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SC804 Loading Tables

Concrete Beam Summary

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Table E.2 : Concrete Beams/Columns: 30 Minutes*

Depth of the reinforcing bar inside concrete beam/column along vertical/horizontal axis, mm	Required SC803/SC804 dry film thickness for the 500°C design reinforcing bar temperature, mm
< 17	0.212
≥ 17	PNR

* Results applicable to members with minimum width of 150 mm

Table E.3 : Concrete Beams/Columns: 60 Minutes*

Depth of the reinforcing bar inside concrete beam/column along vertical/horizontal axis, mm	Required SC803/SC804 dry film thickness for the 500°C design reinforcing bar temperature, mm
0	2.505
1	2.255
2	2.006
3	1.756
4	1.506
5	1.257
7	1.007
7	0.757
8	0.508
9	0.258
≥ 10 but ≤ 36	0.201
≥ 37	PNR

* Results applicable to members with minimum width of 150 mm

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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Concrete Beam Summary

Table E.4 : Concrete Beams/Columns: 90 Minutes*

Depth of the reinforcing bar inside concrete beam/column along vertical/horizontal axis, mm	Required SC803/SC804 dry film thickness for the 500°C design reinforcing bar temperature, mm
0	2.505
1	2.432
2	2.359
3	2.286
4	2.214
5	2.141
6	2.068
7	1.995
8	1.992
9	1.849
10	1.777
11	1.704
12	1.631
13	1.558
14	1.485
15	1.412
16	1.340
17	1.267
18	1.194
19	1.121
20	1.048
21	0.975
22	0.903
23	0.830
24	0.757
25	0.684
26	0.611
27	0.538
28	0.466
29	0.393
30	0.320
31	0.247
≥ 32 but ≤ 54	0.201
≥ 55	PNR

* Results applicable to members with minimum width of 150 mm

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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Concrete Beam Summary

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Table E.5 : Concrete Beams/Columns: 120 Minutes*

Depth of the reinforcing bar inside concrete beam/column along vertical/horizontal axis, mm	Required SC803/SC804 dry film thickness for the 500°C design reinforcing bar temperature, mm
≤ 11	NCCRP
≥ 12 but ≤ 64	2.505
≥ 65	PNR

*Results applicable to members with minimum width of 200mm

Table E.6 : Concrete Beams/Columns: 180 Minutes*

Depth of the reinforcing bar inside concrete beam/column along vertical/horizontal axis, mm	Required SC803/SC804 dry film thickness for the 500°C design reinforcing bar temperature, mm
≤ 45	NCCRP
≥ 46 but ≤ 79	2.505
≥ 80	PNR

*Results applicable to members with minimum width of 240mm

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.