

Appendix 1

Certificate Number: 762c Issue: 08

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For: CAFCO 300 and PROMSPRAY P300

Required applied thickness (dft) in millimetres (mm) of Cafco 300 and PROMSPRAY P300 for I- section beams and H- section columns

This appendix forms part of Certificate Number 762c, Issue 08, issued to:

**Promat Research and Technology Centre NV
Bormstraat 24
2830 Tiselt
Belgium**

on 31 July 2018

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Table 1 Required thickness of Cafco® 300 and PROMASPRAY® P300 for a fire resistance period of 30 minutes

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
30	12	12	12	12	12	12	12	12	12
40	12	12	12	12	12	12	12	12	12
50	12	12	12	12	12	12	12	12	12
60	12	12	12	12	12	12	12	12	12
70	12	12	12	12	12	12	12	12	12
80	12	12	12	12	12	12	12	12	12
90	12	12	12	12	12	12	12	12	12
100	12	12	12	12	12	12	12	12	12
110	12	12	12	12	12	12	12	12	12
120	12	12	12	12	12	12	12	12	12
130	12	12	12	12	12	12	12	12	12
140	12	12	12	12	12	12	12	12	12
150	12	12	12	12	12	12	12	12	12
160	13	13	12	12	12	12	12	12	12
170	13	13	12	12	12	12	12	12	12
180	13	13	12	12	12	12	12	12	12
190	13	13	12	12	12	12	12	12	12
200	13	13	12	12	12	12	12	12	12
210	13	14	12	12	12	12	12	12	12
220	14	14	13	12	12	12	12	12	12
230	14	14	13	12	12	12	12	12	12
240	14	14	13	12	12	12	12	12	12
250	14	14	13	12	12	12	12	12	12
260	14	14	13	12	12	12	12	12	12
270	14	14	13	12	12	12	12	12	12
280	14	14	13	12	12	12	12	12	12
290	14	14	13	12	12	12	12	12	12
300	14	15	13	12	12	12	12	12	12
310	14	15	13	12	12	12	12	12	12
320	14	15	13	12	12	12	12	12	12

Table 2 Required thickness of Cafco® 300 and PROMASPRAY® P300 for a fire resistance period of 60 minutes

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
30	12	12	12	12	12	12	12	12	12
40	12	12	12	12	12	12	12	12	12
50	14	12	12	12	12	12	12	12	12
60	15	14	13	12	12	12	12	12	12
70	16	15	14	12	12	12	12	12	12
80	17	16	14	13	12	12	12	12	12
90	18	16	15	14	13	12	12	12	12
100	19	17	16	14	13	12	12	12	12
110	19	18	16	15	14	12	12	12	12
120	20	18	17	15	14	13	12	12	12
130	20	19	17	16	14	13	13	12	12
140	21	19	18	16	15	13	13	12	12
150	21	20	18	17	15	14	13	12	12
160	22	20	19	17	15	14	13	13	12
170	22	20	19	17	16	14	14	13	12
180	22	21	19	17	16	14	14	13	12
190	22	21	19	18	16	15	14	13	12

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
200	23	21	20	18	16	15	14	13	12
210	23	21	20	18	17	15	14	14	12
220	23	22	20	18	17	15	15	14	12
230	23	22	20	19	17	15	15	14	12
240	24	22	20	19	17	15	15	14	12
250	24	22	21	19	17	16	15	14	12
260	24	22	21	19	17	16	15	14	12
270	24	23	21	19	18	16	15	14	12
280	24	23	21	19	18	16	15	14	12
290	24	23	21	20	18	16	16	14	12
300	25	23	21	20	18	16	16	15	12
310	25	23	22	20	18	16	16	15	12
320	25	23	22	20	18	16	16	15	12

Table 3 Required thickness of Caeco® 300 and PROMASPRAY® P300 for a fire resistance period of 90 minutes

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
30	14	12	12	12	12	12	12	12	12
40	17	15	14	13	12	12	12	12	12
50	19	17	16	14	13	12	12	12	12
60	21	19	17	16	14	13	13	12	12
70	23	20	19	17	16	14	14	13	12
80	24	21	20	18	17	15	15	14	12
90	25	23	21	19	18	16	15	15	12
100	26	23	22	20	18	17	16	15	13
110	27	24	23	21	19	18	17	16	14
120	28	25	23	21	20	18	17	16	14
130	29	26	24	22	20	19	18	17	15
140	29	26	25	23	21	19	18	17	15
150	30	27	25	23	21	19	19	18	15
160	30	27	26	24	22	20	19	18	16
170	31	28	26	24	22	20	19	18	16
180	31	28	26	24	22	21	20	19	16
190	32	29	27	25	23	21	20	19	17
200	32	29	27	25	23	21	20	19	17
210	33	29	27	25	23	21	21	20	17
220	33	30	28	26	24	22	21	20	17
230	33	30	28	26	24	22	21	20	17
240	33	30	28	26	24	22	21	20	18
250	34	30	28	26	24	22	21	20	18
260	34	31	29	27	25	22	22	20	18
270	34	31	29	27	25	23	22	21	18
280	34	31	29	27	25	23	22	21	18
290	35	31	29	27	25	23	22	21	18
300	35	32	29	27	25	23	22	21	18
310	35	32	30	27	25	23	22	21	19
320	35	32	30	28	26	23	23	21	19

Table 4 Required thickness of Caeco® 300 and PROMASPRAY® P300 for a fire resistance period of 120 minutes

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
30	19	16	15	13	12	12	12	12	12
40	22	19	18	16	15	14	13	13	12
50	25	22	20	18	17	16	15	14	12
60	27	24	22	20	19	17	16	16	14
70	29	26	24	22	20	19	18	17	15
80	31	27	25	23	21	20	19	18	16
90	33	29	27	24	23	21	20	19	17
100	34	30	28	26	24	22	21	20	18
110	35	31	29	27	25	23	22	21	18
120	36	32	30	27	25	23	23	22	19
130	37	33	31	28	26	24	23	22	20
140	38	33	31	29	27	25	24	23	20
150	39	34	32	30	27	25	24	23	21
160	39	35	33	30	28	26	25	24	21
170	40	35	33	31	28	26	25	24	22
180	41	36	34	31	29	27	26	24	22
190	41	36	34	32	29	27	26	25	22
200	42	37	35	32	30	27	26	25	23
210	42	37	35	32	30	28	27	25	23
220	43	38	35	33	30	28	27	26	23
230	43	38	36	33	31	28	27	26	24
240	43	38	36	33	31	29	28	26	24
250	44	39	36	34	31	29	28	27	24
260	44	39	37	34	32	29	28	27	24
270	44	39	37	34	32	29	28	27	25
280	44	40	37	35	32	29	29	27	25
290	45	40	37	35	32	30	29	27	25
300	45	40	38	35	33	30	29	28	25
310	45	40	38	35	33	30	29	28	25
320	45	40	38	35	33	30	29	28	26

Table 5 Required thickness of Caeco® 300 and PROMASPRAY® P300 for a fire resistance period of 180 minutes

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
30	27	22	21	19	18	17	16	15	13
40	32	27	25	23	21	20	19	18	16
50	36	31	29	26	24	23	22	21	19
60	40	34	32	29	27	25	24	23	21
70	43	36	34	31	29	27	26	25	23
80	45	39	36	33	31	29	28	27	24
90	48	41	38	35	33	31	29	28	26
100	50	42	40	37	34	32	31	29	27
110	51	44	41	38	35	33	32	31	28
120	53	45	42	39	37	34	33	32	29
130	54	47	44	41	38	35	34	33	30
140	55	48	45	42	39	36	35	33	31
150	56	49	46	42	40	37	35	34	32
160	57	50	47	43	40	38	36	35	33
170	58	50	47	44	41	38	37	35	33
180	59	51	48	45	42	39	37	36	34
190	60	52	49	45	42	39	38	37	34

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
200	61	53	49	46	43	40	39	37	35
210	61	53	50	47	44	40	39	37	35
220	62	54	50	47	44	41	39	38	36
230	62	54	51	48	45	41	40	38	36
240	63	55	51	48	45	42	40	39	37
250	63	55	52	49	45	42	41	39	37
260	64	56	52	49	46	42	41	39	37
270	64	56	53	49	46	43	41	40	38
280	65	56	53	50	46	43	42	40	38
290	65	57	53	50	47	43	42	40	38
300	65	57	54	50	47	44	42	40	39
310	66	57	54	51	47	44	43	41	39
320	66	58	54	51	48	44	43	41	39

Table 6 Required thickness of Caeco® 300 and PROMASPRAY® P300 for a fire resistance period of 240 minutes

Section factor (m ⁻¹)	Design temperature (°C)								
	350	400	450	500	550	600	620	650	700
30	35	29	27	25	23	22	20	20	18
40	42	35	33	30	28	26	25	24	22
50	48	40	37	34	32	30	28	28	25
60	52	44	41	38	35	33	31	31	28
70	56	47	44	41	38	36	34	33	31
80	60	50	47	44	41	38	36	35	33
90	62	53	49	46	43	40	38	37	35
100	65	55	52	48	45	42	40	39	36
110	67	57	54	50	46	44	42	40	38
120	69	59	55	51	48	45	43	42	39
130	71	60	57	53	49	46	44	43	41
140	-	62	58	54	51	47	46	44	42
150	-	63	59	55	52	48	47	45	43
160	-	64	61	57	53	49	48	46	44
170	-	65	62	58	54	50	48	47	45
180	-	66	62	58	55	51	49	47	45
190	-	67	63	59	56	52	50	48	46
200	-	68	64	60	56	52	51	49	47
210	-	69	65	61	57	53	51	49	48
220	-	70	66	62	58	54	52	50	48
230	-	70	66	62	58	54	52	51	49
240	-	71	67	63	59	55	53	51	49
250	-	72	67	63	59	55	53	51	50
260	-	72	68	64	60	56	54	52	50
270	-	-	69	64	60	56	54	52	51
280	-	-	69	65	61	57	55	53	51
290	-	-	69	65	61	57	55	53	51
300	-	-	70	66	62	57	56	53	52
310	-	-	70	66	62	58	56	54	52
320	-	-	71	66	62	58	56	54	53

Note: The thicknesses given for open H- and I-sections also apply to steel sections of other shapes, e.g. U-, L- and T- sections under consideration of the same section factor value.