

## Facteurs de massivité $A_m/V$ et $A_p/V$ [m<sup>-1</sup>]

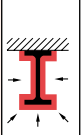
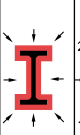
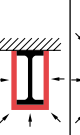
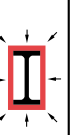
Facteurs utilisés en calcul de résistance au feu suivant ENV 1993-1-2.

## Section factors $A_m/V$ and $A_p/V$ [m<sup>-1</sup>]

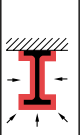
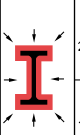
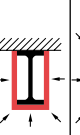
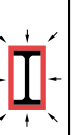
Factors used in fire design in accordance with ENV 1993-1-2.

## Profilfaktoren $A_m/V$ und $A_p/V$ [m<sup>-1</sup>]


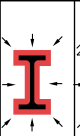
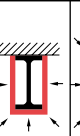
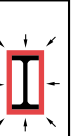
Profilfaktoren für die Berechnung des Feuerwiderstandes gemäß ENV 1993-1-2.

IPE				
IPE A 100	389	452	286	349
IPE 100	334	387	247	300
IPE A 120	370	428	271	329
IPE 120	311	360	230	279
IPE A 140	354	409	260	314
IPE 140	291	335	215	259
IPE A 160	332	382	245	295
IPE 160	269	310	200	241
IPE A 180	308	354	227	274
IPE 180	253	291	188	226
IPE O 180	226	260	168	202
IPE A 200	283	326	210	253
IPE 200	235	270	176	211
IPE O 200	212	244	158	190
IPE A 220	260	298	193	231
IPE 220	221	254	165	198
IPE O 220	200	230	149	179
IPE A 240	240	276	178	214
IPE 240	205	236	153	184
IPE O 240	185	213	139	167
IPE A 270	230	265	171	205
IPE 270	197	227	147	176
IPE O 270	170	195	127	152
IPE A 300	216	248	160	192
IPE 300	188	216	139	167
IPE O 300	163	187	121	145
IPE A 330	199	228	149	178
IPE 330	175	200	131	157
IPE O 330	152	175	114	137
IPE A 360	185	211	138	165
IPE 360	163	186	122	146
IPE O 360	142	162	107	127
IPE A 400	176	200	133	158
IPE 400	152	174	116	137
IPE O 400	135	154	103	122
IPE A 450	165	187	127	149
IPE 450	143	162	110	130
IPE O 450	122	138	94	110
IPE A 500	152	172	118	138
IPE 500	134	151	104	121
IPE O 500	114	129	89	104
IPE A 550	142	160	111	129
IPE 550	124	140	97	113
IPE O 550	108	121	85	98
IPE A 600	131	147	103	119
IPE 600	115	129	91	105
IPE O 600	93	104	73	85
IPE 750 x 147	120	134	94	109
IPE 750 x 173	102	114	81	93
IPE 750 x 196	91	102	72	83

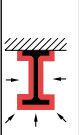
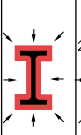
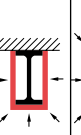

  

IPN				
IPN 120	268	309	210	251
IPN 140	238	274	189	225
IPN 160	220	252	173	205
IPN 180	200	229	158	188
IPN 200	185	212	147	174
IPN 220	171	196	136	161
IPN 240	160	183	127	150
IPN 260	149	170	119	140
IPN 280	139	158	111	131
IPN 300	131	149	105	123
IPN 320	123	140	99	116
IPN 340	117	133	94	110
IPN 360	110	125	89	104
IPN 380	105	119	85	99
IPN 400	100	113	81	94
IPN 450	89	101	73	84
IPN 500	81	91	66	77
IPN 550	75	85	61	71

HE				
HE 100 AA	290	355	181	245
HE 100 A	217	264	138	185
HE 100 B	180	218	115	154
HE 100 M	96	116	65	85
HE 120 AA	296	361	182	247
HE 120 A	220	267	137	185
HE 120 B	167	202	106	141
HE 120 M	92	111	61	80
HE 140 AA	281	342	172	233
HE 140 A	208	253	129	174
HE 140 B	155	187	98	130
HE 140 M	88	106	58	76
HE 160 AA	244	297	150	203
HE 160 A	192	234	120	161
HE 160 B	140	169	88	118
HE 160 M	83	100	54	71
HE 180 AA	229	279	141	190
HE 180 A	187	226	115	155
HE 180 B	131	159	83	110
HE 180 M	80	96	52	68
HE 200 AA	211	256	130	175
HE 200 A	174	211	108	145
HE 200 B	122	147	77	102
HE 200 M	76	92	49	65
HE 220 AA	200	242	122	165
HE 220 A	161	195	99	134
HE 220 B	115	140	72	97
HE 220 M	73	88	47	62

HE 240 AA				
HE 240 AA	185	225	114	154
HE 240 A	147	178	91	122
HE 240 B	108	131	68	91
HE 240 M	61	73	39	52
HE 260 AA	176	214	108	146
HE 260 A	141	171	88	117
HE 260 B	105	127	66	88
HE 260 M	59	72	39	51
HE 280 AA	168	204	104	139
HE 280 A	136	165	84	113
HE 280 B	102	123	64	85
HE 280 M	59	71	38	50
HE 300 AA	158	192	97	131
HE 300 A	126	153	78	105
HE 300 B	96	116	60	80
HE 300 M	50	60	33	43
HE 320 AA	152	184	95	127
HE 320 A	117	141	74	98
HE 320 B	91	110	58	77
HE 320 M	50	60	33	43
HE 340 AA	147	177	94	123
HE 340 A	112	134	72	94
HE 340 B	88	106	57	75
HE 340 M	50	60	34	43
HE 360 AA	142	170	92	120
HE 360 A	107	128	70	91
HE 360 B	86	102	56	73
HE 360 M	51	61	34	44
HE 400 AA	135	161	90	115
HE 400 A	101	120	68	87
HE 400 B	82	97	56	71
HE 400 M	52	62	36	45
HE 450 AA	133	156	91	114
HE 450 A	96	113	66	83
HE 450 B	79	93	55	69
HE 450 M	53	62	38	47
HE 500 AA	130	152	91	113
HE 500 A	92	107	65	80
HE 500 B	76	89	54	67
HE 500 M	55	63	39	48
HE 550 AA	123	142	88	108
HE 550 A	90	104	65	79
HE 550 B	76	88	55	67
HE 550 M	56	64	41	50
HE 600 AA	120	138	88	106
HE 600 A	89	102	65	79
HE 600 B	75	86	56	67
HE 600 M	57	65	42	51
HE 600 x 337	49	56	37	44
HE 600 x 399	42	48	32	38
HE 650 AA	118	135	88	105
HE 650 A	87	100	65	78
HE 650 B	74	85	56	66
HE 650 M	58	66	44	52

## Facteurs de massivité $A_m/V$ et $A_p/V$ [m<sup>-1</sup>]

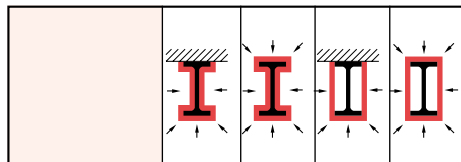
Facteurs utilisés en calcul de résistance au feu suivant ENV 1993-1-2.

## Section factors $A_m/V$ and $A_p/V$ [m<sup>-1</sup>]

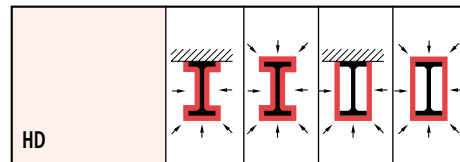
Factors used in fire design in accordance with ENV 1993-1-2.

## Profilfaktoren $A_m/V$ und $A_p/V$ [m<sup>-1</sup>]

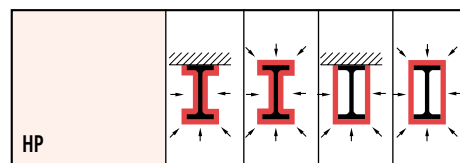
Profilfaktoren für die Berechnung des Feuerwiderstandes gemäß ENV 1993-1-2.



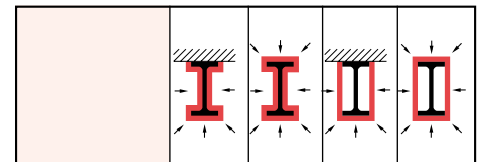
HE 650 x 343	50	57	38	45
HE 650 x 407	43	49	33	39
HE 700 AA	114	129	86	102
HE 700 A	85	96	64	76
HE 700 B	72	82	55	65
HE 700 M	59	67	45	53
HE 700 x 352	51	58	39	46
HE 700 x 418	44	50	34	40
HE 800 AA	108	122	84	98
HE 800 A	84	94	66	76
HE 800 B	72	81	57	66
HE 800 M	60	68	48	55
HE 800 x 373	52	59	41	48
HE 800 x 444	44	50	35	41
HE 900 AA	101	113	81	93
HE 900 A	81	90	65	74
HE 900 B	70	78	57	65
HE 900 M	62	69	50	57
HE 900 x 391	54	60	43	49
HE 900 x 466	45	51	37	42
HE 1000 AA	98	108	79	90
HE 1000 A	81	89	66	74
HE 1000 B	70	78	57	65
HE 1000 M	64	70	52	59
HE 1000 x 393	57	63	47	53
HE 1000 x 409	55	61	45	51
HE 1000 x 488	47	52	38	43
HE 1000 x 579	40	44	33	37
HL 920 x 342	69	78	51	61
HL 920 x 365	65	74	48	57
HL 920 x 387	61	70	46	54
HL 920 x 417	57	65	43	51
HL 920 x 446	53	61	40	48
HL 920 x 488	49	56	37	44
HL 920 x 534	45	51	34	40
HL 920 x 585	42	47	31	37
HL 920 x 653	38	43	29	34
HL 920 x 784	32	36	24	29
HL 920 x 967	26	30	20	24
HL 1000 x 296	82	92	63	73
HL 1000 A	76	85	58	68
HL 1000 B	66	74	51	59
HL 1000 M	60	67	46	54
HL 1000 x 477	52	58	40	47
HL 1000 x 554	45	51	35	41
HL 1000 x 642	39	44	31	36
HL 1000 x 748	34	39	27	31
HL 1000 x 883	29	33	23	27
HL 1100 A	76	85	59	68
HL 1100 B	67	75	52	60
HL 1100 M	61	68	47	55
HL 1100 R	53	59	42	48



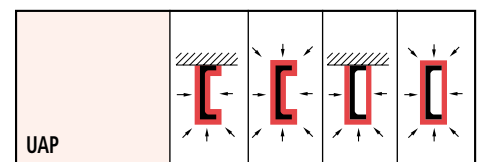
HD 260 x 54,1	176	214	108	146
HD 260 x 68,2	141	171	88	117
HD 260 x 93	105	127	66	88
HD 260 x 114	86	104	55	73
HD 260 x 142	71	86	46	60
HD 260 x 172	59	72	39	51
HD 320 x 74,2	152	184	95	127
HD 320 x 97,6	117	141	74	98
HD 320 x 127	91	110	58	77
HD 320 x 158	74	89	48	63
HD 320 x 198	60	72	39	51
HD 320 x 245	50	60	33	43
HD 320 x 300	42	50	28	36
HD 360 x 134	104	125	63	85
HD 360 x 147	95	114	58	78
HD 360 x 162	87	105	53	71
HD 360 x 179	79	95	49	65
HD 360 x 196	72	87	45	60
HD 400 x 187	78	94	47	64
HD 400 x 216	68	82	42	56
HD 400 x 237	63	76	38	52
HD 400 x 262	57	69	35	47
HD 400 x 287	52	63	32	43
HD 400 x 314	48	58	30	40
HD 400 x 347	44	53	28	37
HD 400 x 382	40	49	25	34
HD 400 x 421	37	45	23	31
HD 400 x 463	34	41	22	29
HD 400 x 509	31	38	20	27
HD 400 x 551	29	35	19	25
HD 400 x 592	28	33	18	23
HD 400 x 634	26	31	17	22
HD 400 x 677	25	30	16	21
HD 400 x 744	23	27	15	20
HD 400 x 818	21	25	14	18
HD 400 x 900	19	23	13	17
HD 400 x 990	18	22	12	16
HD 400 x 1086	17	20	11	15



HP 200 x 43	181	219	112	150
HP 200 x 53	145	176	90	121
HP 220 x 57,2	143	174	88	119
HP 260 x 75	129	156	80	108
HP 260 x 87,3	111	135	70	94
HP 305 x 79	147	178	91	121
HP 305 x 88	132	159	81	109
HP 305 x 95	122	148	76	101
HP 305 x 110	106	129	66	88
HP 305 x 126	94	113	58	78
HP 305 x 149	80	97	50	67



HP 305 x 180	67	81	42	56
HP 305 x 186	65	79	41	55
HP 305 x 223	55	67	35	47
HP 320 x 88,5	128	155	81	108
HP 320 x 103	111	135	70	94
HP 320 x 117	98	119	62	83
HP 320 x 147	80	96	51	68
HP 320 x 184	65	78	42	55
HP 360 x 84,3	162	196	98	132
HP 360 x 109	126	153	77	103
HP 360 x 133	104	126	64	86
HP 360 x 152	92	111	56	76
HP 360 x 174	81	98	50	67
HP 360 x 180	78	95	48	65
HP 400 x 122	116	141	70	95
HP 400 x 140	102	124	61	83
HP 400 x 158	91	111	55	74
HP 400 x 176	82	100	50	67
HP 400 x 194	75	91	46	62
HP 400 x 213	69	84	42	57
HP 400 x 231	64	77	39	53



UAP 80	261	303	192	234
UAP 100	248	285	187	224
UAP 130	231	263	180	211
UAP 150	207	235	160	188
UAP 175	198	224	155	181
UAP 200	187	211	149	172
UAP 220	180	202	143	165
UAP 250	166	185	134	153
UAP 300	148	165	120	137

UPN				
UPN 100	239	276	185	222
UPN 120	223	255	174	206
UPN 140	210	240	167	196
UPN 160	200	228	160	188
UPN 180	193	218	154	179
UPN 200	182	205	148	171
UPN 220	171	192	139	160
UPN 240	163	183	134	154
UPN 260	154	173	126	145
UPN 280	149	167	123	141
UPN 300	145	162	119	136
UPN 320	116	130	98	111
UPN 350	123	135	103	116
UPN 380	125	138	107	120
UPN 400	117	129	99	111

## Facteurs de massivité $A_m/V$ et $A_p/V$ [ $m^{-1}$ ]

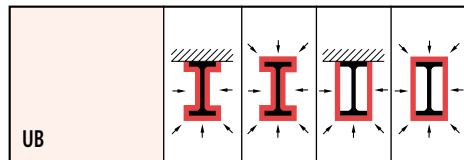
Facteurs utilisés en calcul de résistance au feu suivant ENV 1993-1-2.

## Section factors $A_m/V$ and $A_p/V$ [ $m^{-1}$ ]

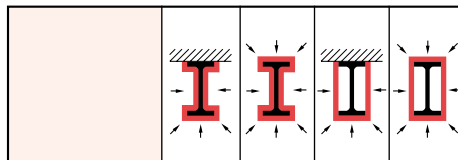
Factors used in fire design in accordance with ENV 1993-1-2.

## Profilfaktoren $A_m/V$ und $A_p/V$ [ $m^{-1}$ ]

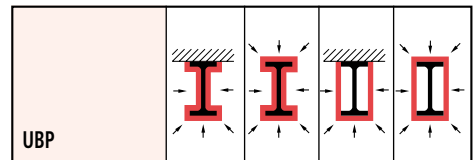
Profilfaktoren für die Berechnung des Feuerwiderstandes gemäß ENV 1993-1-2.



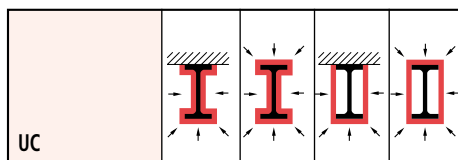
UB				
UB 152 x 89 x 16	270	314	194	237
UB 178 x 102 x 19	262	304	188	230
UB 203 x 102 x 23	234	269	173	207
UB 203 x 133 x 25	244	286	169	210
UB 203 x 133 x 30	207	242	143	178
UB 254 x 102 x 22	281	318	218	254
UB 254 x 102 x 25	248	280	192	224
UB 254 x 102 x 28	222	251	173	201
UB 254 x 146 x 31	231	268	164	200
UB 254 x 146 x 37	196	227	140	171
UB 254 x 146 x 43	170	197	122	149
UB 305 x 102 x 25	282	314	225	257
UB 305 x 102 x 28	250	279	200	229
UB 305 x 102 x 33	217	241	174	198
UB 305 x 165 x 40	209	242	150	183
UB 305 x 165 x 46	184	212	133	161
UB 305 x 165 x 54	159	183	115	139
UB 356 x 127 x 33	248	278	195	225
UB 356 x 127 x 39	212	237	167	193
UB 356 x 171 x 45	207	236	152	182
UB 356 x 171 x 51	184	210	136	162
UB 356 x 171 x 57	165	189	122	146
UB 356 x 171 x 67	142	162	105	126
UB 406 x 140 x 39	240	268	189	217
UB 406 x 140 x 46	205	229	162	186
UB 406 x 178 x 54	189	215	143	168
UB 406 x 178 x 60	172	195	129	153
UB 406 x 178 x 67	154	175	117	138
UB 406 x 178 x 74	140	159	106	125
UB 457 x 152 x 52	199	222	158	181
UB 457 x 152 x 60	175	195	139	159
UB 457 x 152 x 67	157	175	125	143
UB 457 x 152 x 74	143	159	114	130
UB 457 x 152 x 82	130	145	104	119
UB 457 x 191 x 67	169	191	128	150
UB 457 x 191 x 74	153	173	117	137
UB 457 x 191 x 82	139	158	106	125
UB 457 x 191 x 89	129	146	98	115
UB 457 x 191 x 98	118	133	90	105
UB 533 x 210 x 82	157	177	121	141
UB 533 x 210 x 92	141	159	109	126
UB 533 x 210 x 101	129	145	100	116
UB 533 x 210 x 109	120	135	93	108
UB 533 x 210 x 122	108	122	84	97
UB 610 x 229 x 101	143	161	111	129
UB 610 x 229 x 113	129	145	100	116
UB 610 x 229 x 125	117	131	91	106
UB 610 x 229 x 140	105	118	82	95
UB 610 x 305 x 149	110	126	80	97
UB 610 x 305 x 179	92	106	68	81
UB 610 x 305 x 238	71	81	52	62
UB 686 x 254 x 125	130	145	101	117
UB 686 x 254 x 140	116	131	91	105
UB 686 x 254 x 152	107	121	84	97
UB 686 x 254 x 170	97	109	76	88



UB 762 x 267 x 147	120	134	95	109
UB 762 x 267 x 173	103	115	81	93
UB 762 x 267 x 197	91	102	72	83
UB 838 x 292 x 176	111	124	88	101
UB 838 x 292 x 194	101	113	80	92
UB 838 x 292 x 226	87	98	69	79
UB 914 x 305 x 201	104	116	82	94
UB 914 x 305 x 224	93	104	74	85
UB 914 x 305 x 253	83	93	66	76
UB 914 x 305 x 289	73	82	59	67
UB 914 x 419 x 343	69	78	51	61
UB 914 x 419 x 388	61	70	46	54



UBP 203 x 203 x 45	172	208	106	142
UBP 203 x 203 x 54	144	174	90	120
UBP 254 x 254 x 63	152	184	94	126
UBP 254 x 254 x 71	136	164	84	112
UBP 254 x 254 x 85	114	138	71	95
UBP 305 x 305 x 79	146	177	90	121
UBP 305 x 305 x 88	132	159	81	109
UBP 305 x 305 x 95	122	148	76	101
UBP 305 x 305 x 110	106	129	66	88
UBP 305 x 305 x 126	94	113	58	78
UBP 305 x 305 x 149	80	97	50	67
UBP 305 x 305 x 186	65	79	41	55
UBP 305 x 305 x 223	55	67	35	47
UBP 356 x 368 x 109	126	153	77	103
UBP 356 x 368 x 133	104	126	64	86
UBP 356 x 368 x 152	92	111	56	76
UBP 356 x 368 x 174	81	98	50	67



UC 152 x 152 x 23	252	304	156	208
UC 152 x 152 x 30	195	235	122	162
UC 152 x 152 x 37	161	194	101	134
UC 203 x 203 x 46	168	202	104	139
UC 203 x 203 x 52	150	180	93	124
UC 203 x 203 x 60	131	158	82	109
UC 203 x 203 x 71	112	135	71	93
UC 203 x 203 x 86	94	113	60	79
UC 254 x 254 x 73	132	160	82	109
UC 254 x 254 x 89	110	133	69	91
UC 254 x 254 x 107	93	112	58	77
UC 254 x 254 x 132	76	92	48	64
UC 254 x 254 x 167	62	74	40	52
UC 305 x 305 x 97	120	145	75	99
UC 305 x 305 x 118	100	120	62	83
UC 305 x 305 x 137	87	105	54	72
UC 305 x 305 x 158	76	91	48	63
UC 305 x 305 x 198	62	74	39	52
UC 305 x 305 x 240	52	62	33	44
UC 305 x 305 x 283	45	54	29	38
UC 356 x 368 x 129	108	130	66	88
UC 356 x 368 x 153	92	111	56	75
UC 356 x 368 x 177	80	96	49	66
UC 356 x 368 x 202	71	85	44	58
UC 356 x 406 x 235	63	76	39	52
UC 356 x 406 x 287	52	63	32	43
UC 356 x 406 x 340	45	54	28	37
UC 356 x 406 x 393	39	48	25	33
UC 356 x 406 x 467	34	41	22	29
UC 356 x 406 x 551	29	35	19	25
UC 356 x 406 x 634	26	31	17	22

## Facteurs de massivité $A_m/V$ et $A_p/V$ [m<sup>-1</sup>]

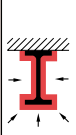

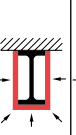
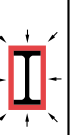
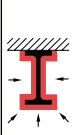

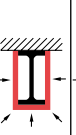
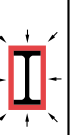
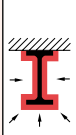

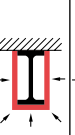
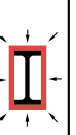
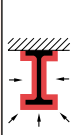
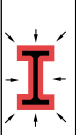
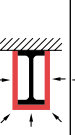
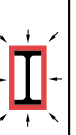
Facteurs utilisés en calcul de résistance au feu suivant ENV 1993-1-2.

## Section factors $A_m/V$ and $A_p/V$ [m<sup>-1</sup>]

Factors used in fire design in accordance with ENV 1993-1-2.

## Profilfaktoren $A_m/V$ und $A_p/V$ [m<sup>-1</sup>]

Profilfaktoren für die Berechnung des Feuerwiderstandes gemäß ENV 1993-1-2.

W																
																
W 100 x 100 x 19.3	201	243	127	169	W 360 x 130 x 32.9	252	282	198	228	W 610 x 230 x 140	105	118	82	95		
W 130 x 130 x 23.8	201	243	126	168	W 360 x 130 x 39.0	213	238	167	193	W 610 x 325 x 155	109	125	78	95		
W 130 x 130 x 28.1	172	208	109	144	W 360 x 170 x 44	207	237	153	183	W 610 x 325 x 174	97	112	70	85		
W 150 x 100 x 13.5	336	393	231	289	W 360 x 170 x 51	185	211	136	163	W 610 x 325 x 195	87	100	63	76		
W 150 x 100 x 18.0	253	297	175	219	W 360 x 170 x 57.8	166	190	123	147	W 610 x 325 x 217	79	91	57	69		
W 150 x 100 x 24.0	197	231	138	172	W 360 x 370 x 134	104	125	63	85	W 610 x 325 x 241	73	83	53	64		
W 150 x 150 x 22.5	259	313	160	213	W 360 x 370 x 147	95	114	58	78	W 610 x 325 x 262	66	76	48	58		
W 150 x 150 x 29.8	198	238	123	164	W 360 x 370 x 162	87	105	53	71	W 610 x 325 x 285	61	70	45	54		
W 150 x 150 x 37.1	160	193	101	134	W 360 x 370 x 179	79	95	49	65	W 610 x 325 x 341	52	60	38	46		
W 200 x 100 x 15.0	354	406	261	313	W 360 x 370 x 196	72	87	45	60	W 610 x 325 x 415	43	50	32	38		
W 200 x 100 x 19.3	276	317	204	245	W 360 x 410 x 216	68	82	42	56	W 610 x 325 x 455	40	46	30	36		
W 200 x 100 x 22.5	241	277	179	215	W 360 x 410 x 237	63	76	38	52	W 610 x 325 x 498	37	42	27	33		
W 200 x 135 x 26.6	232	271	161	200	W 360 x 410 x 262	57	69	35	47	W 610 x 325 x 551	34	39	25	30		
W 200 x 135 x 31.3	199	233	139	172	W 360 x 410 x 287	52	63	32	43	W 690 x 250 x 125	129	145	101	116		
W 200 x 165 x 35.9	190	226	124	160	W 360 x 410 x 314	48	58	30	40	W 690 x 250 x 140	117	131	91	105		
W 200 x 165 x 41.7	165	196	108	140	W 360 x 410 x 347	44	53	28	37	W 690 x 250 x 152	108	121	84	97		
W 200 x 200 x 46.1	168	202	104	139	W 360 x 410 x 382	40	49	25	34	W 690 x 250 x 170	97	109	76	88		
W 200 x 200 x 52	149	180	93	123	W 360 x 410 x 421	37	45	23	31	W 690 x 250 x 192	87	97	68	78		
W 200 x 200 x 59	132	159	83	110	W 360 x 410 x 463	34	41	22	29	W 760 x 265 x 147	120	134	94	109		
W 200 x 200 x 71	111	134	70	93	W 360 x 410 x 509	31	38	20	27	W 760 x 265 x 161	110	123	87	100		
W 200 x 200 x 86	93	112	59	78	W 360 x 410 x 551	29	35	19	25	W 760 x 265 x 173	102	114	81	93		
W 200 x 200 x 100	82	99	53	69	W 360 x 410 x 592	28	33	18	23	W 760 x 265 x 185	97	108	76	88		
W 250 x 100 x 17.9	342	386	264	308	W 360 x 410 x 634	26	31	17	22	W 760 x 265 x 196	91	102	72	83		
W 250 x 100 x 22.3	275	311	213	248	W 360 x 410 x 677	25	30	16	21	W 760 x 265 x 220	82	91	65	74		
W 250 x 100 x 25.3	246	277	190	222	W 360 x 410 x 744	23	27	15	20	W 840 x 295 x 176	111	124	88	101		
W 250 x 100 x 28.4	221	249	172	200	W 360 x 410 x 818	21	25	14	18	W 840 x 295 x 193	101	113	80	92		
W 250 x 145 x 32.7	222	257	159	194	W 360 x 410 x 900	19	23	13	17	W 840 x 295 x 210	93	104	74	85		
W 250 x 145 x 38.5	190	220	136	166	W 360 x 410 x 990	18	22	12	16	W 840 x 295 x 226	87	97	69	79		
W 250 x 145 x 44.8	165	191	119	144	W 360 x 410 x 1086	17	20	11	15	W 840 x 295 x 251	79	88	63	72		
W 250 x 250 x 73	132	159	82	109	W 410 x 140 x 38.8	239	267	189	217	W 920 x 310 x 201	104	115	82	94		
W 250 x 250 x 80	121	146	75	100	W 410 x 140 x 46.1	203	227	161	185	W 920 x 310 x 223	93	104	74	85		
W 250 x 250 x 89	109	132	68	90	W 410 x 180 x 53	192	218	145	171	W 920 x 310 x 238	88	98	70	80		
W 250 x 250 x 101	97	117	61	81	W 410 x 180 x 60	174	197	131	154	W 920 x 310 x 253	83	93	66	76		
W 250 x 250 x 115	87	104	55	72	W 410 x 180 x 67	154	175	116	137	W 920 x 310 x 271	78	87	62	71		
W 250 x 250 x 131	77	92	49	64	W 410 x 180 x 75	140	159	106	125	W 920 x 310 x 289	74	82	59	67		
W 250 x 250 x 149	68	82	44	57	W 410 x 180 x 85	124	140	94	110	W 920 x 310 x 313	68	76	55	62		
W 250 x 250 x 167	62	74	40	52	W 460 x 150 x 52	200	223	159	182	W 920 x 310 x 342	69	78	51	61		
W 310 x 100 x 21.0	329	367	263	301	W 460 x 150 x 60	176	196	140	160	W 920 x 420 x 342	65	74	48	57		
W 310 x 100 x 23.8	292	326	234	267	W 460 x 150 x 68	154	172	123	141	W 920 x 420 x 365	61	70	46	54		
W 310 x 100 x 28.3	249	277	200	228	W 460 x 190 x 74	153	173	117	137	W 920 x 420 x 387	57	65	43	51		
W 310 x 100 x 32.7	216	241	174	198	W 460 x 190 x 82	139	158	106	125	W 920 x 420 x 417	53	61	40	48		
W 310 x 165 x 38.7	220	253	158	192	W 460 x 190 x 89	129	145	98	115	W 920 x 420 x 446	49	56	37	44		
W 310 x 165 x 44.5	193	222	139	168	W 460 x 190 x 97	119	135	91	107	W 920 x 420 x 488	45	51	34	40		
W 310 x 165 x 52	166	191	120	145	W 460 x 190 x 106	110	124	84	99	W 920 x 420 x 534	42	47	31	37		
W 310 x 310 x 97	120	145	75	99	W 460 x 280 x 113	120	139	84	103	W 920 x 420 x 585	38	43	29	34		
W 310 x 310 x 107	110	132	68	91	W 460 x 280 x 128	106	124	74	92	W 920 x 420 x 653	32	36	24	29		
W 310 x 310 x 117	100	121	62	83	W 460 x 280 x 144	95	110	67	82	W 920 x 420 x 784	26	30	20	24		
W 310 x 310 x 129	91	110	57	76	W 460 x 280 x 158	87	102	62	76	W 1000 x 300 x 222	97	108	79	90		
W 310 x 310 x 143	83	100	52	69	W 460 x 280 x 177	78	91	55	68	W 1000 x 300 x 249	88	97	71	81		
W 310 x 310 x 158	76	92	48	64	W 530 x 210 x 92	140	158	108	126	W 1000 x 300 x 272	81	89	66	74		
W 310 x 310 x 179	68	82	43	57	W 530 x 210 x 101	128	145	99	115	W 1000 x 300 x 314	70	78	57	65		
W 310 x 310 x 202	60	73	39	51	W 530 x 210 x 109	120	135	93	108	W 1000 x 300 x 350	64	70	52	59		
W 310 x 310 x 226	55	66	35	46	W 530 x 210 x 123	107	120	83	96	W 1000 x 300 x 393	57	63	47	53		
W 310 x 310 x 253	49	59	32	42	W 530 x 210 x 138	96	108	74	87	W 1000 x 300 x 415	54	60	44	50		
W 310 x 310 x 283	45	54	29	38	W 610 x 230 x 101	142	160	110	128	W 1000 x 300 x 494	46	51	38	43		
W 310 x 310 x 313	41	49	27	35	W 610 x 230 x 113	128	144	100	116	W 1000 x 300 x 584	39	44	33	37		
W 310 x 310 x 342	38	45	25	32	W 610 x 230 x 125	117	131	91	105							

## Facteurs de massivité $A_m/V$ et $A_p/V$ [ $m^{-1}$ ]

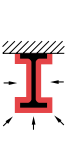

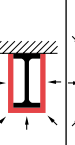

Facteurs utilisés en calcul de résistance au feu suivant ENV 1993-1-2.

## Section factors $A_m/V$ and $A_p/V$ [ $m^{-1}$ ]



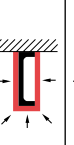

Factors used in fire design in accordance with ENV 1993-1-2.

## Profilfaktoren $A_m/V$ und $A_p/V$ [ $m^{-1}$ ]

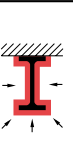
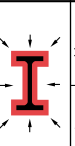
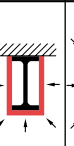
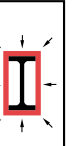
Profilfaktoren für die Berechnung des Feuerwiderstandes gemäß ENV 1993-1-2.

W				
	W 1000 x 400 x 296	82	92	63
W 1000 x 400 x 321	76	85	58	68
W 1000 x 400 x 371	66	74	51	59
W 1000 x 400 x 412	60	67	46	54
W 1000 x 400 x 443	56	63	43	50
W 1000 x 400 x 483	51	58	40	46
W 1000 x 400 x 539	46	52	36	42
W 1000 x 400 x 591	42	48	33	38
W 1000 x 400 x 642	39	44	31	36
W 1000 x 400 x 748	34	39	27	31
W 1000 x 400 x 883	29	33	23	27
W 1100 x 400 x 343	76	85	59	68
W 1100 x 400 x 390	67	75	52	60
W 1100 x 400 x 433	61	68	47	55
W 1100 x 400 x 499	53	59	42	48

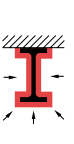
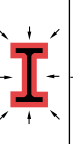
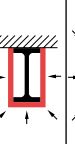

  

C				
	C 380 x 50.4	150	163	132
C 380 x 60	125	137	112	124
C 380 x 74	100	110	90	100


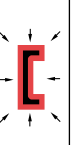
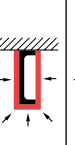

  

HJ				
	H 100 x 100 x 6 x 8	219	265	139
H 125 x 125 x 6.5 x 9	199	241	125	167
H 150 x 75 x 5 x 7	281	323	210	252
H 150 x 150 x 7 x 10	182	220	113	151
H 175 x 175 x 7.5 x 11	163	197	102	136
H 200 x 100 x 4.5 x 7	295	339	218	262
H 200 x 100 x 5.5 x 8	253	291	187	225
H 200 x 200 x 8 x 12	151	183	94	126
H 200 x 200 x 12 x 12	135	164	84	113
H 250 x 125 x 5 x 8	264	303	194	233
H 250 x 125 x 6 x 9	230	264	169	203
H 250 x 250 x 11 x 11	148	179	91	122
H 250 x 250 x 9 x 14	132	160	82	109
H 250 x 250 x 14 x 14	117	141	73	97
H 300 x 150 x 5.5 x 8	247	284	183	219
H 300 x 150 x 6.5 x 9	217	249	160	192
H 300 x 300 x 12 x 12	136	165	84	112
H 300 x 300 x 10 x 15	123	148	76	101
H 300 x 300 x 15 x 15	110	132	68	91
H 350 x 175 x 6 x 9	225	258	165	198
H 350 x 175 x 7 x 11	189	217	139	167
H 350 x 350 x 13 x 13	126	152	77	103
H 350 x 350 x 10 x 16	117	141	72	96
H 350 x 350 x 16 x 16	103	124	63	85
H 350 x 350 x 12 x 19	99	119	61	81
H 350 x 350 x 19 x 19	87	105	54	72
H 400 x 300 x 10 x 16	123	145	81	104
H 400 x 400 x 15 x 15	107	130	66	89
H 400 x 400 x 11 x 18	103	124	63	85
H 400 x 400 x 18 x 18	90	109	56	75
H 400 x 400 x 13 x 21	89	107	55	73
H 400 x 400 x 21 x 21	78	94	48	64
H 400 x 400 x 18 x 28	67	80	42	55
H 400 x 400 x 20 x 35	55	67	35	46
H 400 x 400 x 30 x 50	39	47	25	33
H 500 x 200 x 9 x 14	156	176	120	140
H 500 x 200 x 10 x 16	139	157	107	125
H 500 x 200 x 11 x 19	121	137	94	109
H 500 x 300 x 11 x 15	129	150	90	111
H 500 x 300 x 11 x 18	115	134	80	99

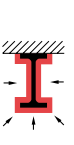

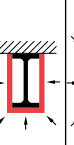

  

HP				
	HP 200 x 43	181	219	112
HP 200 x 53	145	176	90	121
HP 250 x 62	152	185	94	126
HP 250 x 85	114	138	71	95
HP 310 x 79	147	178	91	121
HP 310 x 93	124	150	77	103
HP 310 x 110	106	128	66	88
HP 310 x 125	94	114	59	79
HP 310 x 132	90	109	56	75
HP 360 x 108	127	154	77	104
HP 360 x 132	105	127	64	86
HP 360 x 152	92	111	56	76
HP 360 x 174	81	98	50	67

U				
	C 200 x 17.1	234	260	213
C 200 x 20.5	199	222	179	202
C 200 x 27.9	146	164	132	150
C 250 x 22.8	218	240	199	222
C 250 x 30	167	186	153	171
C 250 x 37	141	157	128	144
C 250 x 45	114	127	103	116
C 310 x 30.8	191	210	174	193
C 310 x 37	162	178	146	162
C 310 x 45	131	145	121	135

H				
	H 600 x 300 x 12 x 17	119	137	87
H 600 x 300 x 12 x 20	108	124	79	95
H 600 x 300 x 14 x 23	94	108	69	83
H 700 x 300 x 13 x 20	107	122	81	96
H 700 x 300 x 13 x 24	97	110	73	86
H 800 x 300 x 14 x 22	101	114	79	91
H 800 x 300 x 14 x 26	93	104	72	83
H 900 x 300 x 15 x 23	98	109	78	89
H 900 x 300 x 16 x 28	86	96	69	78
H 900 x 300 x 18 x 34	74	82	59	67

