.981	2.812	2.652	2.641	2.436	2.414	2.114	2.017	1.902	1.781	1.781
90	5.645	4.798	3.947	3.131	2.972	2.828	2.816	2.592	2.569	2.236	2.128	1.997	1.790	1.781
95	5.811	5.158	4.413	3.280	3.131	3.004	2.992	2.748	2.723	2.358	2.239	2.093	1.876	1.781
100	5.976	5.530	4.878	3.429	3.291	3.180	3.168	2.904	2.878	2.479	2.350	2.189	1.963	1.781
105	6.141	5.902	5.343	3.824	3.450	3.357	3.343	3.060	3.032	2.601	2.460	2.285	2.049	1.781
110	6.307	6.273	5.808	4.259	3.878	3.645	3.613	3.216	3.187	2.723	2.571	2.380	2.135	1.849
115	6.425	6.403	6.274	4.695	4.306	4.065	4.032	3.372	3.342	2.845	2.682	2.476	2.222	1.935
120	6.534	6.485	6.396	5.130	4.734	4.484	4.450	3.642	3.562	2.966	2.793	2.572	2.308	2.022
125	6.643	6.568	6.468	5.566	5.162	4.903	4.869	4.027	3.940	3.088	2.904	2.667	2.394	2.109
130	6.753	6.651	6.539	6.001	5.591	5.323	5.287	4.413	4.319	3.210	3.015	2.763	2.481	2.195
135	6.862	6.734	6.611	6.350	6.019	5.742	5.706	4.798	4.697	3.332	3.126	2.859	2.567	2.282
140	6.971	6.817	6.683	6.420	6.352	6.161	6.124	5.183	5.076	3.457	3.237	2.954	2.653	2.368
145	7.081	6.899	6.755	6.489	6.421	6.374	6.368	5.568	5.455	3.760	3.348	3.050	2.739	2.455
150	7.190	6.982	6.827	6.559	6.491	6.444	6.437	5.953	5.833	4.063	3.462	3.146	2.826	2.542
155	7.299	7.065	6.899	6.629	6.561	6.513	6.507	6.334	6.212	4.366	3.613	3.242	2.912	2.628
160	7.409	7.148	6.971	6.699	6.630	6.583	6.576	6.404	6.380	4.669	3.765	3.337	2.998	2.715
165	7.518	7.231	7.042	6.769	6.700	6.652	6.646	6.473	6.450	4.972	3.917	3.433	3.085	2.802
170	7.627	7.313	7.114	6.839	6.770	6.722	6.715	6.543	6.520	5.275	4.069	3.608	3.171	2.888
175	7.737	7.396	7.186	6.909	6.839	6.791	6.785	6.613	6.590	5.578	4.221	3.801	3.257	2.975
180	7.846	7.479	7.258	6.979	6.909	6.861	6.854	6.682	6.659	5.881	4.373	3.995	3.344	3.061
185	7.955	7.562	7.330	7.049	6.979	6.930	6.924	6.752	6.729	6.184	4.525	4.188	3.430	3.148
190	8.064	7.645	7.402	7.119	7.048	7.000	6.993	6.821	6.799	6.370	4.677	4.382	3.651	3.235
195	8.174	7.727	7.474	7.188	7.118	7.070	7.063	6.891	6.869	6.442	4.829	4.575	3.915	3.321
200	8.283	7.810	7.545	7.258	7.188	7.139	7.132	6.961	6.938	6.515	5.514	4.768	4.179	3.408
205	-	7.893	7.617	7.328	7.257	7.209	7.202	7.030	7.008	6.587	6.352	4.975	4.443	3.528
210	-	7.976	7.689	7.398	7.327	7.278	7.271	7.100	7.078	6.660	6.427	5.206	4.707	3.682
215	-	8.059	7.761	7.468	7.397	7.348	7.341	7.170	7.148	6.733	6.502	5.437	4.917	3.836
220	-	8.141	7.833	7.538	7.467	7.417	7.411	7.239	7.217	6.805	6.577	5.669	4.992	3.990
225	-	8.224	7.905	7.608	7.536	7.487	7.480	7.309	7.287	6.878	6.652	5.900	5.067	4.144
230	-	8.307	7.977	7.678	7.606	7.556	7.550	7.379	7.357	6.950	6.726	6.131	5.142	4.298
235	-	-	8.048	7.748	7.676	7.626	7.619	7.448	7.426	7.023	6.801	6.343	5.217	4.452

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

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Table 31: Hollow Columns
Fire Resistance Period: 105 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m⁻¹	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	-	-	8.120	7.818	7.745	7.696	7.689	7.518	7.496	7.095	6.876	6.425	5.292	4.606
245	-	-	8.192	7.887	7.815	7.765	7.758	7.588	7.566	7.168	6.951	6.507	5.367	4.760
250	-	-	8.264	7.957	7.885	7.835	7.828	7.657	7.636	7.240	7.026	6.589	5.442	4.901
255	-	-	-	8.027	7.954	7.904	7.897	7.727	7.705	7.313	7.101	6.670	5.517	4.948
260	-	-	-	8.097	8.024	7.974	7.967	7.796	7.775	7.385	7.176	6.752	5.592	4.995
265	-	-	-	8.167	8.094	8.043	8.036	7.866	7.845	7.458	7.251	6.834	5.667	5.042
270	-	-	-	8.237	8.163	8.113	8.106	7.936	7.915	7.530	7.326	6.915	5.742	5.090
275	-	-	-	8.307	8.233	8.182	8.175	8.005	7.984	7.603	7.401	6.997	5.817	5.137
280	-	-	-	-	8.303	8.252	8.245	8.075	8.054	7.676	7.476	7.079	5.892	5.184
285	-	-	-	-	-	8.321	8.314	8.145	8.124	7.748	7.551	7.161	5.967	5.231
290	-	-	-	-	-	-	-	8.214	8.194	7.821	7.626	7.242	6.042	5.278
295	-	-	-	-	-	-	-	8.284	8.263	7.893	7.701	7.324	6.117	5.325
300	-	-	-	-	-	-	-	-	-	7.966	7.775	7.406	6.192	5.372
305	-	-	-	-	-	-	-	-	-	8.038	7.850	7.487	6.267	5.420
310	-	-	-	-	-	-	-	-	-	8.111	7.925	7.569	6.347	5.467
315	-	-	-	-	-	-	-	-	-	8.183	8.000	7.651	6.466	5.514
320	-	-	-	-	-	-	-	-	-	8.256	8.075	7.733	6.585	5.561
325	-	-	-	-	-	-	-	-	-	8.328	8.150	7.814	6.703	5.608
330	-	-	-	-	-	-	-	-	-	8.401	8.225	7.896	6.822	5.655
335	-	-	-	-	-	-	-	-	-	-	8.300	7.978	6.941	5.703
340	-	-	-	-	-	-	-	-	-	-	8.375	8.059	7.059	5.750
345	-	-	-	-	-	-	-	-	-	-	-	8.141	7.178	5.797
350	-	-	-	-	-	-	-	-	-	-	-	8.223	7.297	5.844
355	-	-	-	-	-	-	-	-	-	-	-	8.305	7.416	5.891
360	-	-	-	-	-	-	-	-	-	-	-	8.386	7.534	5.938
365	-	-	-	-	-	-	-	-	-	-	-	8.468	7.653	5.985
370	-	-	-	-	-	-	-	-	-	-	-	-	7.772	6.033
375	-	-	-	-	-	-	-	-	-	-	-	-	7.890	6.080
380	-	-	-	-	-	-	-	-	-	-	-	-	8.009	6.127
385	-	-	-	-	-	-	-	-	-	-	-	-	8.128	6.174
390	-	-	-	-	-	-	-	-	-	-	-	-	8.246	6.221
395	-	-	-	-	-	-	-	-	-	-	-	-	8.365	6.268
400	-	-	-	-	-	-	-	-	-	-	-	-	8.484	6.315
405	-	-	-	-	-	-	-	-	-	-	-	-	8.602	6.694
410	-	-	-	-	-	-	-	-	-	-	-	-	-	7.269
415	-	-	-	-	-	-	-	-	-	-	-	-	-	7.845
420	-	-	-	-	-	-	-	-	-	-	-	-	-	8.420
425	-	-	-	-	-	-	-	-	-	-	-	-	-	-
430	-	-	-	-	-	-	-	-	-	-	-	-	-	-
435	-	-	-	-	-	-	-	-	-	-	-	-	-	-

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

SC801 has been tested on cellular beams according to BS EN 13381-9 2015 and approved for 30-120 minutes. Please refer to Technical Services.

Table 32: Hollow Columns
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
40	5.700	4.406	3.050	2.287	2.204	2.147	2.141	1.891	1.781	1.781	1.781	1.781	1.781	1.781
45	5.700	4.406	3.122	2.432	2.348	2.291	2.284	2.039	2.002	1.781	1.781	1.781	1.781	1.781
50	5.700	4.406	3.194	2.577	2.492	2.434	2.427	2.187	2.152	1.781	1.781	1.781	1.781	1.781
55	5.700	4.406	3.265	2.722	2.635	2.578	2.571	2.335	2.301	1.781	1.781	1.781	1.781	1.781
60	6.204	4.828	3.337	2.867	2.779	2.721	2.714	2.483	2.450	1.781	1.781	1.781	1.781	1.781
65	6.381	4.987	3.409	3.012	2.923	2.865	2.858	2.631	2.600	1.880	1.781	1.781	1.781	1.781
70	6.558	5.146	3.698	3.157	3.067	3.008	3.001	2.778	2.749	2.060	1.946	1.812	1.781	1.781
75	6.735	5.305	4.303	3.302	3.211	3.152	3.145	2.926	2.899	2.240	2.111	1.957	1.781	1.781
80	6.912	5.464	4.900	3.447	3.355	3.295	3.288	3.074	3.048	2.421	2.277	2.102	1.854	1.781
85	7.089	5.623	5.133	3.763	3.546	3.439	3.431	3.222	3.198	2.601	2.442	2.247	1.969	1.781
90	7.266	5.782	5.365	4.084	3.971	3.971	3.946	3.370	3.347	2.781	2.608	2.391	2.084	1.832
95	7.443	5.941	5.598	4.539	4.539	4.539	4.520	3.720	3.629	2.961	2.773	2.536	2.200	1.920
100	7.620	6.100	5.831	5.106	5.106	5.106	5.094	4.314	4.214	3.142	2.938	2.681	2.315	2.008
105	7.797	6.259	6.063	5.674	5.674	5.674	5.667	4.907	4.799	3.322	3.104	2.826	2.430	2.096
110	7.974	6.441	6.296	6.242	6.242	6.242	6.241	5.501	5.384	3.597	3.269	2.971	2.545	2.184
115	8.151	6.642	6.421	6.405	6.400	6.400	6.400	6.094	5.970	4.112	3.434	3.116	2.660	2.272
120	8.328	6.843	6.526	6.491	6.480	6.480	6.479	6.379	6.362	4.627	3.877	3.261	2.775	2.359
125	-	7.045	6.631	6.576	6.559	6.559	6.559	6.456	6.439	5.143	4.351	3.406	2.890	2.447
130	-	7.246	6.736	6.662	6.639	6.639	6.638	6.533	6.516	5.658	4.824	3.726	3.005	2.535
135	-	7.447	6.841	6.748	6.719	6.719	6.717	6.610	6.593	6.173	5.298	4.125	3.120	2.623
140	-	7.649	6.945	6.833	6.799	6.799	6.797	6.687	6.670	6.385	5.772	4.524	3.235	2.711
145	-	7.850	7.050	6.919	6.878	6.878	6.876	6.764	6.747	6.461	6.245	4.922	3.350	2.799
150	-	8.051	7.155	7.005	6.958	6.958	6.956	6.841	6.824	6.537	6.395	5.321	3.469	2.886
155	-	8.253	7.260	7.090	7.038	7.038	7.035	6.918	6.901	6.613	6.471	5.719	3.613	2.974
160	-	8.454	7.365	7.176	7.118	7.118	7.115	6.995	6.978	6.689	6.547	6.118	3.756	3.062
165	-	-	7.470	7.262	7.197	7.197	7.194	7.072	7.055	6.765	6.623	6.369	3.900	3.150
170	-	-	7.575	7.347	7.277	7.277	7.273	7.149	7.132	6.841	6.699	6.446	4.044	3.238
175	-	-	7.679	7.433	7.357	7.357	7.353	7.226	7.209	6.916	6.775	6.523	4.188	3.326
180	-	-	7.784	7.518	7.437	7.437	7.432	7.303	7.286	6.992	6.851	6.600	4.332	3.413
185	-	-	7.889	7.604	7.516	7.516	7.512	7.381	7.363	7.068	6.927	6.677	4.476	3.593
190	-	-	7.994	7.690	7.596	7.596	7.591	7.458	7.440	7.144	7.004	6.755	4.620	3.840
195	-	-	8.099	7.775	7.676	7.676	7.671	7.535	7.517	7.220	7.080	6.832	4.764	4.088
200	-	-	8.204	7.861	7.756	7.756	7.750	7.612	7.594	7.296	7.156	6.909	5.042	4.336
205	-	-	8.309	7.947	7.835	7.835	7.829	7.689	7.671	7.372	7.232	6.986	6.354	4.584
210	-	-	-	8.032	7.915	7.915	7.909	7.766	7.748	7.448	7.308	7.064	6.440	4.831
215	-	-	-	8.118	7.995	7.995	7.988	7.843	7.825	7.523	7.384	7.141	6.526	4.985
220	-	-	-	8.204	8.074	8.074	8.068	7.920	7.902	7.599	7.460	7.218	6.612	5.105
225	-	-	-	8.289	8.154	8.154	8.147	7.997	7.979	7.675	7.536	7.295	6.698	5.226
230	-	-	-	-	8.234	8.234	8.227	8.074	8.056	7.751	7.612	7.373	6.783	5.346
235	-	-	-	-	-	-	8.306	8.151	8.133	7.827	7.688	7.450	6.869	5.467

PLEASE NOTE: The critical temperatures in this loading table are as defined for offices in accordance with BS5950-8:2003 as per Table 18 of the ASFP 5th Edition Yellow Book. The Yellow book also gives new critical temperatures to comply with several different building uses either to the Eurocodes for steel design or BS5950-8:2003. Alternative loadings tables to other critical temperatures are available from the Nullifire Technical Desk on request.

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Table 32: Hollow Columns
Fire Resistance Period: 120 Minutes

Thickness (mm) Required for a Design Temperature of

Section Factor up to m^{-1}	350°C	400°C	450°C	500°C	512°C	520°C	521°C	547°C	550°C	600°C	620°C	650°C	700°C	750°C
	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)	DFT (mm)
240	-	-	-	-	-	-	-	8.228	8.210	7.903	7.764	7.527	6.955	5.588
245	-	-	-	-	-	-	-	-	8.287	7.979	7.840	7.604	7.041	5.708
250	-	-	-	-	-	-	-	-	-	8.055	7.916	7.681	7.127	5.829
255	-	-	-	-	-	-	-	-	-	8.131	7.992	7.759	7.212	5.950
260	-	-	-	-	-	-	-	-	-	8.206	8.068	7.836	7.298	6.070
265	-	-	-	-	-	-	-	-	-	8.282	8.145	7.913	7.384	6.191
270	-	-	-	-	-	-	-	-	-	-	8.221	7.990	7.470	6.312
275	-	-	-	-	-	-	-	-	-	-	8.297	8.068	7.556	6.442
280	-	-	-	-	-	-	-	-	-	-	-	8.145	7.641	6.574
285	-	-	-	-	-	-	-	-	-	-	-	8.222	7.727	6.706
290	-	-	-	-	-	-	-	-	-	-	-	8.299	7.813	6.838
295	-	-	-	-	-	-	-	-	-	-	-	-	7.899	6.971
300	-	-	-	-	-	-	-	-	-	-	-	-	7.985	7.103
305	-	-	-	-	-	-	-	-	-	-	-	-	8.071	7.235
310	-	-	-	-	-	-	-	-	-	-	-	-	8.156	7.367
315	-	-	-	-	-	-	-	-	-	-	-	-	8.242	7.500
320	-	-	-	-	-	-	-	-	-	-	-	-	8.328	7.632
325	-	-	-	-	-	-	-	-	-	-	-	-	8.414	7.764
330	-	-	-	-	-	-	-	-	-	-	-	-	8.500	7.896
335	-	-	-	-	-	-	-	-	-	-	-	-	-	8.029
340	-	-	-	-	-	-	-	-	-	-	-	-	-	8.161
345	-	-	-	-	-	-	-	-	-	-	-	-	-	8.293
350	-	-	-	-	-	-	-	-	-	-	-	-	-	8.425
355	-	-	-	-	-	-	-	-	-	-	-	-	-	8.558
360	-	-	-	-	-	-	-	-	-	-	-	-	-	-
365	-	-	-	-	-	-	-	-	-	-	-	-	-	-
370	-	-	-	-	-	-	-	-	-	-	-	-	-	-
375	-	-	-	-	-	-	-	-	-	-	-	-	-	-
380	-	-	-	-	-	-	-	-	-	-	-	-	-	-
385	-	-	-	-	-	-	-	-	-	-	-	-	-	-
390	-	-	-	-	-	-	-	-	-	-	-	-	-	-
395	-	-	-	-	-	-	-	-	-	-	-	-	-	-
400	-	-	-	-	-	-	-	-	-	-	-	-	-	-
405	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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415	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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435	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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