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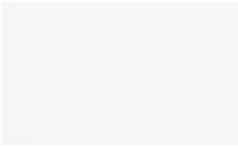
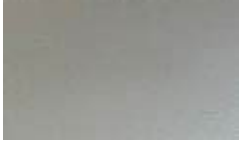
Rolling Shutter and accessories

Catalog

2026



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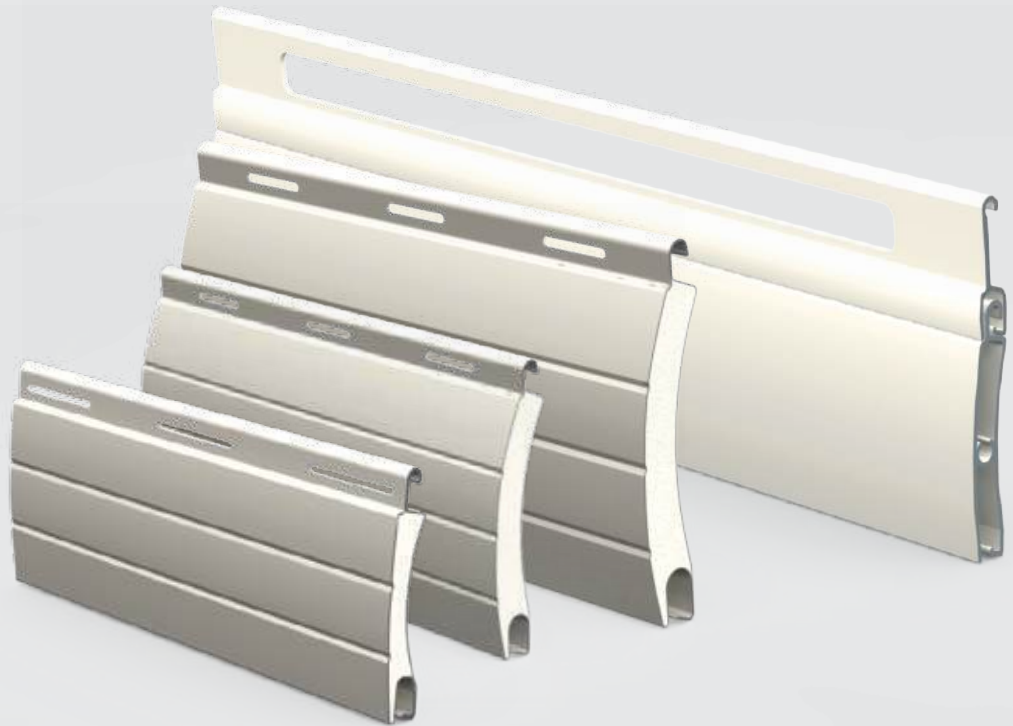
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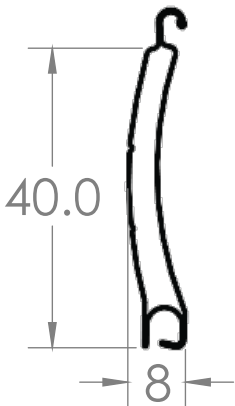
Shutter Slats



ARS-40-C-M

Aluminium rolling shutter

Features	40 mm	
Approximate weight / m ² [1]	2.3	kg/m ²
Maximum width tested [2]	2.5	m
Maximum height tested	2.5	m
Slat dimensions	40 x 8	mm
Slats per meter	25	
Production length	Up to 6.5	m
Packaging	60	
Polyurethane density	65±5	kg/m ³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	20 ±2 µm
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

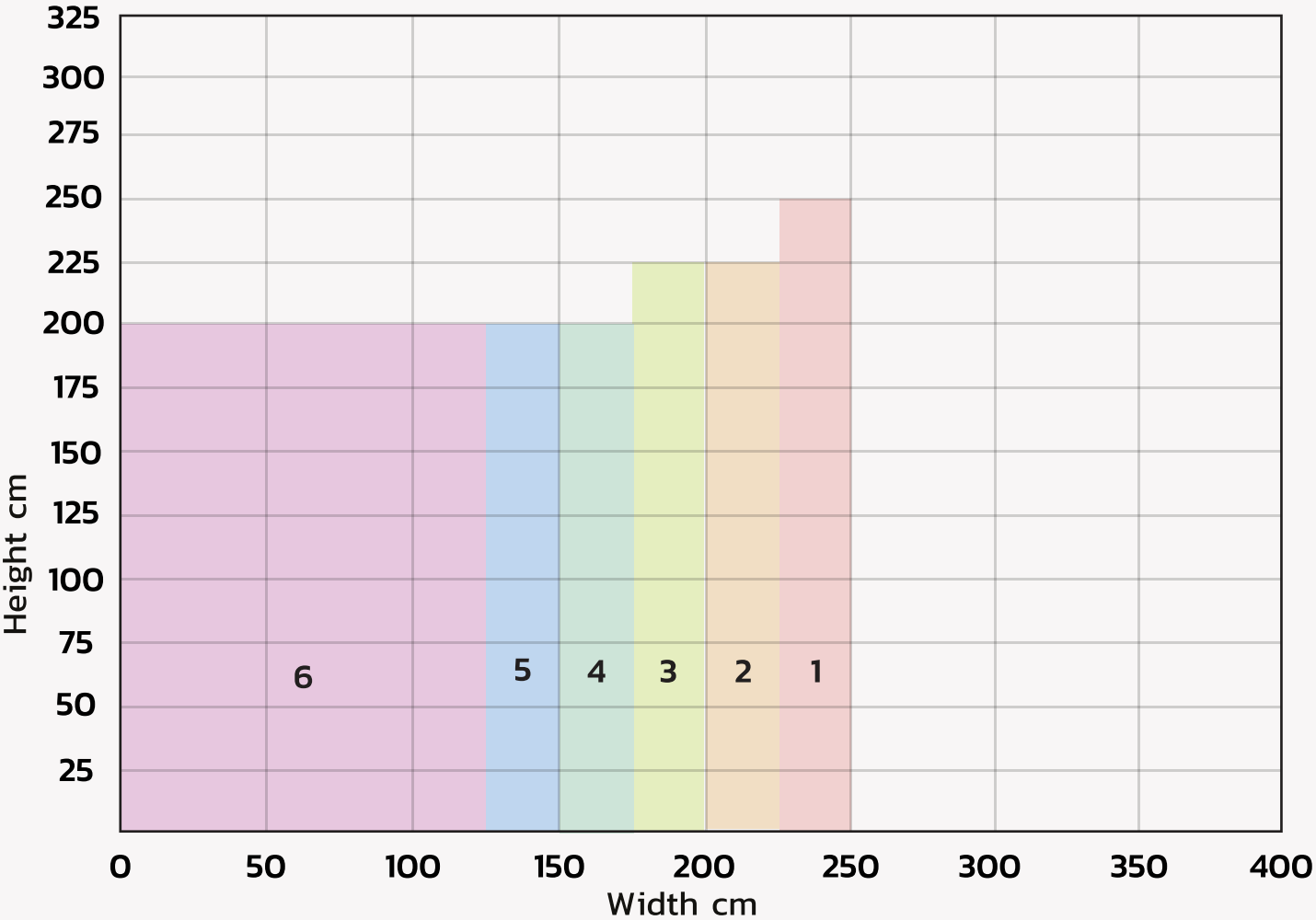
Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	40	60
150		1685	1445
165		1890	1730
180		2500	2405
205		-	2500
225		-	-
250		-	-
300		-	-

[1] Including end locks weight.

[2] Using guide GR-22-53-T, GR-21-52-T, GR-23-80-T, or GR-23-80-T2 according to EN 13659 class1 wind speed 39.8 km/h.

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	40	111	119	125	135	142	148	155	160	-	-	-	-	-	-	-	-
	60	120	128	133	140	150	154	161	165	-	-	-	-	-	-	-	-

Wind load resistance according to EN 13695



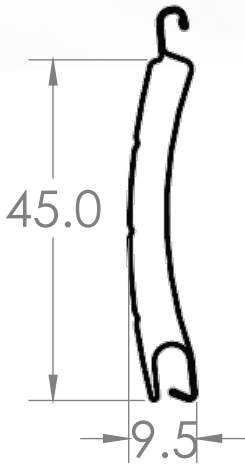
Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
250 x 250	Class 1	175 x 200	Class 4
225 x 225	Class 2	150 x 200	Class 5
200 x 225	Class 3	125 x 200	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-40-C	GR-21-52-T
ES-45-G		GR-22-53-T
		GR-23-80-T
		GR-23-80-T2

ARS-45-C-M

Aluminium rolling shutter

Features	45 mm	
Approximate weight / m ² [1]	2.5	kg/m ²
Maximum width tested [2]	3.0	m
Maximum height tested	2.5	m
Slat dimensions	45 x 9.5	mm
Slats per meter	22.22	
Production length	Up to 6.5	m
Packaging	51	
Polyurethane density	65± 5	kg/m ³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

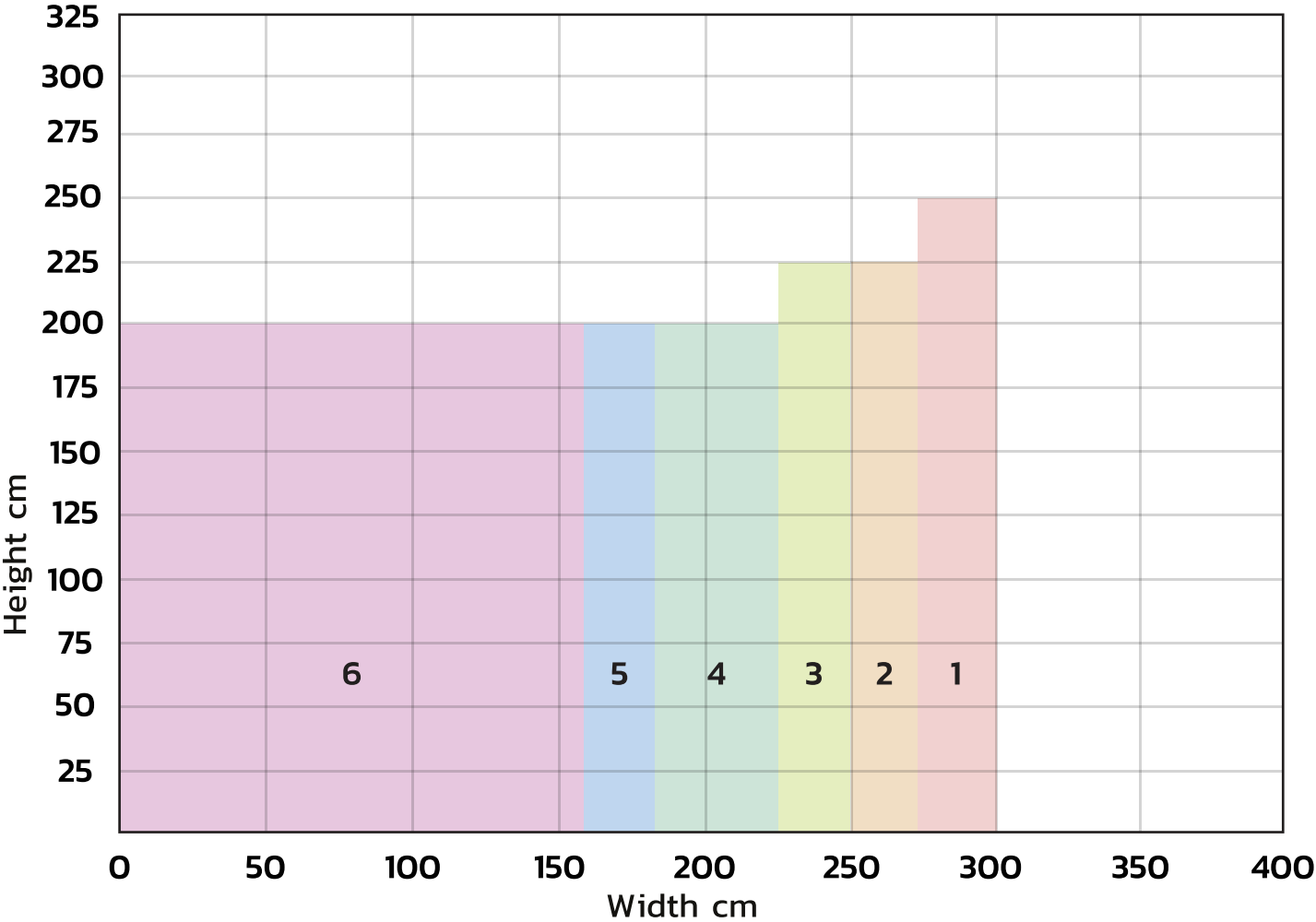
Box size according to the height of the shutter (mm)		
Box size (mm)	Tube (mm)	60
150		1045
165		1300
180		1845
205		2500
225		-
250		-
300		-

[1] Including end locks weight.

[2] Using guide GR-22-53-T, GR-21-52-T, GR-23-80-T, or GR-23-80-T2 according to EN 13659 class1 wind speed 39.8 km/h

Rolling shutter diameter																
Height (mm)	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	135	150	160	170	170	175	185	190	195	205	210	-	-	-	-

Wind load resistance according to EN 13659



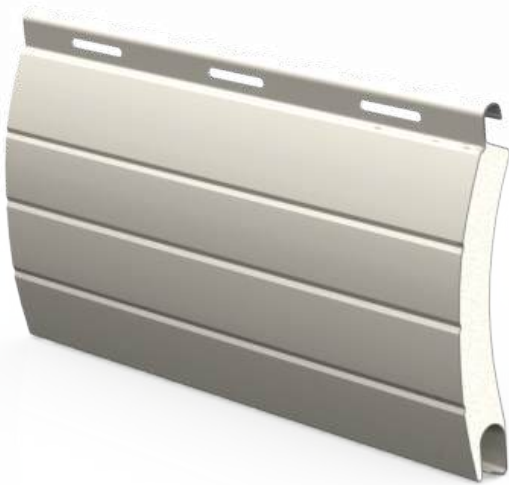
Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
300 x 250	Class 1	225 x 200	Class 4
275 x 225	Class 2	185 x 200	Class 5
250 x 225	Class 3	160 x 200	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-45-C	GR-21-52-T
ES-45-G		GR-22-53-T
		GR-23-80-T
		GR-23-80-T2

ARS-46-C-M

Aluminium rolling shutter

Features	46 mm	
Approximate weight / m ² ^[1]	2.5	kg/m ²
Maximum width tested ^[2]	3.0	m
Maximum height tested	2.5	m
Slat dimensions	46 x 9.5	mm
Slats per meter	21.74	
Production length	Up to 6.5	m
Packaging	51	
Polyurethane density	65± 5	kg/m ³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	0T
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

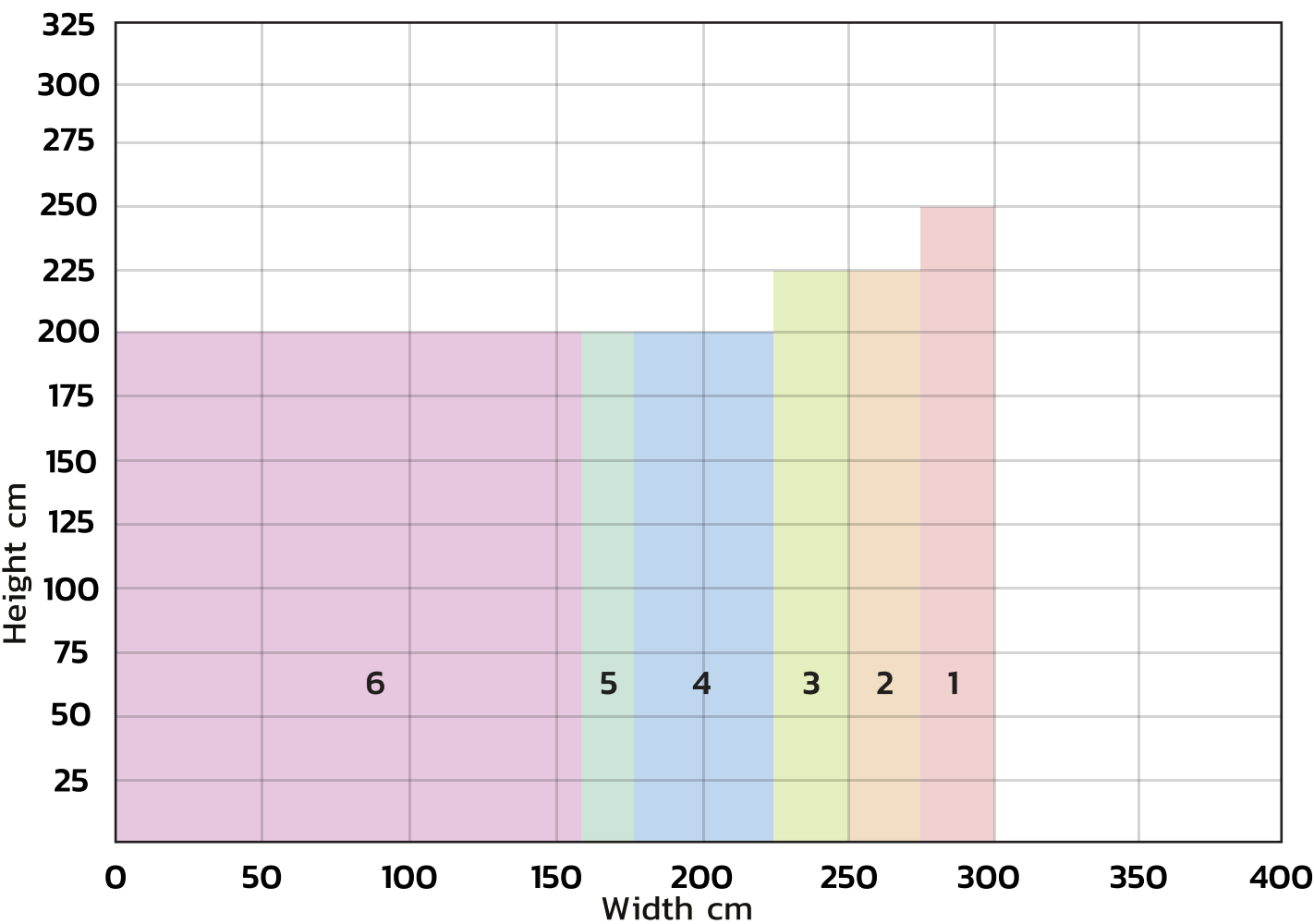
Box size according to the height of the shutter (mm)		
Box size (mm) \ Tube (mm)	60	
150	1240	
165	1610	
180	2210	
205	2500	
225	-	
250	-	
300	-	

[1] Including end locks weight.

[2] Using guide GR-22-53-T, GR-21-52-T, GR-23-80-T, or GR-23-80-T2 according to EN 13659 class1 wind speed 39.8 km/h

Rolling shutter diameter																
Height (mm)	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	134	148	150	162	164	166	180	182	190	192	194	206	-	-	-

Wind load resistance according to EN 13659



Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
300 x 250	Class 1	225 x 200	Class 4
275 x 225	Class 2	185 x 200	Class 5
250 x 225	Class 3	160 x 200	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-46-C	GR-21-52-T
ES-45-G		GR-22-53-T
		GR-23-80-T
		GR-23-80-T2

ARS-55-C-M

Aluminium rolling shutter

Features	55 mm
Approximate weight / m² [1]	2.7 kg/m²
Maximum width tested [2]	3.75 (4.25) m
Maximum height tested	3.25 m
Slat dimensions	55 x 12.3 mm
Slats per meter	18.18
Production length	Up to 6.5 m
Packaging	30
Polyurethane density	65± 5 kg/m³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	0T
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70)
150		-	-
165		1040	-
180		1420	1260
205		1970	1810
250		3250	3190
300		-	3250

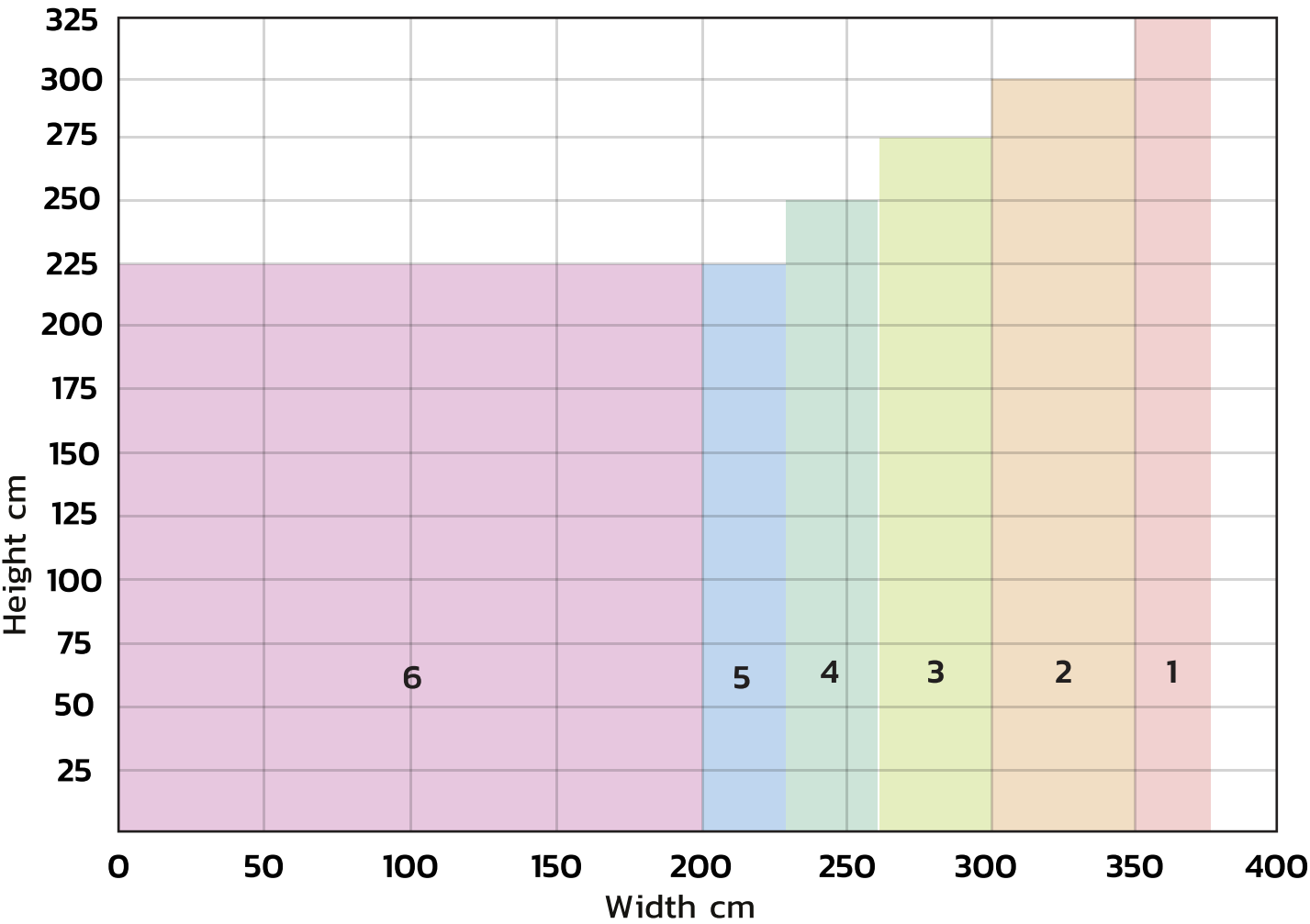
[1] Including end locks weight.

[2] Using guide GR-25-80-T2, GR-25-80-T, or GR-25-66-T according to EN 13659 class1 wind speed 39.8 km/h

[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	155	170	175	185	195	205	210	215	225	235	240	245	-	-	-	-
	70	165	180	185	195	205	215	220	225	235	245	250	255	-	-	-	-

Wind load resistance according to EN1932



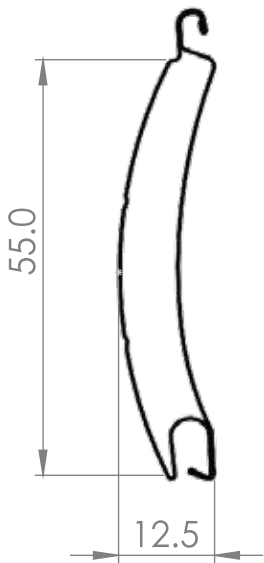
Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
375 x 325	Class 1	260 x 250	Class 4
350 x 300	Class 2	235 x 225	Class 5
300 x 275	Class 3	200 x 225	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-55-C	GR-27-95-T
ES-45-G		GR-80-25-T2
		GR-25-80-T
		GR-25-66-T

ARS-55-C2-M

Aluminium rolling shutter

Features	55 mm
Approximate weight / m ² [1]	2.6 kg/m ²
Maximum width tested [2]	3.60(4.10) ^[3] m
Maximum height tested	3.25 m
Slat dimensions	55 x 12.5 mm
Slats per meter	18.18
Production length	Up to 6.5 m
Packaging	30
Polyurethane density	65± 5 kg/m ³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70
150		980	-
165		1310	-
180		1480	1310
205		2360	2250
225		3460	3180

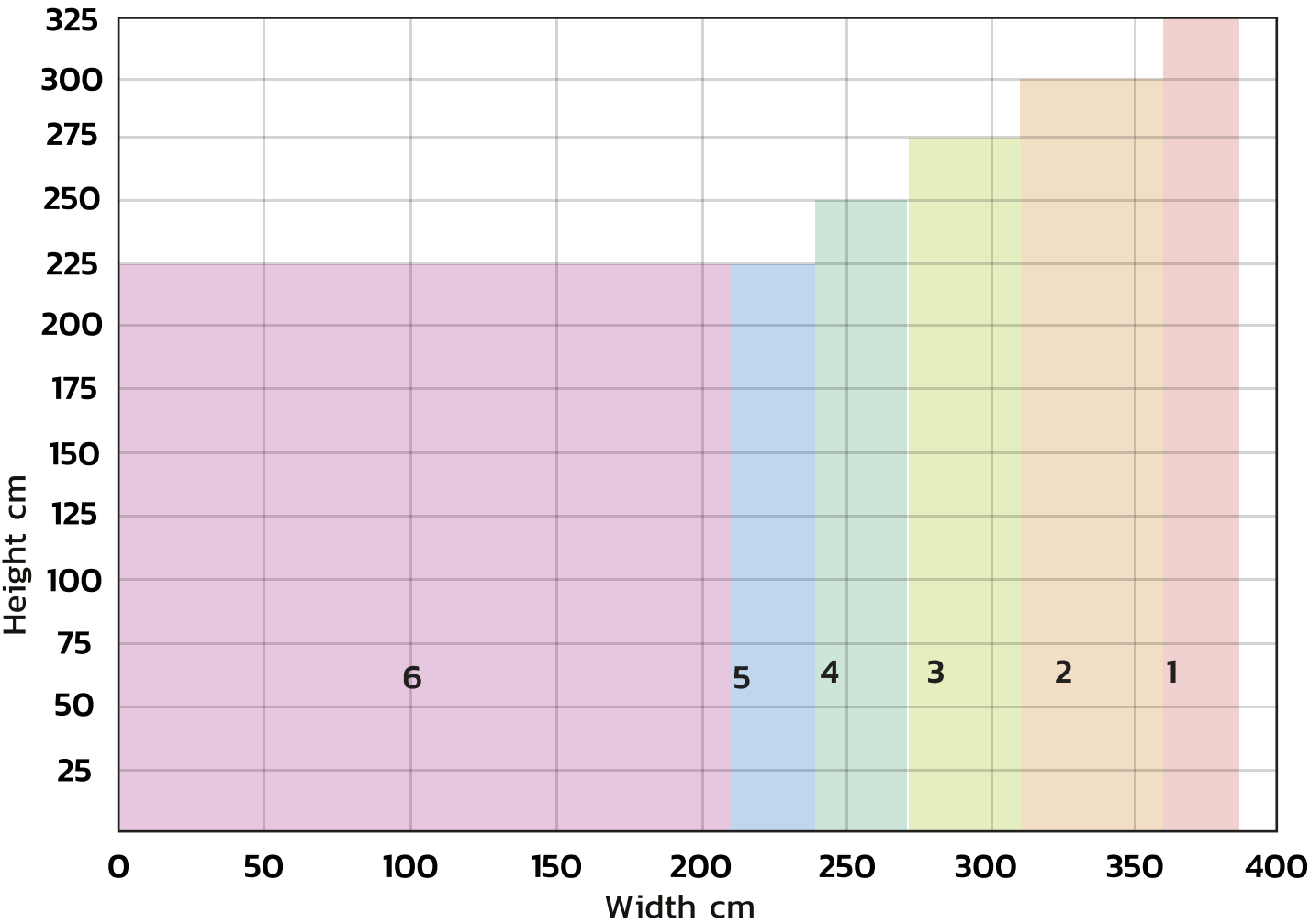
[1] Including end locks weight.

[2] Using guide GR-25-80-T2, GR-25-80-T, or GR-25-66-T according to EN 13659 class1 wind speed 39.8 km/h

[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	112	122	124	136	146	146	168	170	174	184	192	196	206	-	-	-
	70	122	132	134	146	156	156	178	180	184	194	202	206	216	-	-	-

Wind load resistance according to EN1932



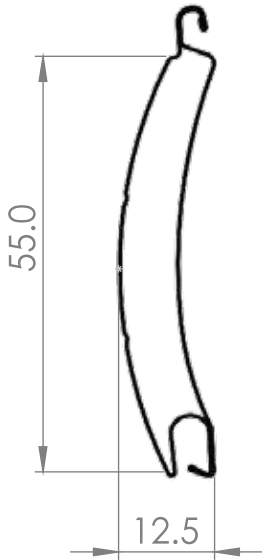
Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
385 x 325	Class 1	270 x 250	Class 4
360 x 300	Class 2	245 x 225	Class 5
310 x 275	Class 3	210 x 225	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-55-C2	GR-27-95-T
ES-45-G		GR-80-25-T2
		GR-25-80-T
		GR-25-66-T

ARS-55-C2-H

Aluminium rolling shutter

Features	55 mm
Approximate weight / m² [1]	3.3 kg/m²
Maximum width tested [2]	3.10(4.60) [3] m
Maximum height tested	3.25 m
Slat dimensions	55 x 12.5 mm
Slats per meter	18.18
Production length	Up to 6.5 m
Packaging	30
Polyurethane density	200 ± 10 kg/m³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70
150		980	-
165		1310	-
180		1480	1310
205		2360	2250
225		3460	3180

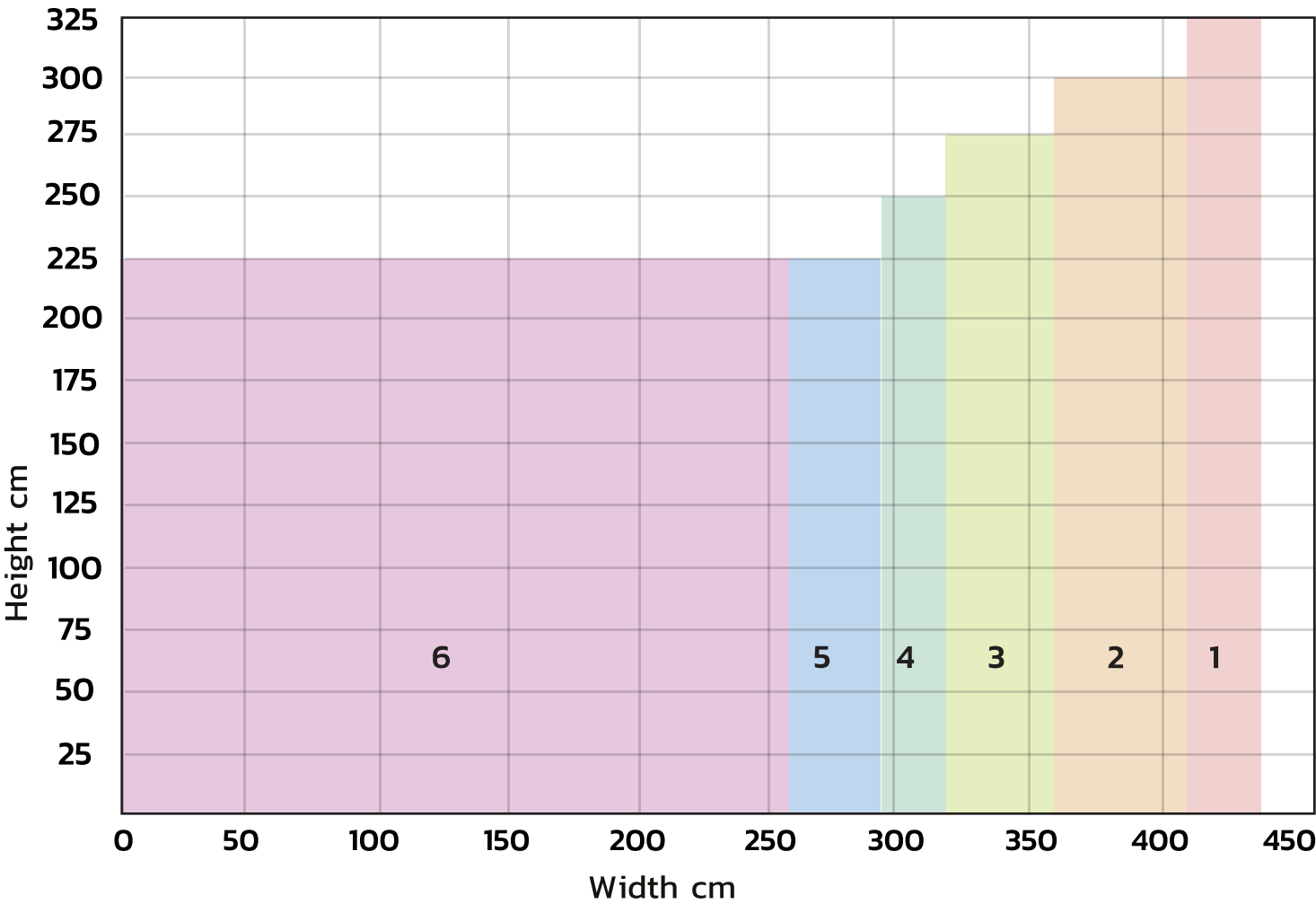
[1] Including end locks weight.

[2] Using guide GR-25-80-T2, GR-25-80-T, or GR-25-66-T according to EN 13659 class1 wind speed 39.8 km/h

[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	112	122	124	136	146	146	168	170	174	184	192	196	206	-	-	-
	70	122	132	134	146	156	156	178	180	184	194	202	206	216	-	-	-

Wind load resistance according to EN1932



Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
435 x 325	Class 1	320 x 250	Class 4
410 x 300	Class 2	295 x 225	Class 5
360 x 275	Class 3	260 x 225	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-55-C2	GR-27-95-T
ES-45-G		GR-80-25-T2
		GR-25-80-T
		GR-25-66-T

ARS-58-C-M

Aluminium rolling shutter

Features	58 mm
Approximate weight / m ² [1]	2.7 kg/m ²
Maximum width tested [2]	4.0 (4.5) [3] m
Maximum height tested	3.2 m
Slat dimensions	58 x 13 mm
Slats per meter	17.24
Production length	Up to 6.5 m
Packaging	30
Polyurethane density	65± 5 kg/m ³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70
150		-	-
165		980	-
180		1380	1260
205		1850	1670
225		2540	2190
250		3130	2970
300		3200	3200

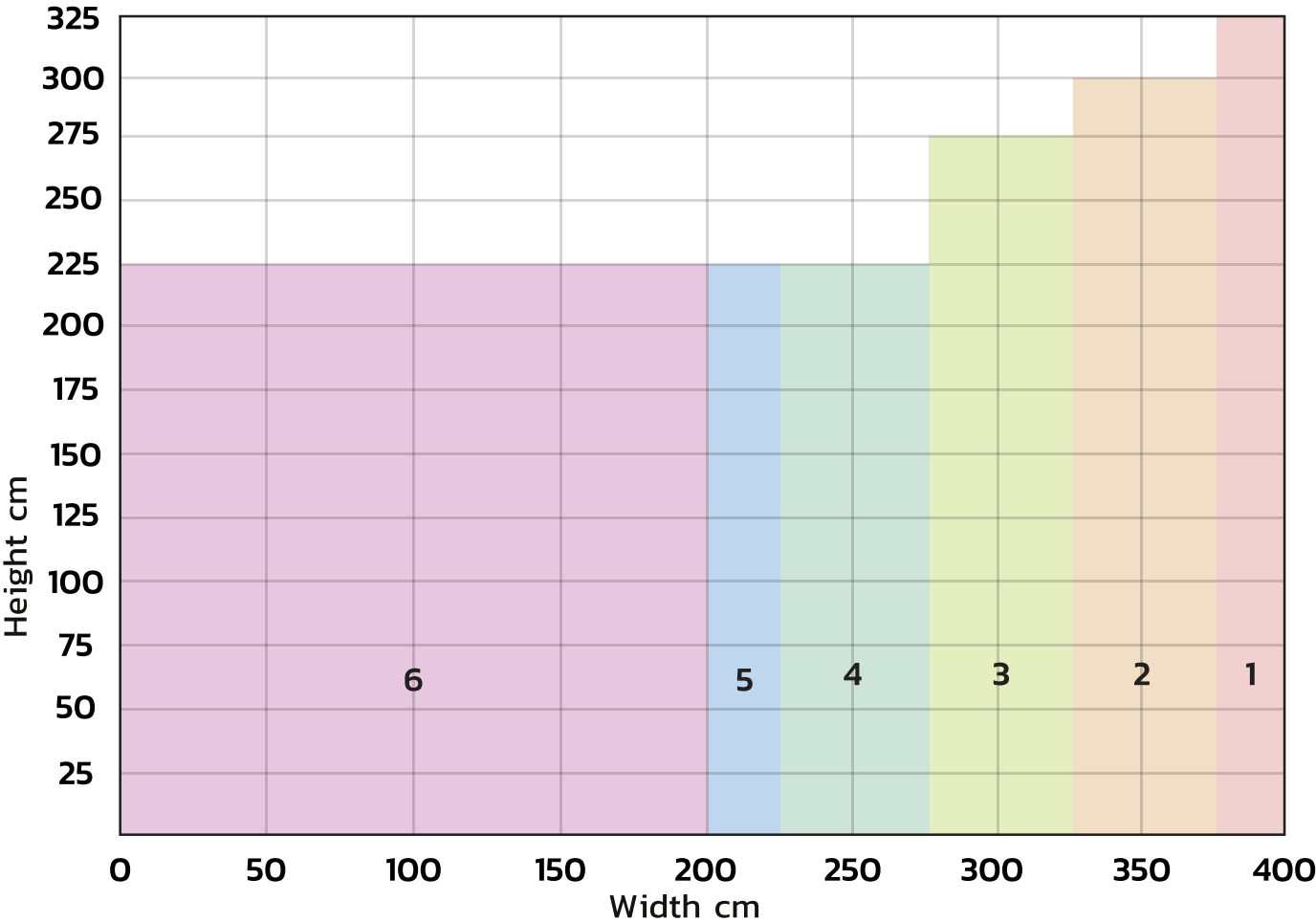
[1] Including end locks weight.

[2] Using guide GR-25-80-T2, GR-25-66-T or GR-25-80-T according to EN 13659 class1 wind speed 39.8 km/h

[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	160	170	180	190	200	205	210	215	220	230	245	255	-	-	-	-
	70	170	180	190	200	210	215	220	225	230	240	255	265	-	-	-	-

Wind load resistance according to EN 13659



Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
400 x 325	Class 1	275 x 225	Class 4
375 x 300	Class 2	225 x 225	Class 5
325 x 275	Class 3	200 x 225	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-58-C	GR-27-95-T
ES-45-G		GR-25-80-T
		GR-25-80-T2
		GR-25-66-T

ARS-58-C-H

Aluminium rolling shutter

Features	58 mm
Approximate weight / m ² [1]	3.5 kg/m ²
Maximum width tested [2]	4.5 (5.0) ^[3] m
Maximum height tested	3.2 m
Slat dimensions	58 x 13 mm
Slats per meter	17.24
Production length	Up to 6.5 m
Packaging	30
Polyurethane density	200 kg/m ³



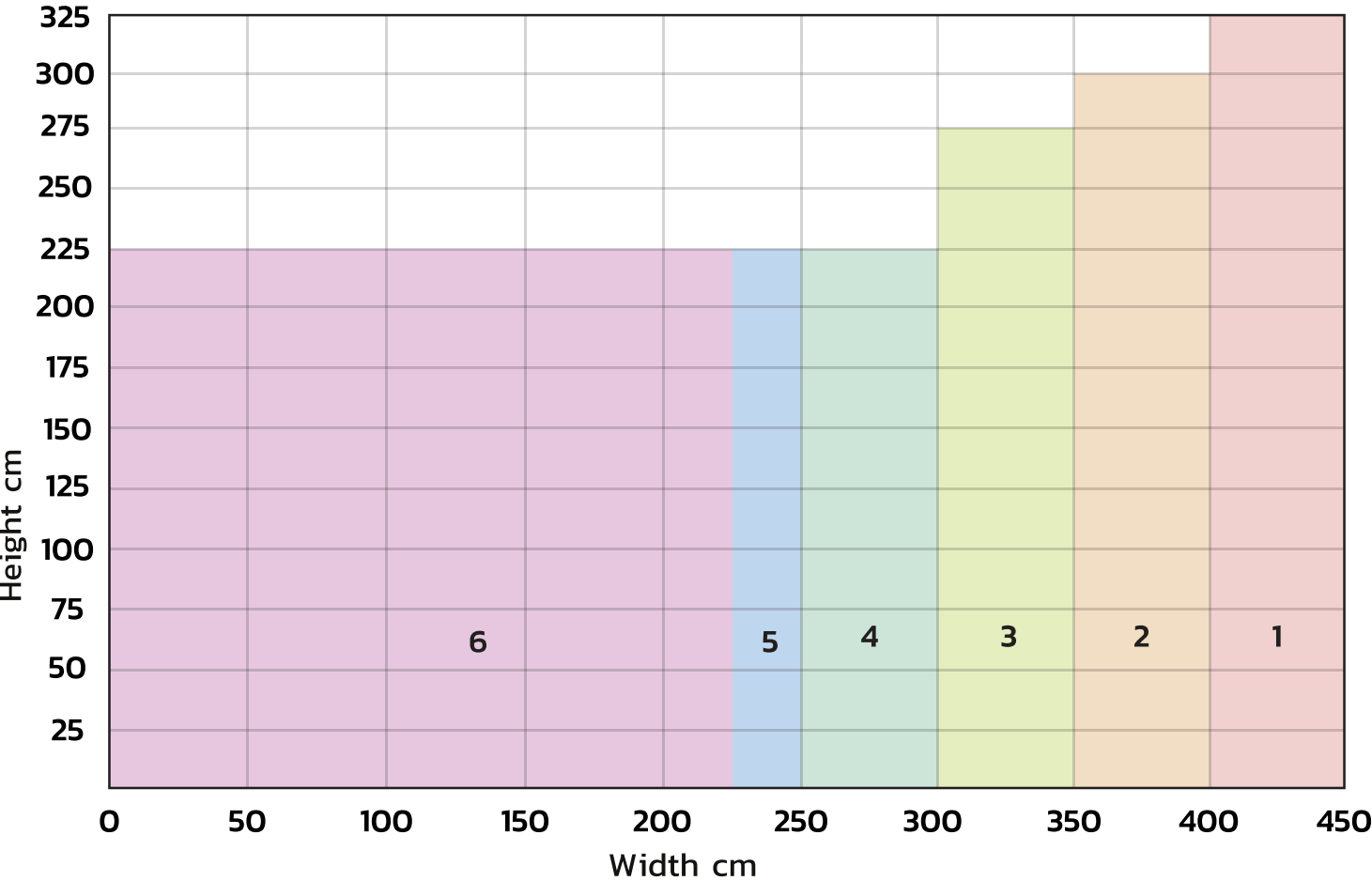
Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70
150		-	-
165		980	-
180		1380	1260
205		1850	1670
225		2540	2190
250		3130	2970
300		3200	3200

[1] Including end locks weight.
[2] Using guide GR-25-80-T2, GR-25-66-T or GR-25-80-T according to EN 13659 class1 wind speed 39.8 km/h.
[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h.

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	160	170	180	190	200	205	210	215	220	230	245	255	-	-	-	-
	70	170	180	190	200	210	215	220	225	230	240	255	265	-	-	-	-

Wind load resistance according to EN 13659



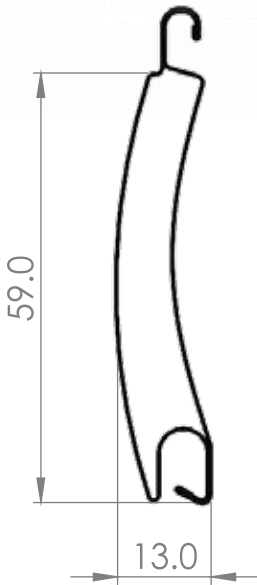
Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
400 x 325	Class 1	275 x 225	Class 4
375 x 300	Class 2	225 x 225	Class 5
325 x 275	Class 3	200 x 225	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-58-C	GR-27-95-T
ES-45-G		GR-25-80-T
		GR-25-80-T2
		GR-25-66-T

ARS-59-C-M

Aluminium rolling shutter

Features	59 mm
Approximate weight / m ² [1]	2.7 kg/m ²
Maximum width tested [2]	4.0 (4.5) [3] m
Maximum height tested	3.2 m
Slat dimensions	59 x 13 mm
Slats per meter	16.94
Production length	Up to 6.5 m
Packaging	30
Polyurethane density	65± 5 kg/m ³



Coating		
Polyurethane polyamide	Norm.	Value
Thickness	ECCA – T01 EN 1396	(20±2) um
Gloss@ 60°	ECCA – T02	30 ± 5
Pencil Hardness	ECCA – T04	H
T Bending Test	ECCA – T07	OT
Resistance to Solvents (MEK Rubbing Test)	ECCA – T11	100 D.R. PASS
Resistance to Acetic Salt Spray FOG after 2000 Hrs	ECCA – T08	2(S2)

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70
150		-	-
165		980	-
180		1380	1260
205		1850	1670
225		2540	2190
250		3130	2970
300		3200	3200

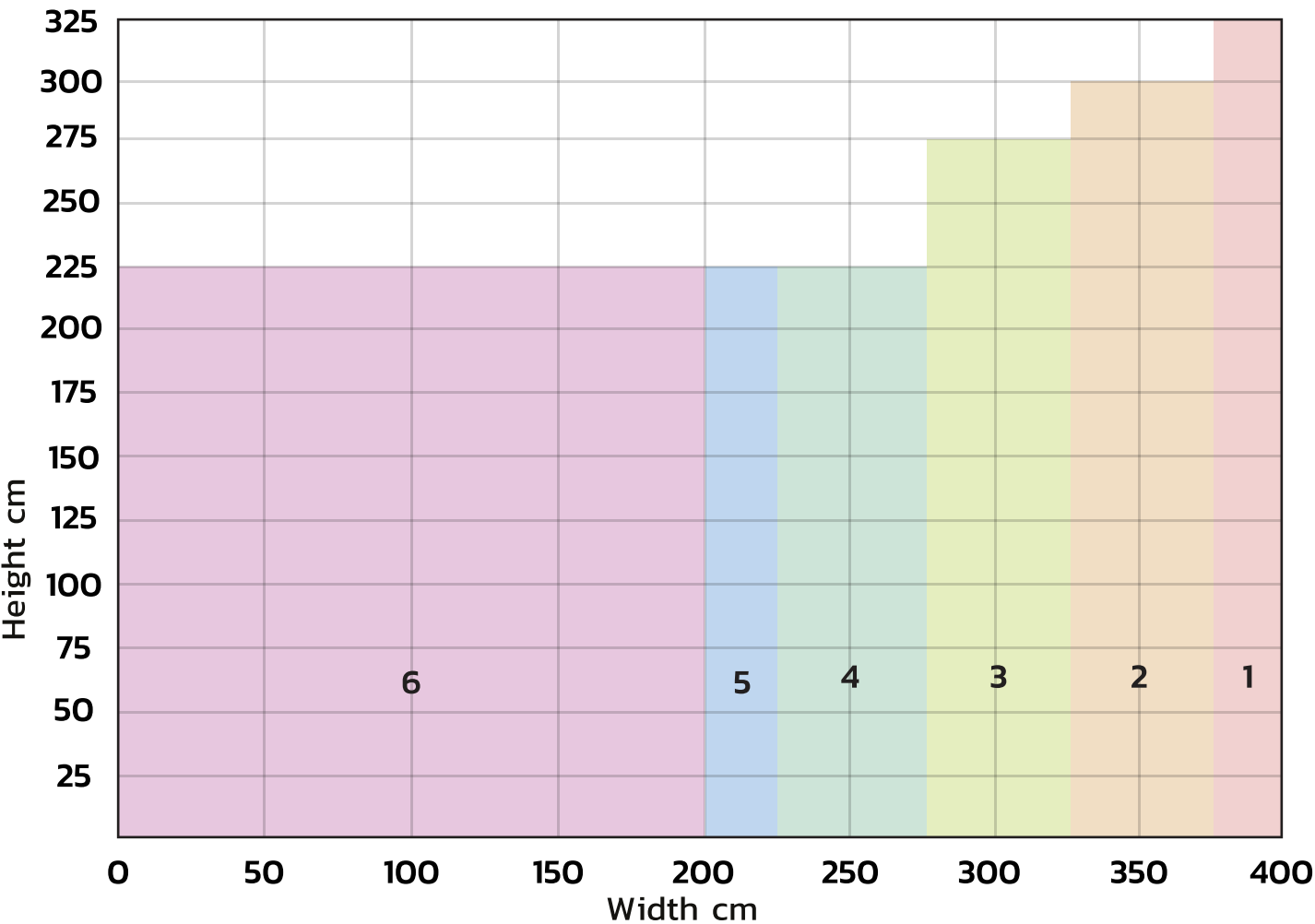
[1] Including end locks weight.

[2] Using guide GR-25-80-T2, GR-25-66-T or GR-25-80-T according to EN 13659 class1 wind speed 39.8 km/h.

[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h.

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	160	170	180	190	200	205	210	215	220	230	245	255	-	-	-	-
	70	170	180	190	200	210	215	220	225	230	240	255	265	-	-	-	-

Wind load resistance according to EN 13659



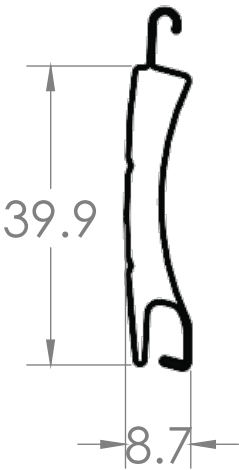
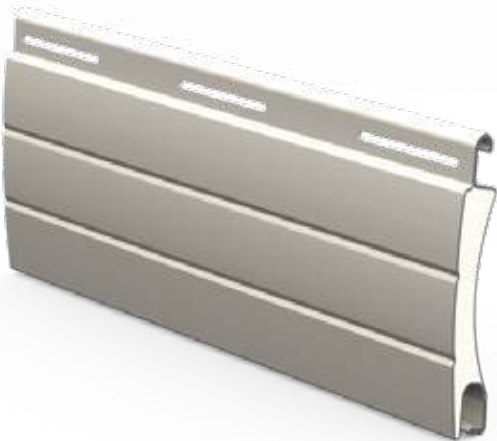
Wind load Resistance			
Width x Height	EN 13659	Width x Height	EN 13659
400 x 325	Class 1	275 x 225	Class 4
375 x 300	Class 2	225 x 225	Class 5
325 x 275	Class 3	200 x 225	Class 6

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-58-C	GR-27-95-T
ES-45-G		GR-25-80-T
		GR-25-80-T2
		GR-25-66-T

SRS-40-C-M

Steel rolling shutter

Features	40 mm	
Approximate weight / m ² [1]	7.0	kg/m ²
Maximum width tested [2]	3.5	m
Maximum height tested	4.0	m
Slat dimensions	39.9 X 8.7	mm
Slats per meter	25.06	
Production length	Up to 6.5	m
Packaging	15	
Polyurethane density	65± 5	kg/m ³



Coating	
Polyurethane polyamide	Value
PPGI Standards	DIN EN 10169, EN 13523
Base Metal & Zinc	DIN EN 10346, EN 10143
ZINC	AS PER ASTM 653, CSB, Z100
Primer	5-7 Micron
Top Coat	Plain 20± 2 Micron
Back Coat	Epoxy polyester, 5/7 Micron +/- 1Micron

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70 and 90 Circular
150		-	-
165		1050	770
180		1930	1650
205		2490	2170
225		2970	2650
250		4000	4000
300		-	-

[1] Including end locks weight.

[2] Using guide GR-22-53-T, GR-21-52-T, GR-23-80-T, or GR-23-80-T2 according to EN 13659 class1 wind speed 39.8 km/h.

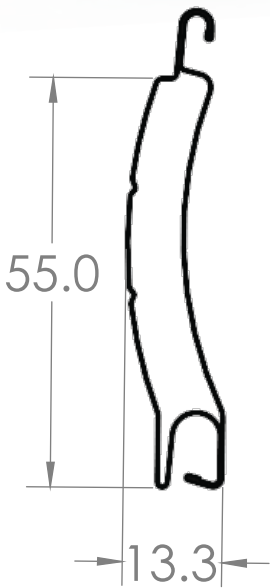
Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	164	164	164	184	184	198	200	200	215	217	217	235	235	235	250	252
	70	174	174	174	194	194	208	210	210	225	227	227	245	245	245	260	262

Compatible end slat	Compatible end lock	Compatible guide
ES - 45	EL-40-C	GR-21-52-T
ES - 45 - G		GR-22-53-T
		GR-23-80-T
		GR-23-80-T2

SRS-55-C-M

Steel rolling shutter

Features	55 mm	
Approximate weight / m ² [1]	6.9	kg/m ²
Maximum width tested [2]	4.0	m
Maximum height tested	4.0	m
Slat dimensions	55 x 13.3	mm
Slats per meter	18.18	
Production length	Up to 6.5	m
Packaging	15	
Polyurethane density	65± 5	kg/m ³



Coating	
Polyurethane polyamide	Value
PPGI Standards	DIN EN 10169, EN 13523
Base Metal & Zinc	DIN EN 10346, EN 10143
ZINC	AS PER ASTM 653, CSB, Z100
Primer	5-7 Micron
Top Coat	20±2 Micron
Back Coat	Epoxy polyester, 5/7 Micron +/- 1Micron

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70 and 90 Circular
150		-	-
165		-	-
180		1320	1150
205		2140	1920
225		2350	2240
250		3240	3080
300		4000	4000

[1] Including end locks weight.

[2] Using guide GR-45-95-T, GR-25-80-T2, GR-27-95-T, or GR-25-80-T according to EN 13659 class1 wind speed 39.8 km/h.

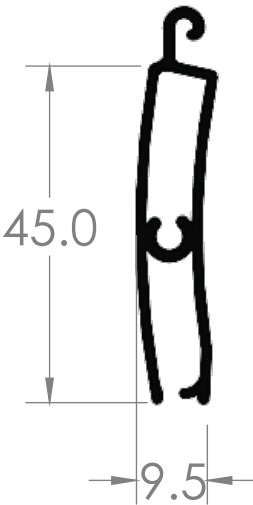
Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	169	182	183	200	202	208	224	227	230	240	240	242	260	260	262	265
	70	179	192	193	210	212	218	234	237	240	250	250	252	270	270	272	275

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-55-C	GR-45-95-T
ES-45-G		GR-27-95-T
		GR-25-80-T
		GR-25-80-T2

ASS-45-C

Aluminium security shutter

Features	45mm	
Approximate weight / m ² [1]	8.1	kg/m ²
Maximum width tested [2]	4.0	m
Maximum height tested	3.0	m
Slat dimensions	45 x 9.5	mm
Slats per meter	22.22	
Production length	Up to 6.5	m
Packaging	10	
Aluminium thickness	1.0	mm



Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Box size according to the height of the shutter (mm)			
Box size (mm) \ Tube (mm)	60	70 and 90 Circular	
150	-	-	
165	-	-	
180	1485	1345	
205	2120	1990	
225	2610	2430	
250	3000	3000	
300	-	-	

[1] Including end locks weight.

[2] Using guide GR-21-52-T, GR-23-80-T2, or GR-23-80-T according to EN 13659 class1 wind speed 39.8 km/h.

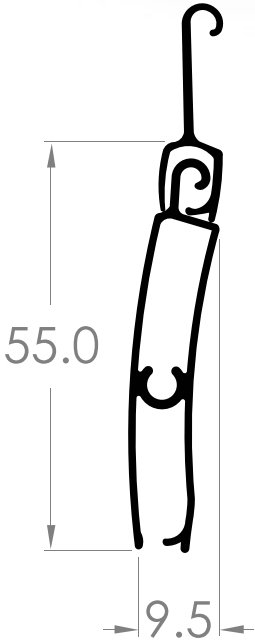
Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	165	175	180	195	205	215	220	225	230	240	250	-	-	-	-	-
	70	175	185	190	205	215	225	230	235	240	250	260	-	-	-	-	-

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL-55-CL	GR-21-52-T
ES-45-G		GR-23-80-T2
		GR-23-80-T

ASS-55-CL

Aluminium security shutter

Features	55 mm	
Approximate weight / m ² [1]	9.4	kg/m ²
Maximum width tested [2]	4.0	m
Maximum height tested	3.0	m
Slat dimensions	55 x 9.5	mm
Slats per meter	18.18	
Production length	Up to 6.5	m
Packaging	10	
Aluminium thickness	1.0	mm



Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70 and 90 Circular
150		-	-
165		-	-
180		1145	1035
205		1590	1480
225		2580	2300
250		2960	2850
300		3000	3000

[1] Including end locks weight.

[2] Using guide GR-21-52-T, GR-23-80-T2, or GR-23-80-T according to EN 13659 class1 wind speed 39.8 km/h.

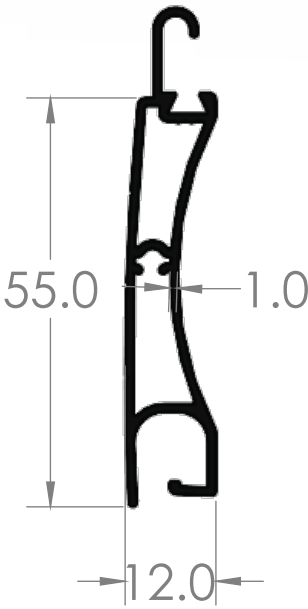
Rolling shutter diameter																
Height (mm)	1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	170	180	190	195	205	215	220	225	230	240	250	-	-	-	-
	70	180	190	200	205	215	225	230	235	240	250	260	-	-	-	-

Compatible end slat	Compatible end lock	Compatible guide
ES-45	EL- 55-CL	GR-21-52-T
ES-45-G		GR-23-80-T2
		GR-23-80-T

ASS-55-C

Aluminium security shutter

Features	55mm
Approximate weight / m ² [1]	9.5 kg/m ²
Maximum width tested [2]	5.0(5.5) [3] m
Maximum height tested	4.0 m
Slat dimensions	55 x 12 mm
Slats per meter	18.18
Production length	Up to 6.5 m
Packaging	10
Aluminium thickness	1.0 mm



Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Box size according to the height of the shutter (mm)			
Box size (mm) \ Tube (mm)	60	70 and 90 Circular	
150	-	-	
165	-	-	
180	1050	890	
205	1440	1270	
225	1760	1930	
250	2540	2430	
300	4000	4000	

[1] Including end locks weight.
[2] Using guide GR-45-95-T, GR-25-80-T, or GR-25-80-T2 according to EN 13659 class1 wind speed 39.8 km/h.
[3] Using guide GR-27-95-T according to EN 13659 class1 wind speed 39.8 km/h

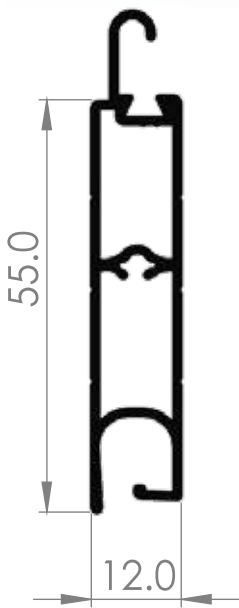
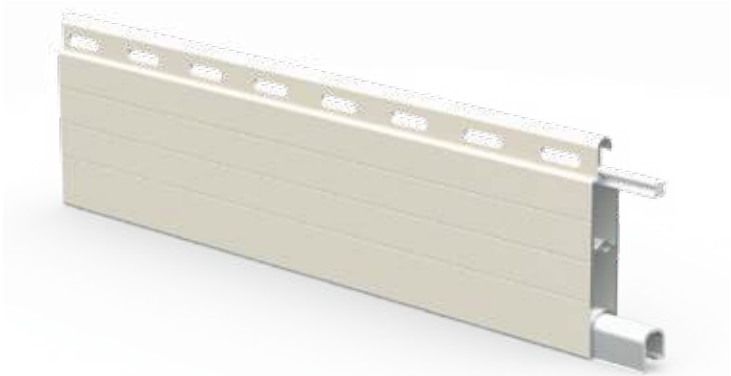
Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	185	195	215	220	225	230	240	245	250	255	260	270	275	285	292	300
	70	195	205	225	230	235	240	250	255	260	265	270	280	285	295	302	310

Compatible end slat	Compatible end lock	Compatible guide
ES-55-GF	EL-55-C-S	GR-45-95-T
ES-55-GR		GR-25-80-T
		GR-25-80-T2
		GR-27-95-T

ASS-55-S

Aluminium security shutter

Features	55 mm	
Approximate weight / m ² [1]	10.5	kg/m ²
Maximum width tested [2]	5.5	m
Maximum height tested	4.5	m
Slat dimensions	55 x 12	mm
Slats per meter	18.18	
Production length	Up to 6.5	m
Packaging	10	
Aluminium thickness	1.1	mm



Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Box size according to the height of the shutter (mm)			
Box size (mm) \ Tube (mm)	60	70 and 90 Circular	
150	-	-	
165	-	-	
180	830	720	
205	1100	990	
225	1320	1420	
250	1980	1870	
300	3030	2920	

[1] Including end locks weight.

[2] Using guide GR-45-95-T, GR-25-80-T2, GR-27-95-T, or GR-25-80-T according to EN 13659 class1 wind speed 39.8 km/h.

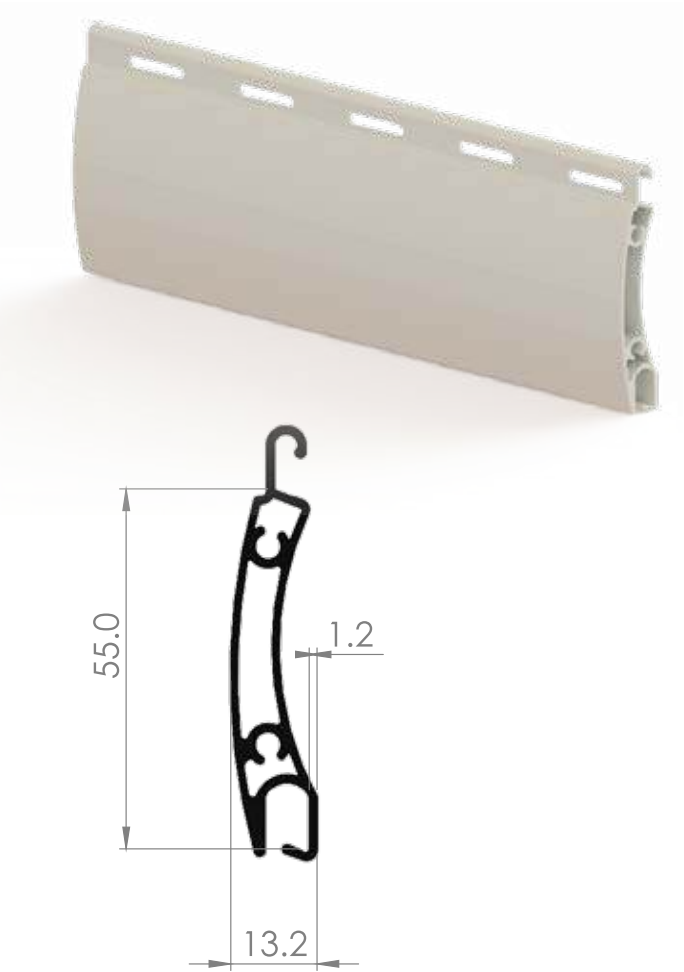
Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	200	205	215	220	230	235	250	255	265	270	280	285	290	295	305	310
	70	210	215	225	230	240	245	260	265	275	280	290	295	300	305	315	320

Compatible end slat	Compatible end lock	Compatible guide
ES-55-GF	EL-55-C-S	GR-45-95-T
ES-55-GR		GR-25-80-T2
		GR-27-95-T
		GR-25-80-T

ASS-55-CT

Aluminium security shutter

Features	55mm	
Approximate weight / m ² [1]	10.3	kg/m ²
Maximum width tested [2]	6.0	m
Maximum height tested	4.0	m
Slat dimensions	55 x 13.2	mm
Slats per meter	18.18	
Production length	Up to 6.5	m
Packaging	10	
Aluminium thickness	1.2	mm



Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Box size according to the height of the shutter (mm)			
Box size (mm)	Tube (mm)	60	70 and 90 Circular
180		1050	890
205		1440	1270
225		1760	1930
250		2540	2430
265		3250	2700
300		4000	4000

[1] Including end locks weight.

[2] Using guide GR-27-92-T, up to wind speed 74 km/hr.

Rolling shutter diameter																	
Height (mm)		1000	1200	1400	1600	1800	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800	4000
Tube (mm)	60	185	195	215	220	225	230	240	245	250	255	260	270	275	285	292	300
	70	195	205	225	230	235	240	250	255	260	265	270	280	285	295	302	310

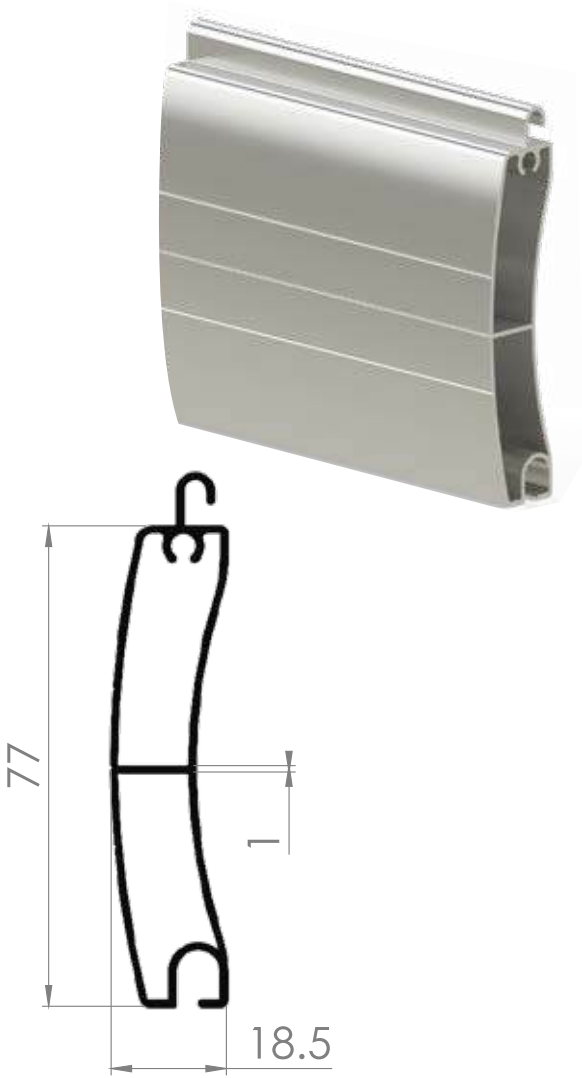
Compatible end slat	Compatible end lock	Compatible guide
ES-55-GF	EL-55-C-T	GR-27-92-T
ES-55-GR		GR-45-95-T [1]
		GR-25-80-T [1]
		GR-25-80-T2 [1]
		GR-27-95-T [1]

[1] When using EL-55-CT end lock without pins.

ARD-77-D

Aluminium Rolling Door

Features	77 mm	
Approximate weight / m ² [1]	8.3	kg/m ²
Maximum width tested [2]	6.0	m
Maximum height tested	5.0	m
Slat dimensions	77 x 18.5	mm
Slats per meter	12.9	
Production length	Up to 6.5	m
Packaging	5.0	
Aluminium thickness	1.0	mm



Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Box size according to the height of the door (mm)			
Box size (mm)	Tube (mm)	90	[3] 70 or 102
250		1771	1617
265		1925	1848
300		2926	2849

[1] Up to wind speed 64.8 km/h.

[2] Up to wind speed 64.8 km/h.

[3] Used with security hangers.

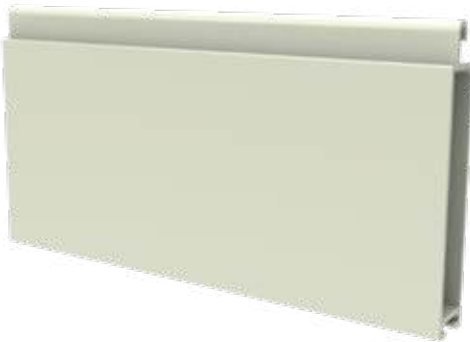
Rolling door diameter						
Height (mm)		1000	2000	3000	4000	5000
Tube (mm)	90	188	236	288	344	397
	102 or 70	200	248	300	356	409

Compatible end slat	Compatible end lock	Compatible guide
ARD-77-D ^[1]	EL-77-R	GR-32-66-T
	EL-77-L	GR-61-84-T

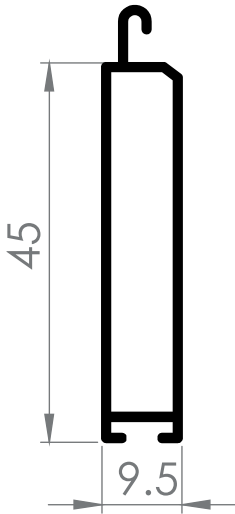
[1] The same slat is used as an end slat with it's gasket.

ES-45

Extruded end slat for
shutter slats



Features	45 mm
Weight	319 g/lm
End slat size	45 x 9.5 mm
Production length	up to 6.5 m
Aluminium thickness	1.0 mm

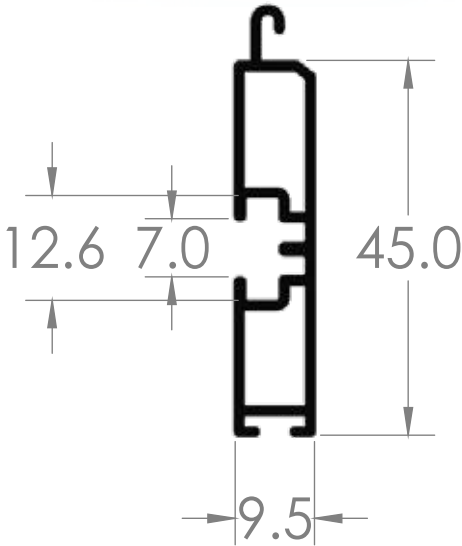
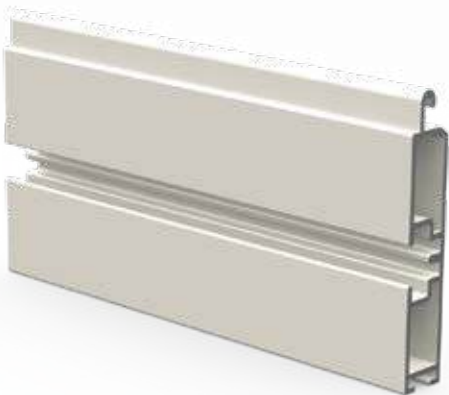


Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 /ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Suitable for
ARS-40-C
ARS-45-C
ARS-46-C
ARS-55-C
ARS-55-C2
ARS-58-C
ARS-59-C
SRS-40-C
SRS-55-C
ASS-45-C
ASS-55-CL

ES-45-G

**Extruded end slat with lock
for shutter slats**



Features	45 mm	
Weight	370	g/lm
End slat size	45 x 9.5	mm
Production length	up to 6.5	m
Aluminium thickness	1.0	mm

Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 / ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

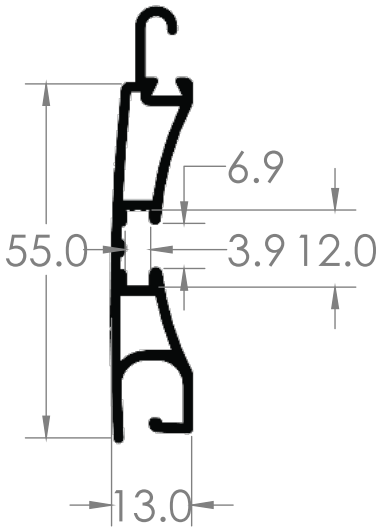
Suitable for
ARS-40-C
ARS-45-C
ARS-46-C
ARS-55-C
ARS-55-C2
ARS-58-C
ARS-59-C
SRS-40-C
SRS-55-C
ASS-45-C
ASS-55-CL

ES-55-GF

**End slat for aluminium
security shutter**



Features	45 mm
Weight	505 g/lm
End slat size	55 x 13 mm
Production length	up to 6.5 m
Aluminium thickness	1.0 mm

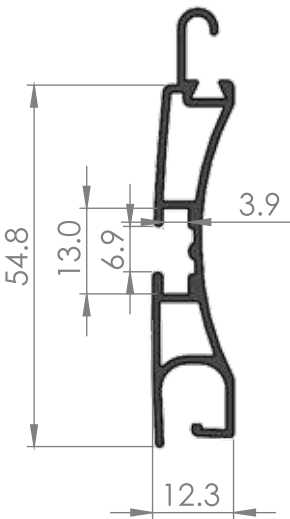


Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 μ m
Impact	ISO 6272 / ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Suitable for
ASS-55-C
ASS-55-CT
ASS-55-S

ES-55-GR

End slat for aluminium
security shutter

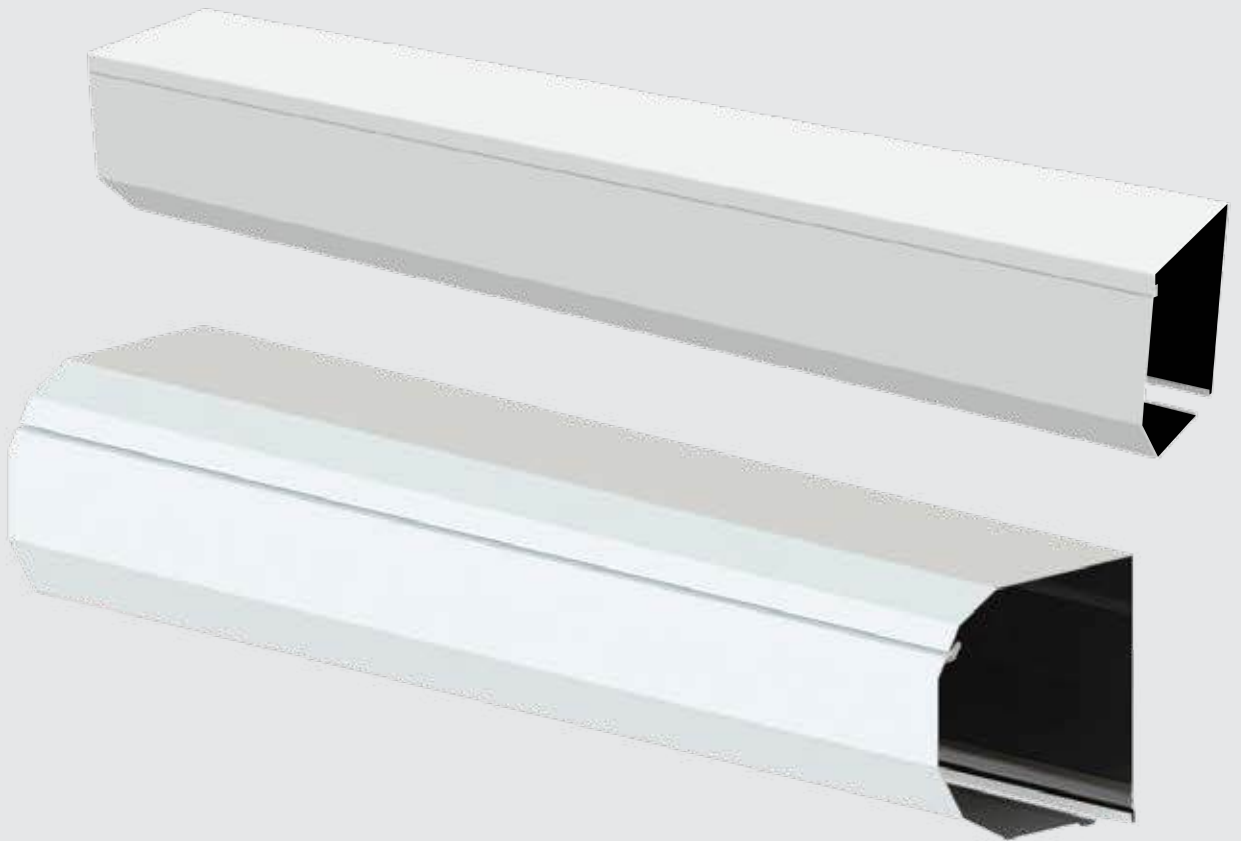


Features	55 mm	
Weight	509	g/lm
End slat size	55 x 12.3	mm
Production length	up to 6.5	m
Aluminium thickness	1.0	mm

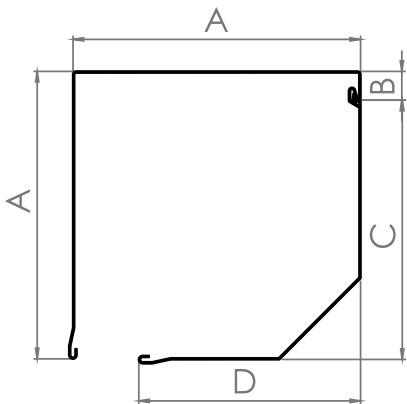
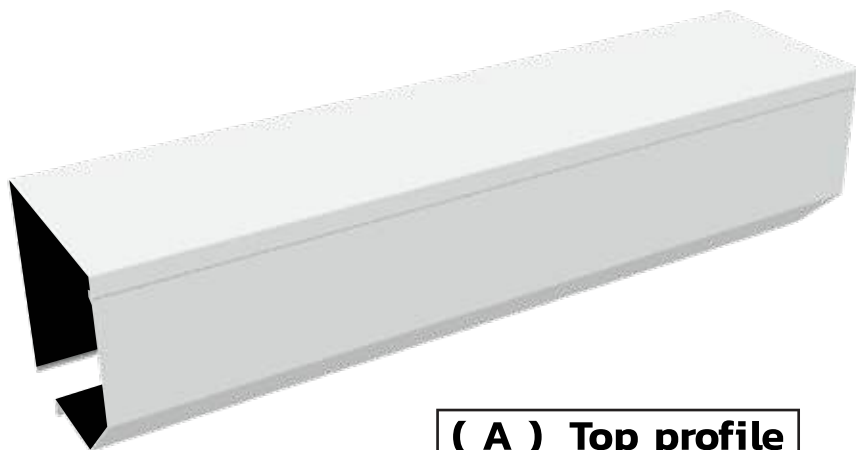
Coating		
Test	Norms	Range
Color	ISO 11664-4	The color deviation from the certified RAL card shall not be greater than the standard limit
Gloss	ISO 2813	Permissible variation from the nominal value specified by the coating supplier
Thickness	ISO 2360	90 - 60 µm
Impact	ISO 6272 / ASTM D 2794	The coating shall not show any sign of cracking or detachment
Hardness Test	ISO 2815	Minimum 80 with the specified required coating thickness
Cylindrical Bending Test	ISO 1519	The coating shall not show any sign of cracking or detachment

Suitable for
ASS-55-C
ASS-55-CT
ASS-55-S

Shutter Boxes



Shutter box - 45° Profiled



(A) Top profile

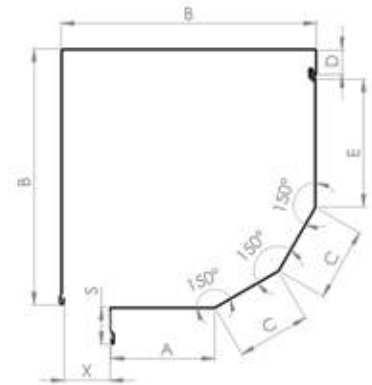
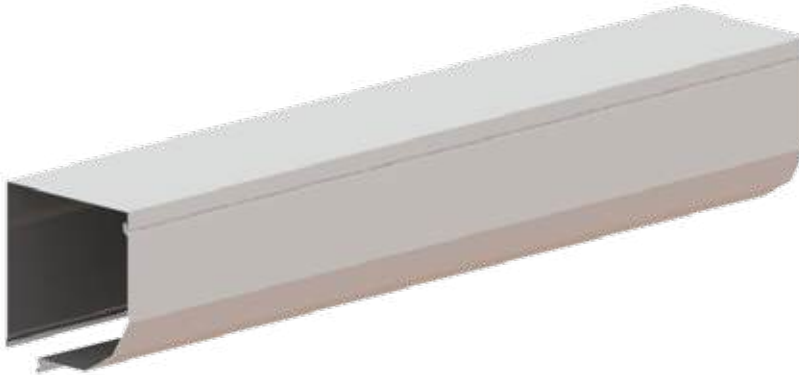
Code	Description	A	B*
ABB-150	Top profile 150	150	18
ABB-165	Top profile 165	165	18
ABB-180	Top profile 180	180	18
ABB-205	Top profile 205	205	18
ABB-225	Top profile 225	225	26
ABB-250	Top profile 250	250	26
ABB-265	Top profile 265	265	26
ABB-300	Top profile 300	300	26

(B) Front profile 45°

Code	Description	C*	D*
ABC-150-45	Front 45°profile 150	132	125
ABC-165-45	Front 45°profile 165	147	132
ABC-180-45	Front 45°profile 180	162	146
ABC-205-45	Front 45°profile 205	187	155
ABC-225-45	Front 45°profile 225	199	177
ABC-250-45	Front 45°profile 250	224	207
ABC-265-45	Front 45°profile 265	239	222
ABC-300-45	Front 45°profile 300	274	257

[*] nominal values; tolerances are subjected to functional inspection.

Shutter box - 150° Profiled



(A) Top profile

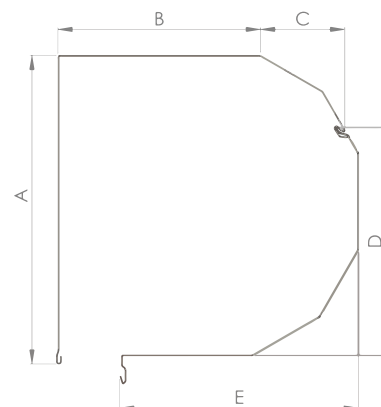
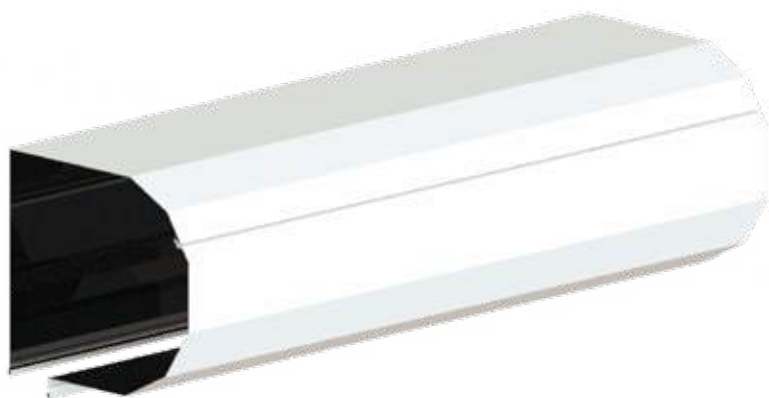
Code	Description	B	D [*]
ABB-150-30-T	Top profile 150	150	18
ABB-165-30-T	Top profile 165	165	18
ABB-180-30-T	Top profile 180	180	18
ABB-205-30-T	Top profile 205	205	18
ABB-225-30-T	Top profile 225	225	26
ABB-250-30-T	Top profile 250	250	24
ABB-265-30-T	Top profile 265	265	24
ABB-300-30-T	Top profile 300	300	24

(B) Front profile 150°

Code	Description	X [*]	S [*]	A [*]	C [*]	E [*]
ABC-150-30-T	Front 150°profile 150	40	15.7	61	36.3	78.5
ABC-165-30-T	Front 150°profile 165	44	15.7	63	41.3	85.5
ABC-180-30-T	Front 150°profile 180	47.5	15.7	70	46.3	94.5
ABC-205-30-T	Front 150°profile 205	44	33.5	85.4	54	105.9
ABC-225-30-T	Front 150°profile 225	45	36.7	86.7	62.2	106.6
ABC-250-30-T	Front 150°profile 250	47	36.3	101.3	71.7	125.1
ABC-265-30-T	Front 150°profile 265	48.5	38.5	110.3	76.2	130.2
ABC-300-30-T	Front 150°profile 300	48.5	51.8	131	86.7	150.8

[*] nominal values; tolerances are subjected to functional inspection.

Shutter box - 30° Profiled



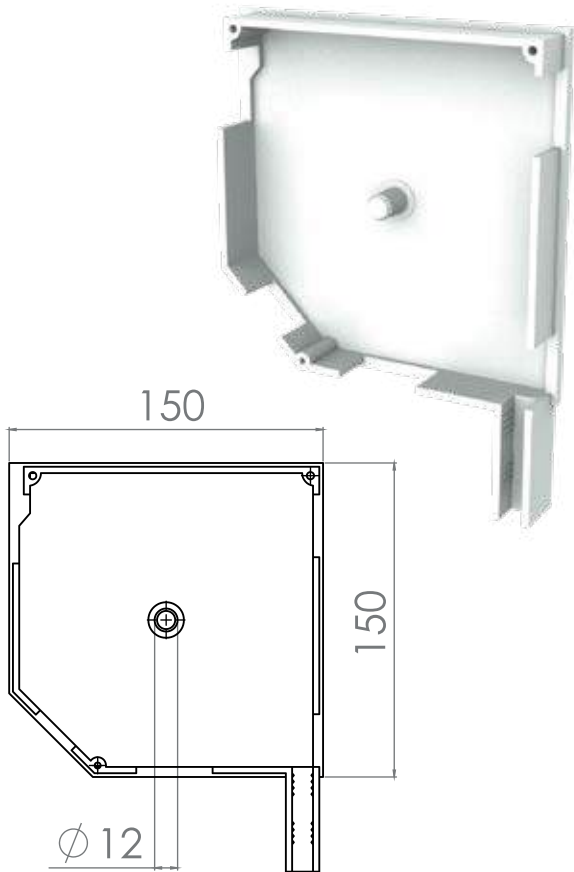
(A) Top profile

Code	Description	A	B [*]	C [*]
ABB-150-30	Top profile 150	156	104	36
ABB-165-30	Top profile 165	172	113	42
ABB-180-30	Top profile 180	186	123	47
ABB-205-30	Top profile 205	210	138	54
ABB-225-30	Top profile 225	232	151	64
ABB-250-30	Top profile 250	255	250	70
ABB-265-30	Top profile 265	270	177	76
ABB-300-30	Top profile 300	305	199	85

(B) Front profile 30°

Code	Description	D [*]	E [*]
ABC-150-30	Front 30°profile 150	121	121
ABC-165-30	Front 30°profile 165	129	131
ABC-180-30	Front 30°profile 180	140	141
ABC-205-30	Front 30°profile 205	159	157
ABC-225-30	Front 30°profile 225	167	180
ABC-250-30	Front 30°profile 250	189	198
ABC-265-30	Front 30°profile 265	197	216
ABC-300-30	Front 30°profile 300	226	250

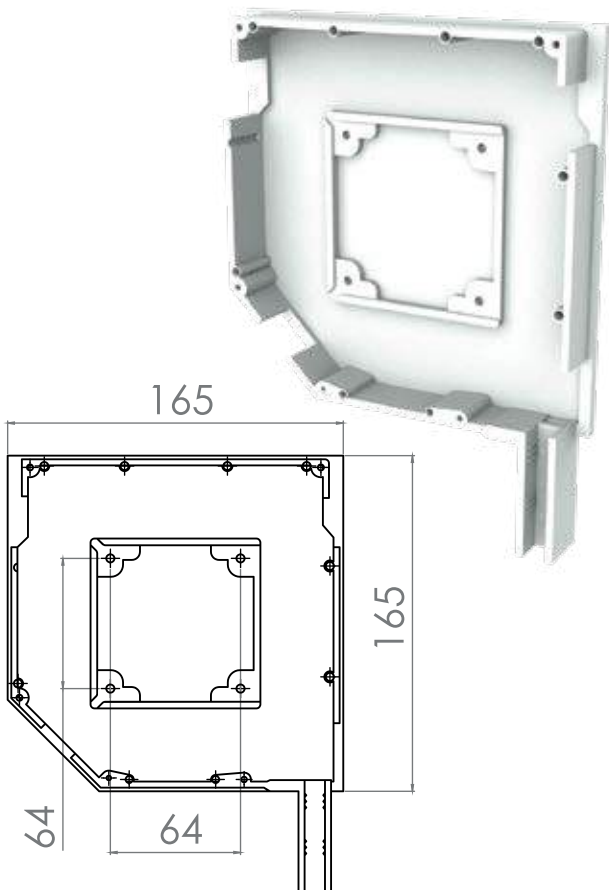
[*] nominal values; tolerances are subjected to functional inspection.



Side frame 150 mm with pin

Code	Package
ASF.150.45.P	pair
	1

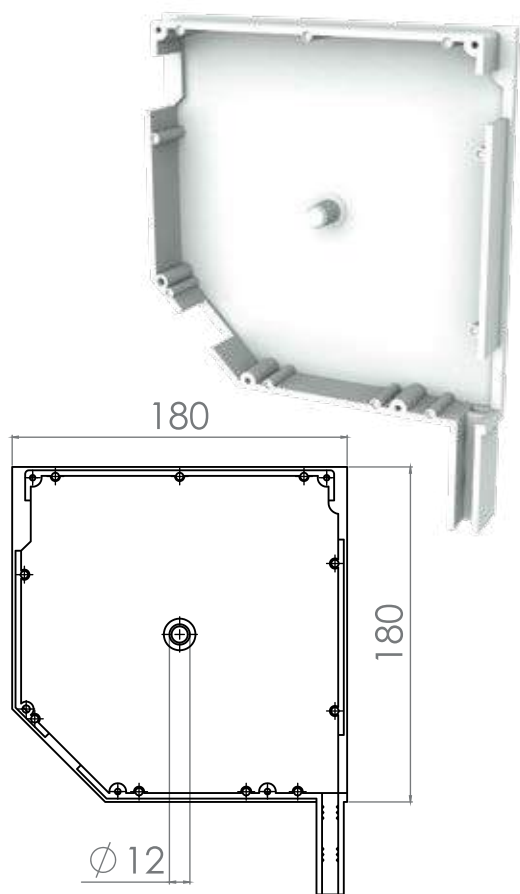
Used with 150°-45° profiled box.



Side frame 165 mm

Code	Package
ASF.165.45	pair
	1

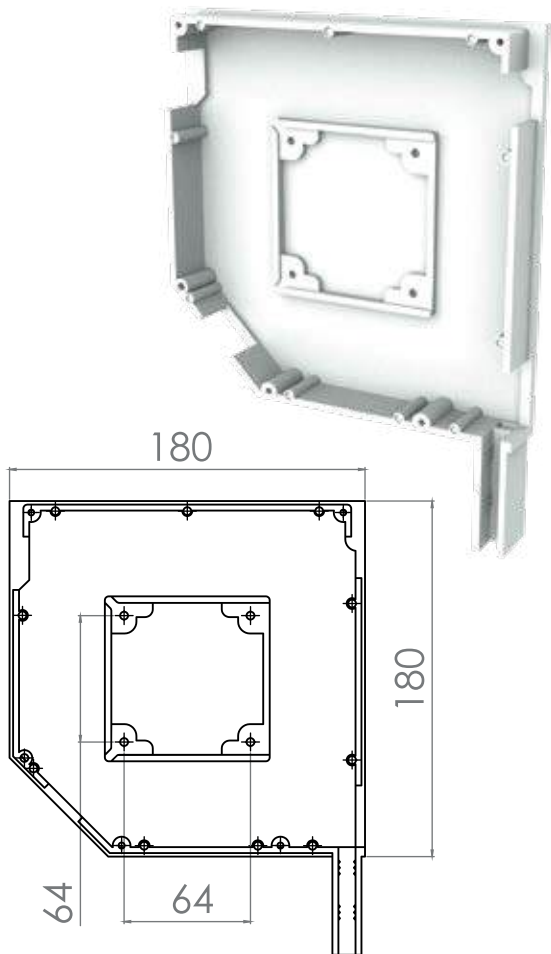
Used with 165°-45° profiled box.



Side frame 180 mm with pin

Code	Package
ASF.180.45.P	pair
	1

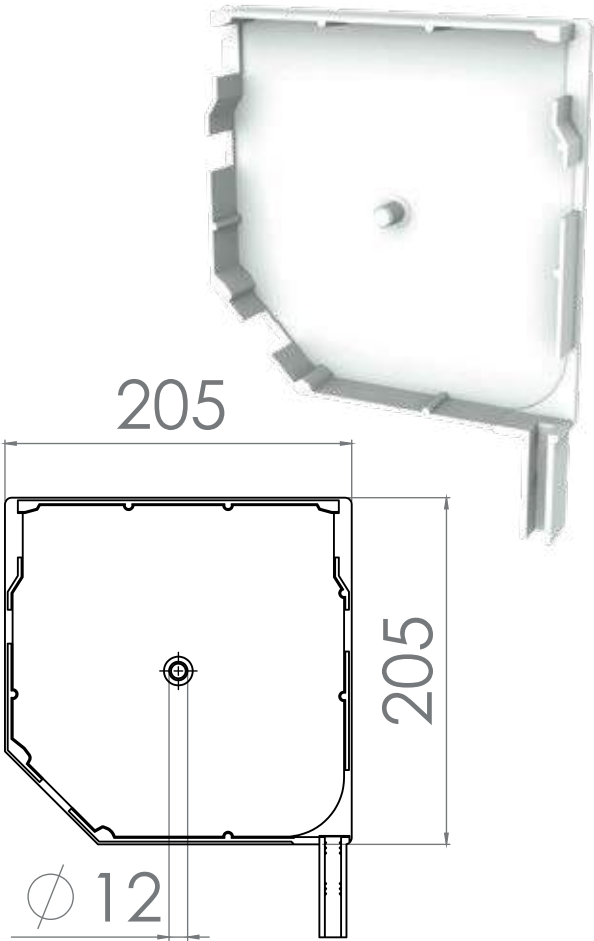
Used with 180°-45° profiled box.



Side frame 180 mm

Code	Package
ASF.180.45	pair
	1

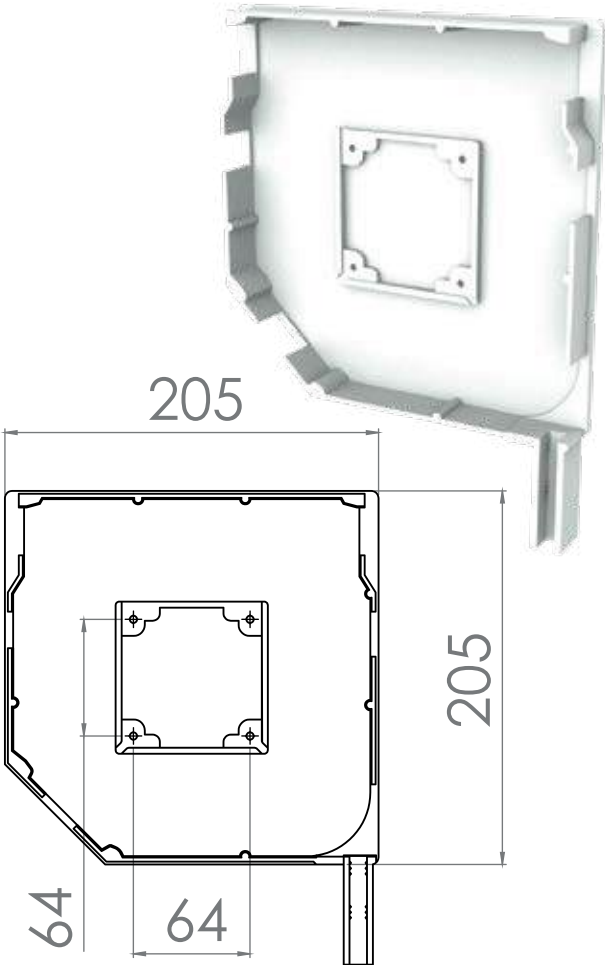
Used with 180°-45° profiled box.



Side frame 205 mm with pin

Code	Package
ASF.205.45.P	pair
	1

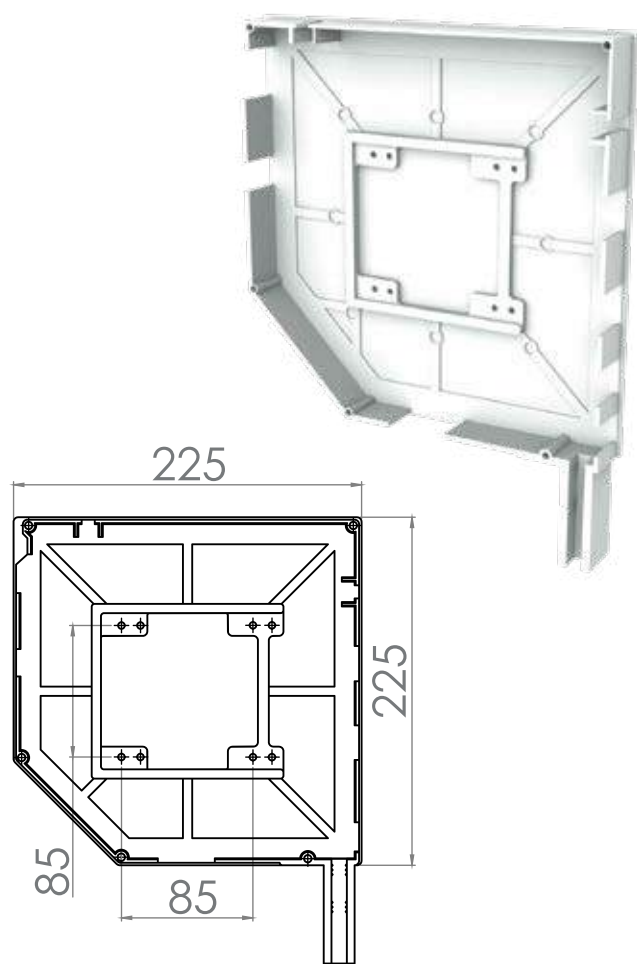
Used with 205°-45° profiled box.



Side frame 205 mm

Code	Package
ASF.205.45	pair
	1

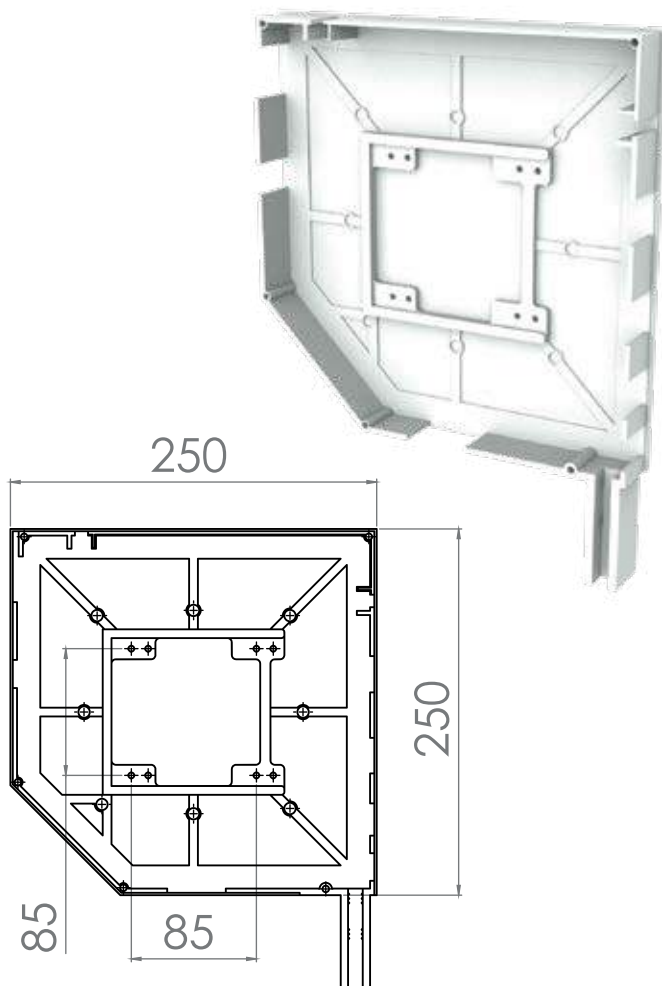
Used with 205°-45° profiled box.



Side frame 225 mm

Code	Package
ASF.225.45	pair
	1

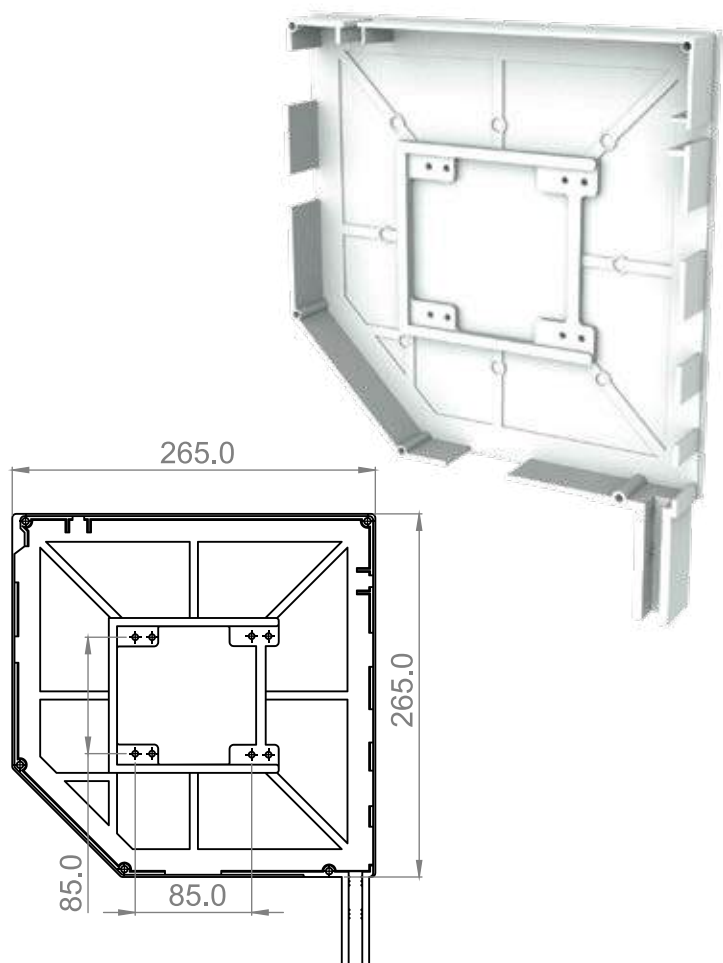
Used with 225°-45° profiled box.



Side frame 250 mm

Code	Package
ASF.250.45	pair
	1

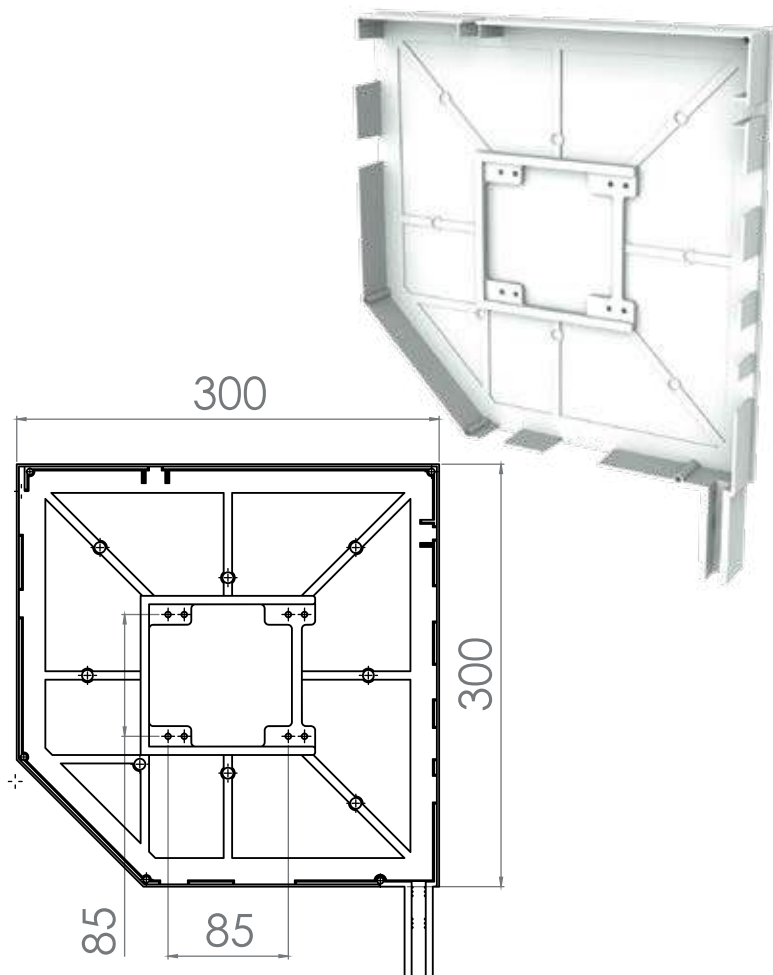
Used with 250°-45° profiled box.



Side frame 265 mm

Code	Package
ASF.265.45	pair
	1

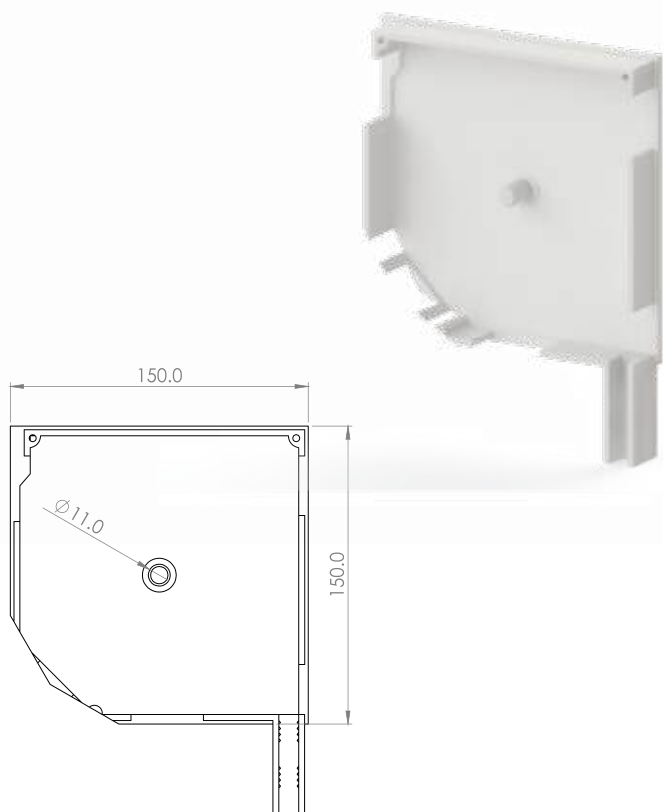
Used with 265°-45° profiled box.



Side frame 300 mm

Code	Package
ASF.300.45	pair
	1

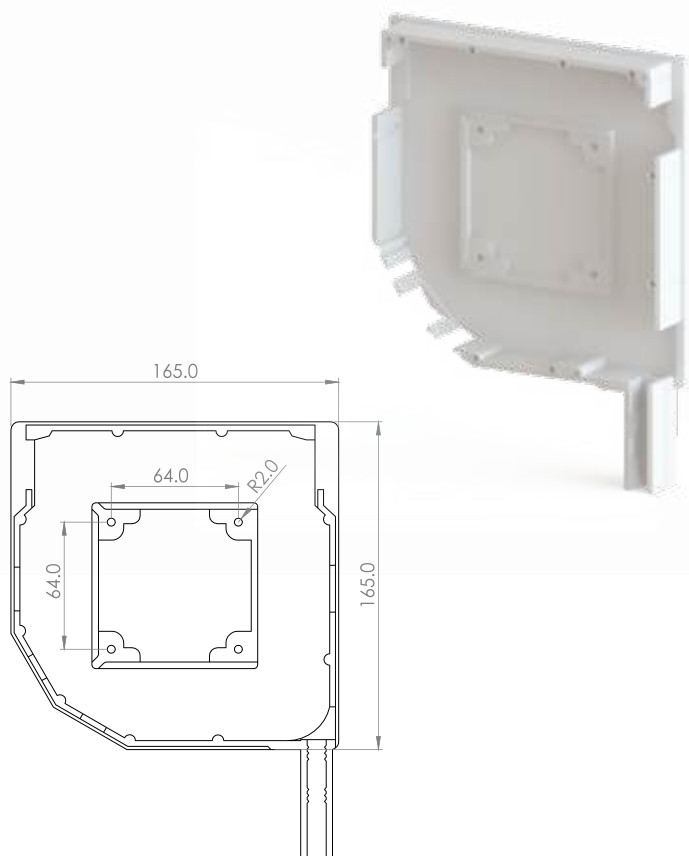
Used with 300°-45° profiled box.



Side frame 150 mm

Code	Package
ASF-P-150-30-T	pair
	1

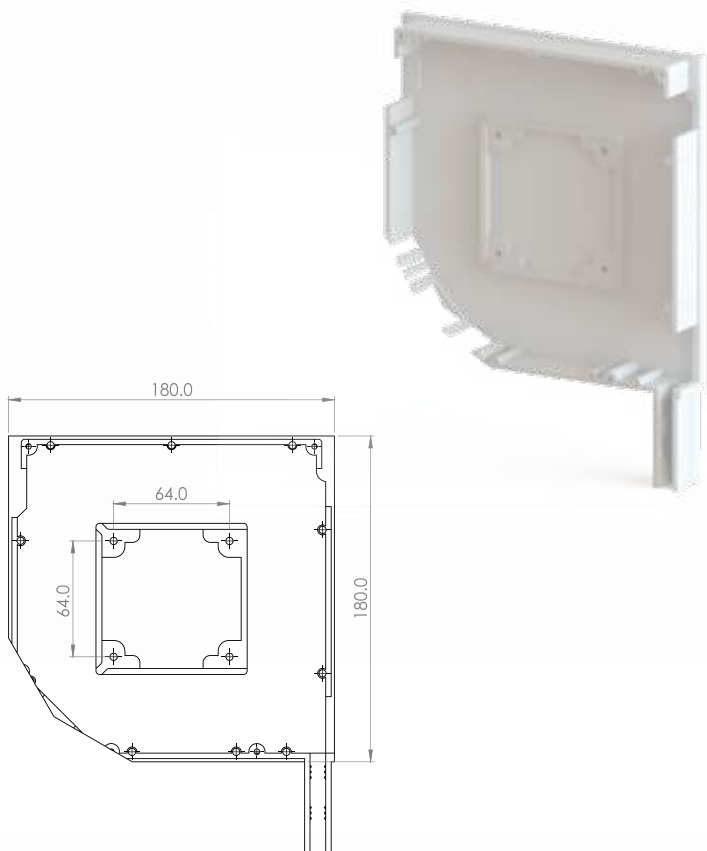
Used with: 150-30-T profiled box.



Side frame 165 mm

Code	Package
ASF-B-165-30-T	pair
	1

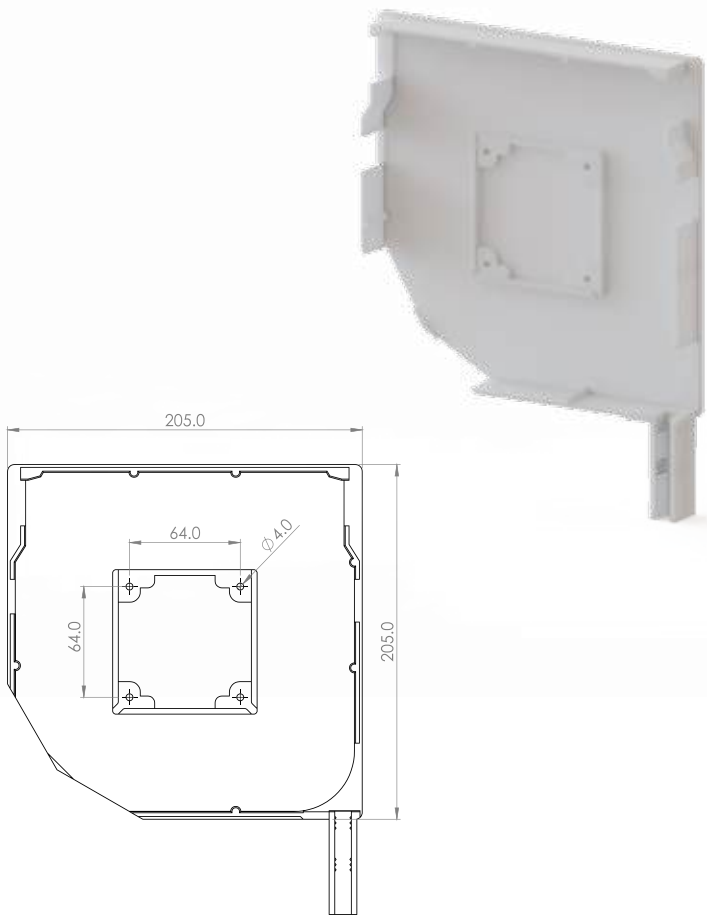
Used with: 165-30-T profiled box.



Side frame 180 mm

Code	Package
ASF-B-180-30-T	pair
	1

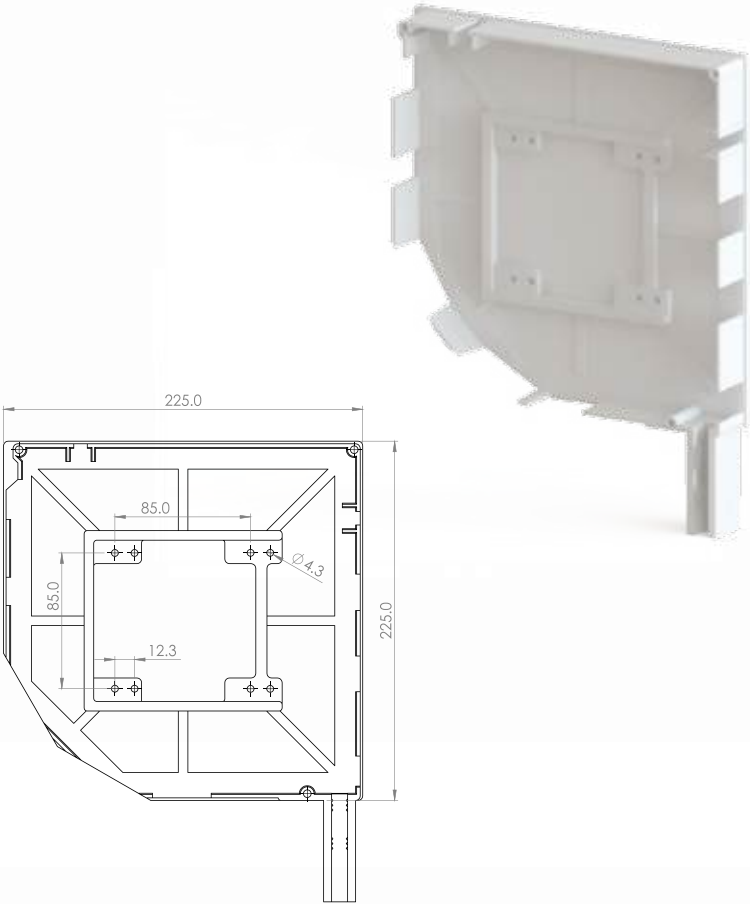
Used with: 180-30-T profiled box.



Side frame 205 mm

Code	Package
ASF-B-205-30-T	pair
	1

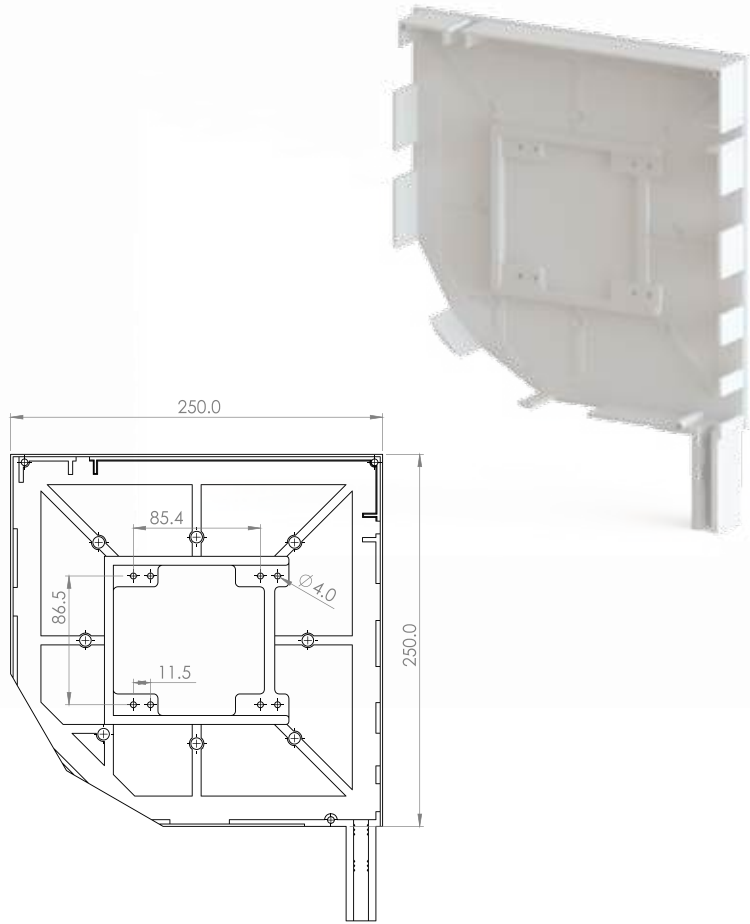
Used with: 205-30-T profiled box.



Side frame 225 mm

Code	Package
ASF-B-225-30-T	pair
	1

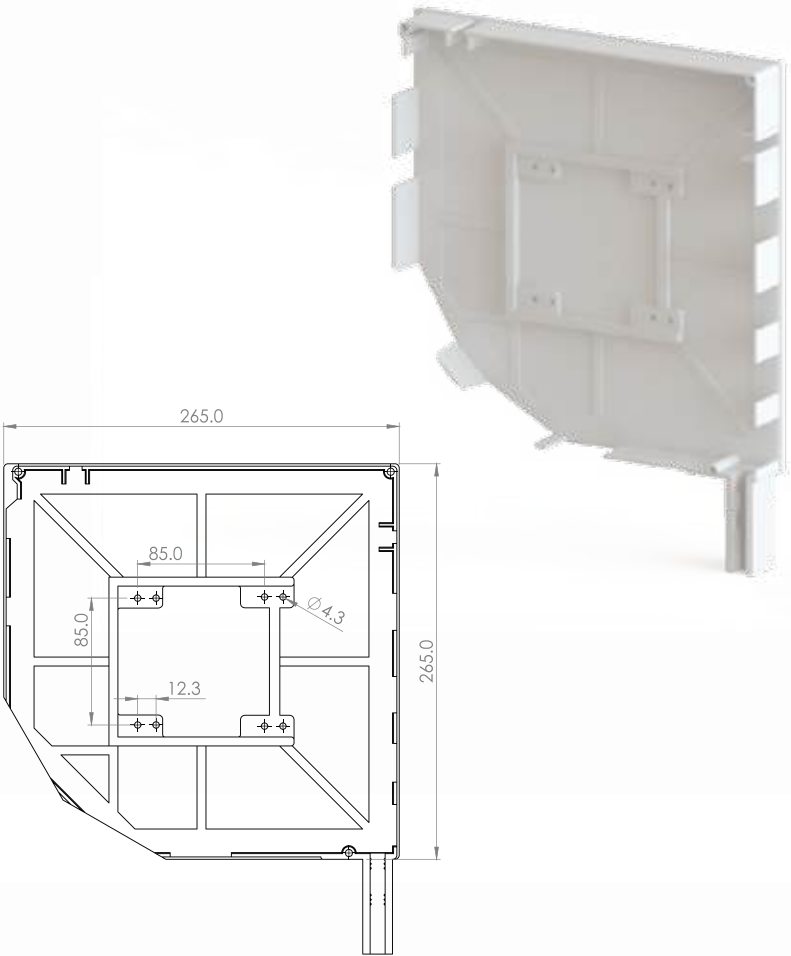
Used with: 225-30-T profiled box.



Side frame 250 mm

Code	Package
ASF-B-250-30-T	pair
	1

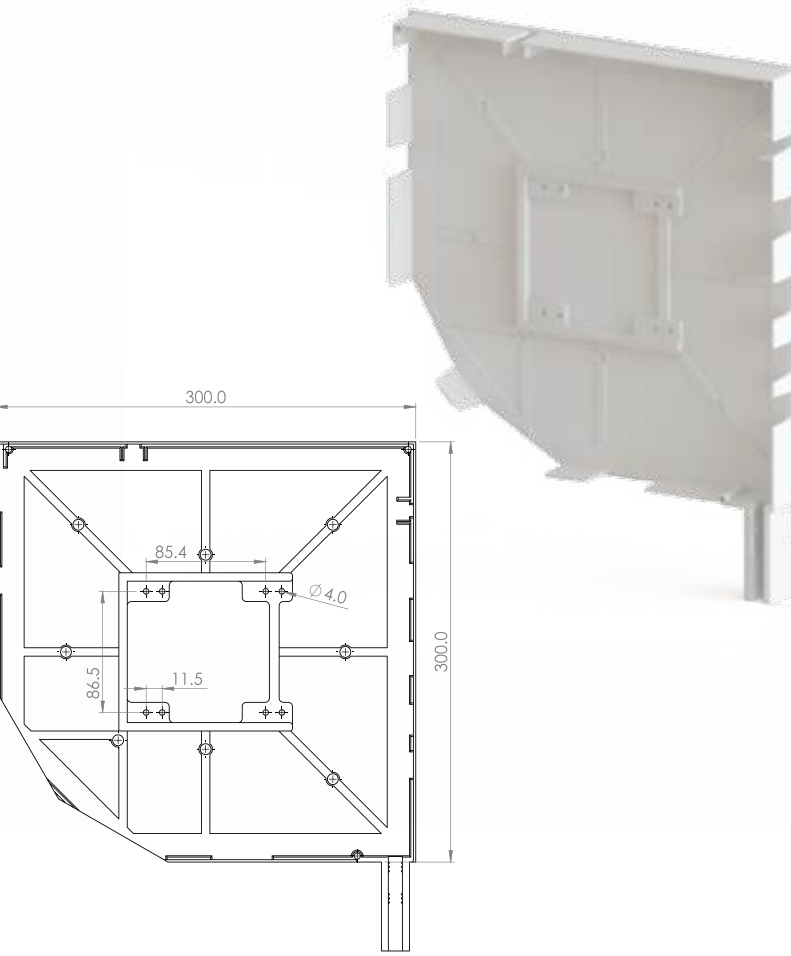
Used with: 250-30-T profiled box.



Side frame 265 mm

Code	Package
ASF-B-265-30-T	pair
	1

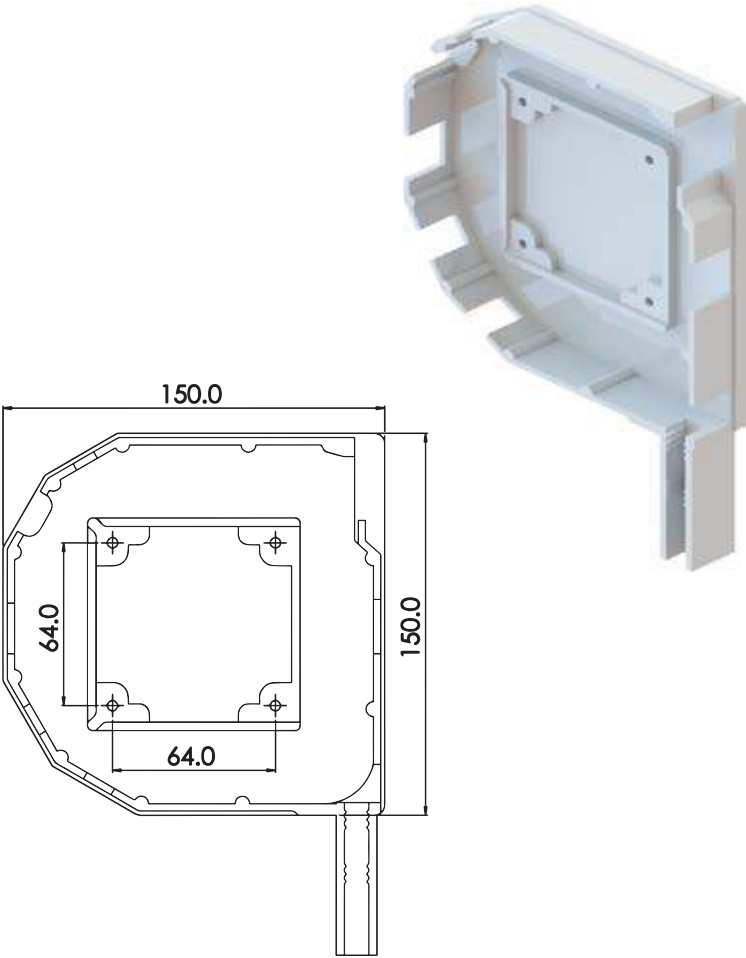
Used with: 265-30-T profiled box.



Side frame 300 mm

Code	Package
ASF-B-300-30-T	pair
	1

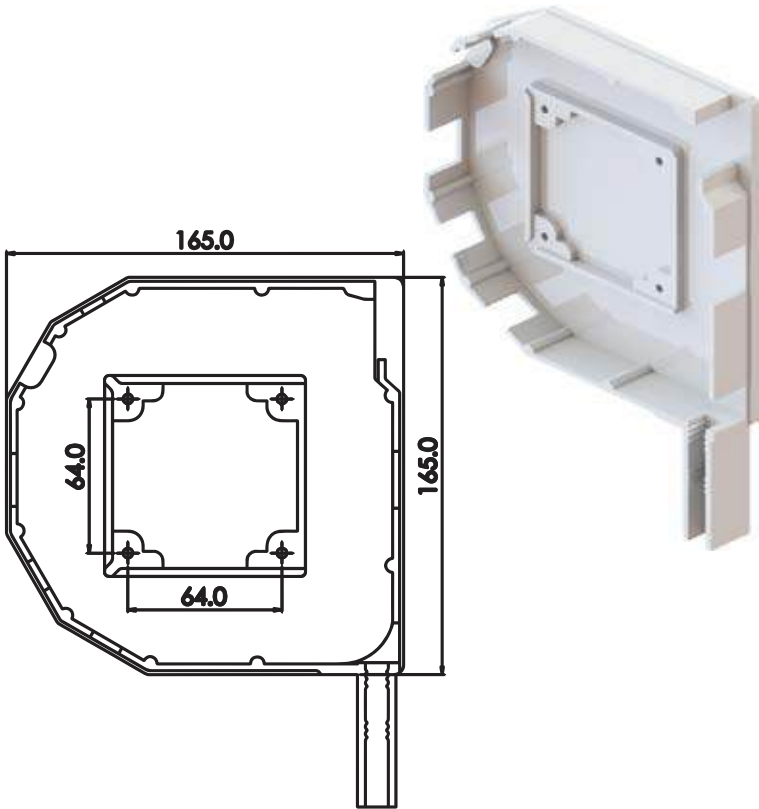
Used with: 300-30-T profiled box.



Side frame 150 mm

Code	Package
ASF-150-30	pair
	1

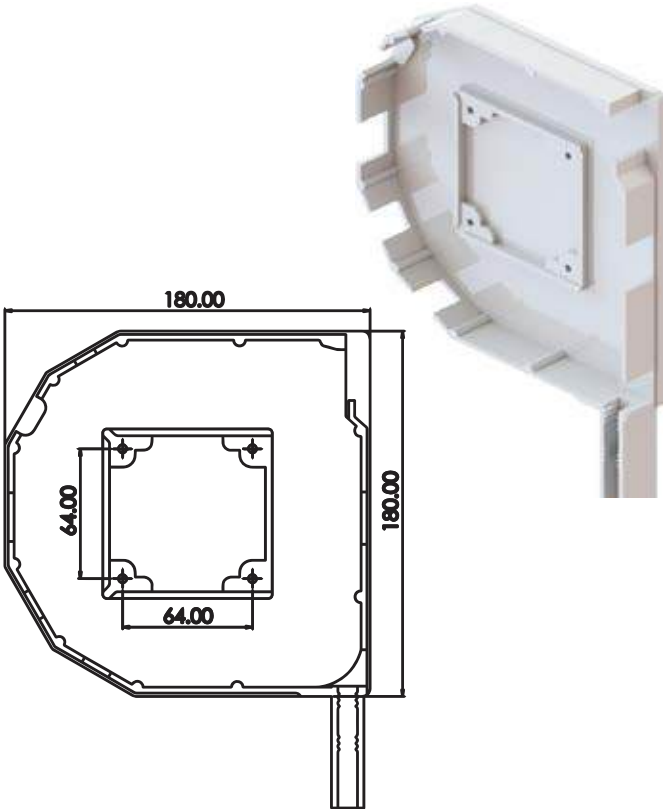
Used with: 150-30 profiled box.



Side frame 165 mm

Code	Package
ASF-165-30	pair
	1

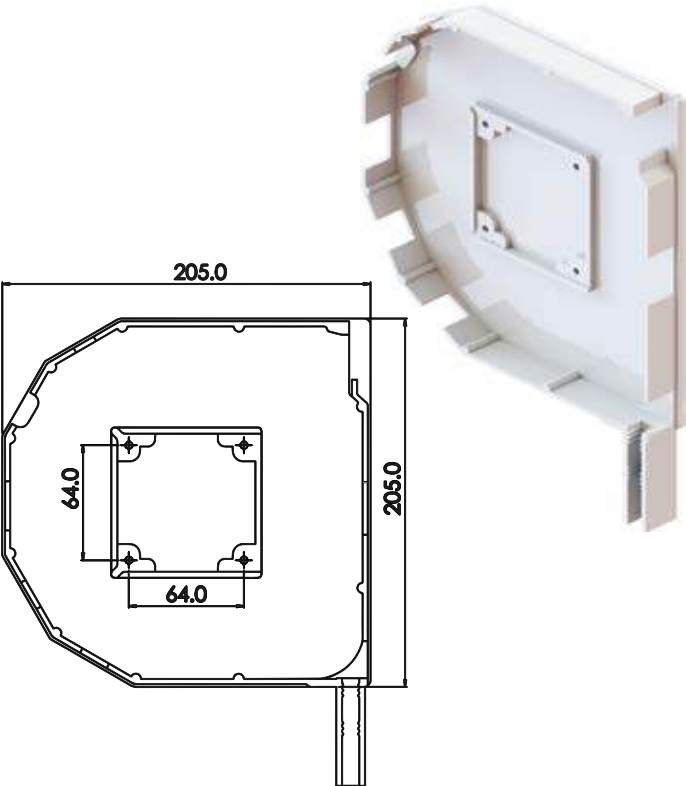
Used with: 165-30 profiled box.



Side frame 180 mm

Code	Package
ASF-180-30	pair
	1

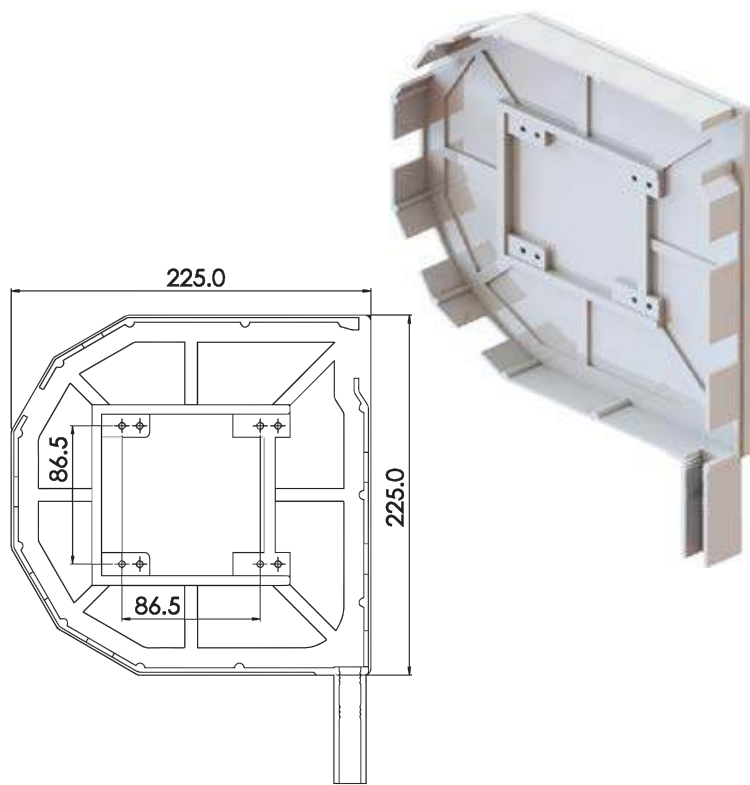
Used with: 180-30 profiled box.



Side frame 205 mm

Code	Package
ASF-205-30	pair
	1

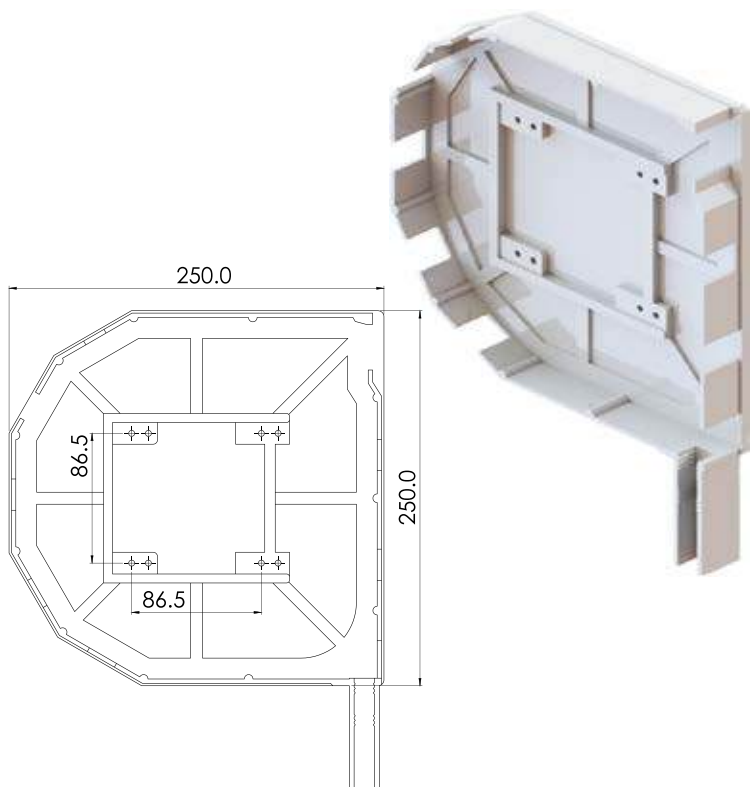
Used with: 205-30 profiled box.



Side frame 225 mm

Code	Package
ASF-225-30	pair
	1

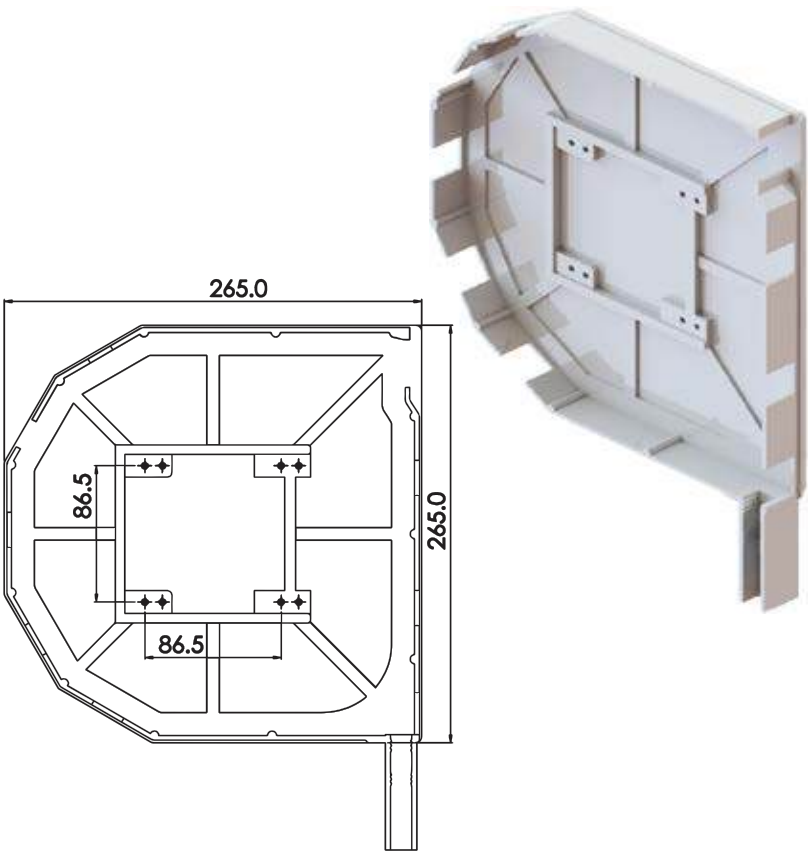
Used with: 225-30 profiled box.



Side frame 250 mm

Code	Package
ASF-250-30	pair
	1

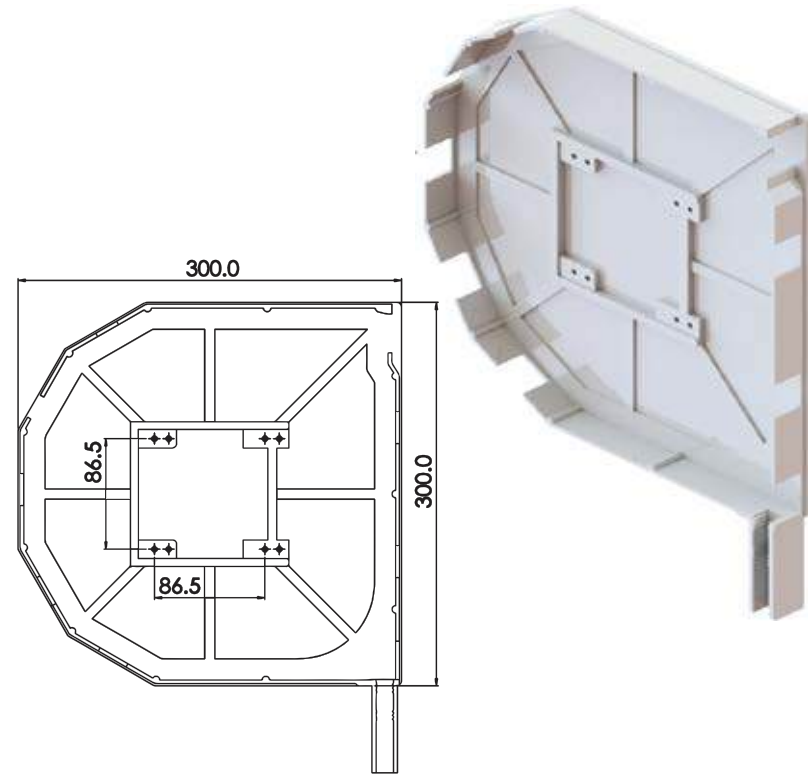
Used with: 250-30 profiled box.



Side frame 265 mm

Code	Package
ASF-265-30	pair
	1

Used with: 265-30 profiled box.

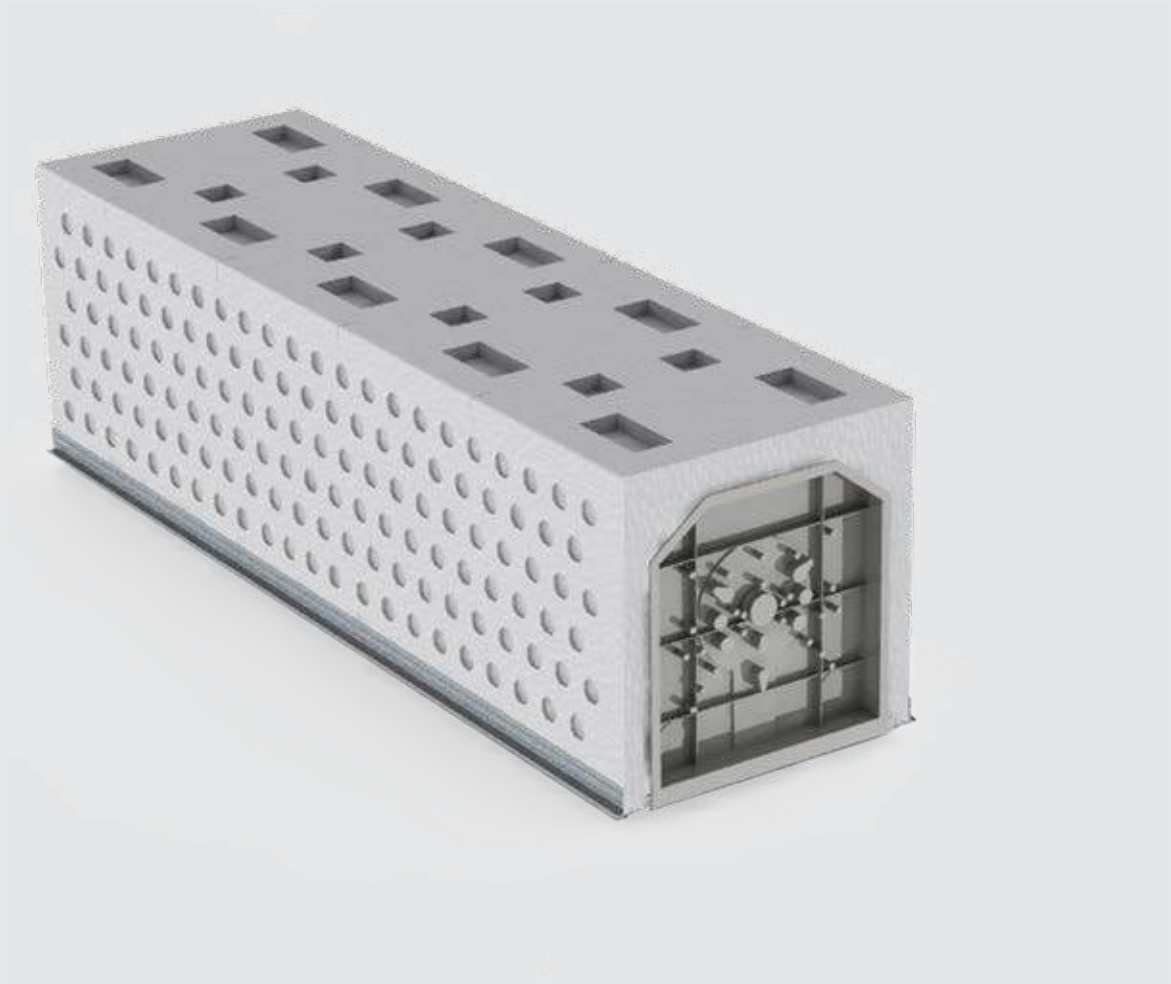


Side frame 300 mm

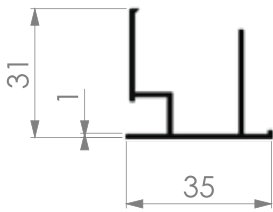
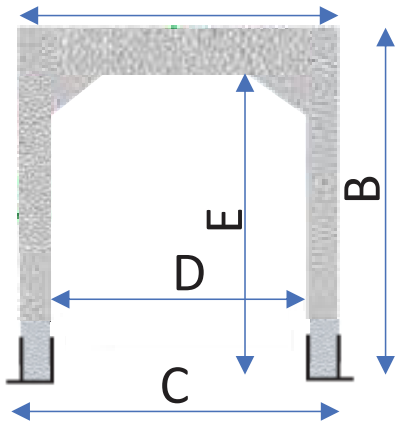
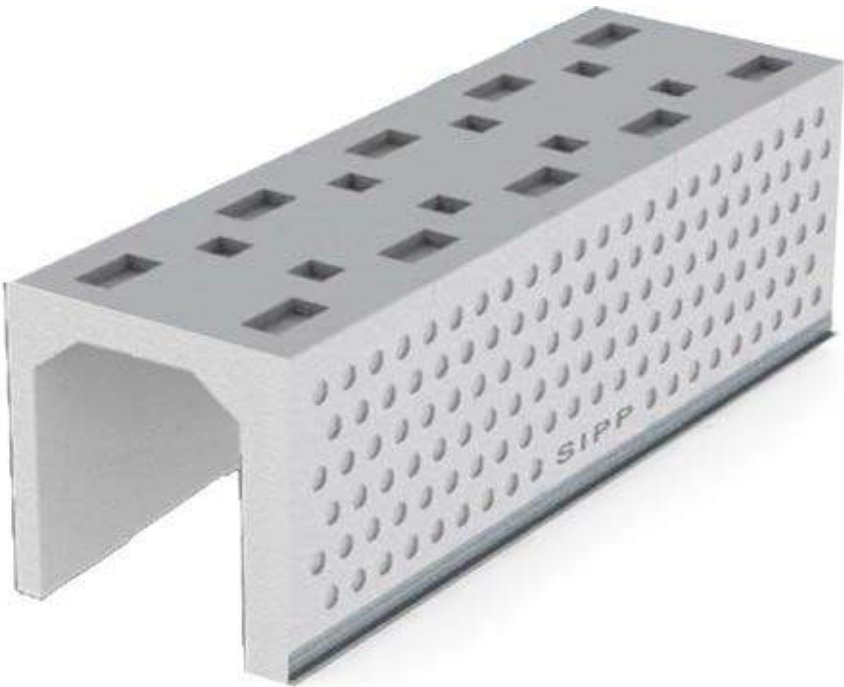
Code	Package
ASF-300-30	pair
	1

Used with: 300-30 profiled box.

Shutter Pocket

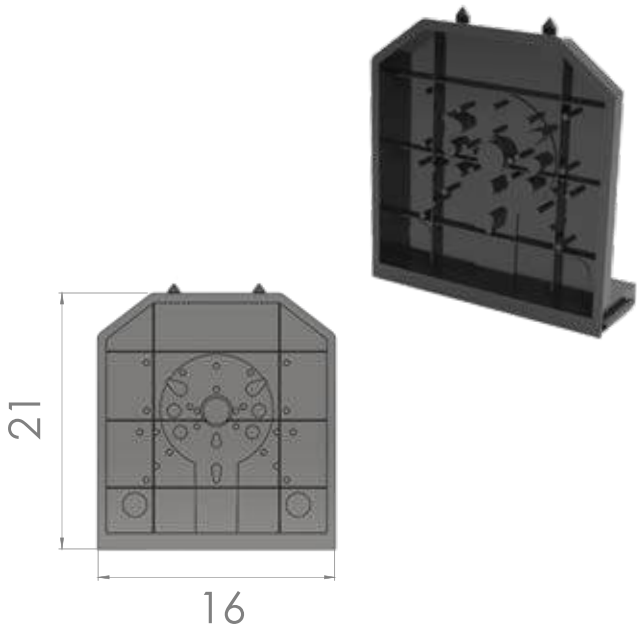


Shutter Pocket – EPS (220, 250, 300, 350) mm



Code	Description	A	B	C	D	E
B.CVR.22	Small Box	220	250	240	160	210
B.CVR.25	Medium Box	250	250	270	190	210
B.CVR.30	Large Box	300	300	320	240	250
B.CVR.35	X-Large Box	350	350	370	290	280

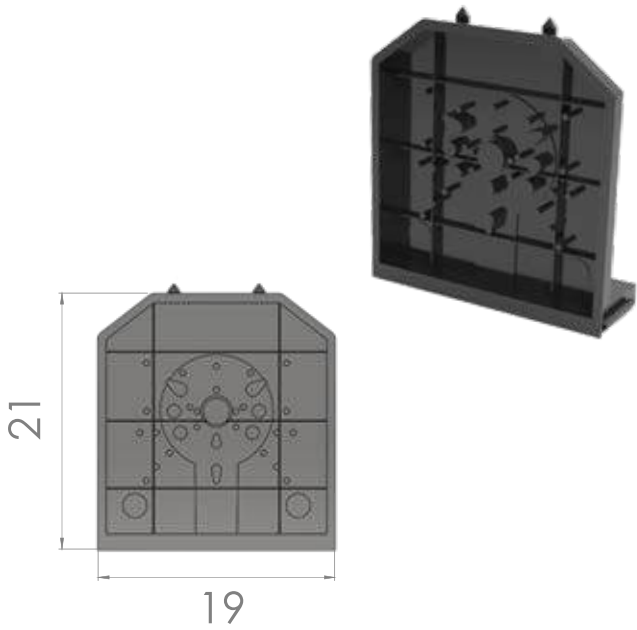
Expanded Polystyrene Rigid foam (EPS) with average densities 25-35 kg/m3.
Used with a welded mesh reinforcement, 2 aluminum profiles (1mm thickness) to stop the finishing plaster on the outside of the hull and support the underside, 2 plastic endcaps and 1 extruded PVC bottom cover code per box.



Small Plastic Side frame

Code	Package
PSF22	pair
	1

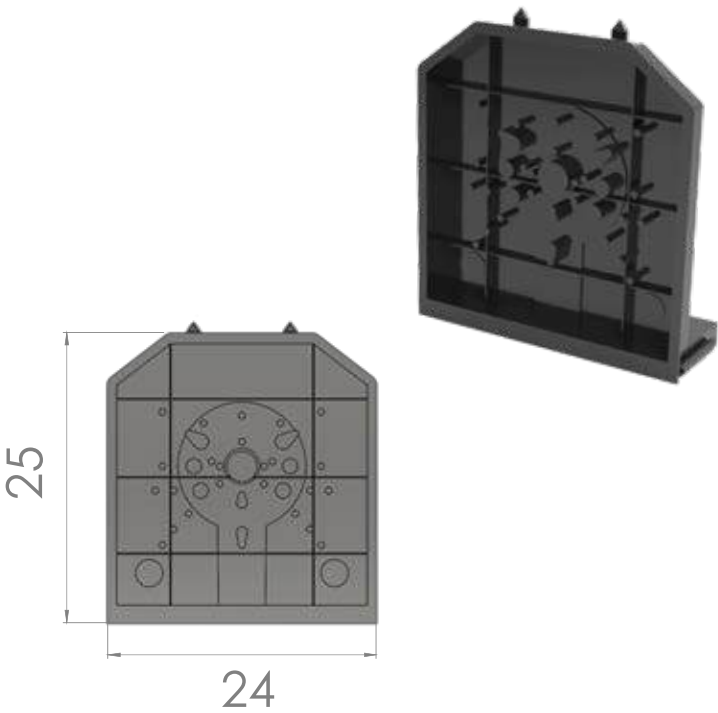
Used with B-CVR-22.



Medium Plastic Side frame

Code	Package
PSF25	pair
	1

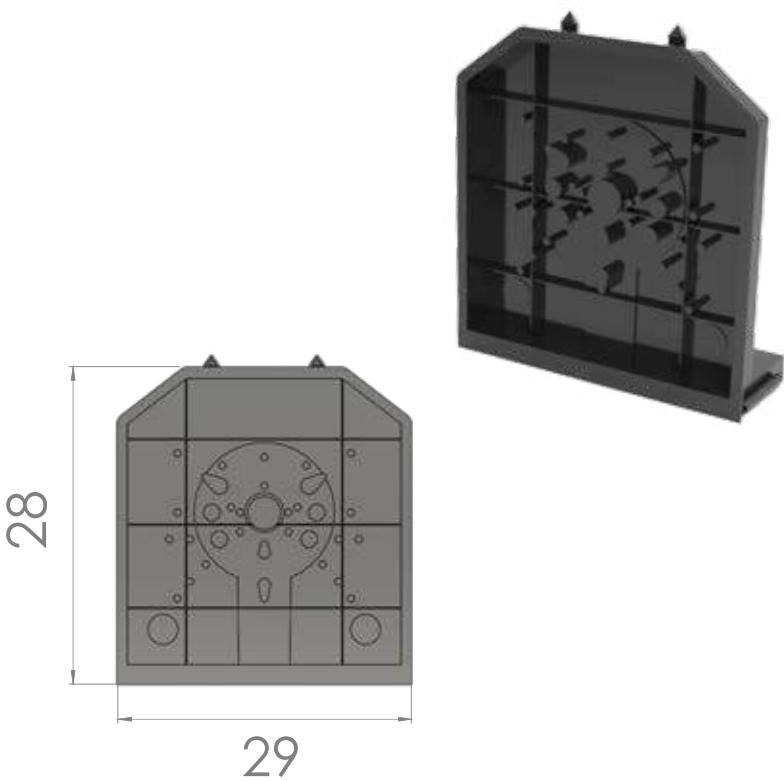
Used with B-CVR-25.



Large Plastic Side frame

Code	Package
PSF30	pair
	1

Used with B-CVR-30.

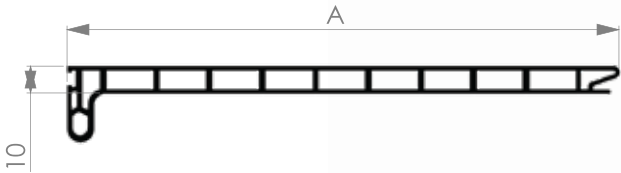


X-Large Plastic Side frame

Code	Package
PSF35	pair
	1

Used with B-CVR-35.

PVC bottom cover

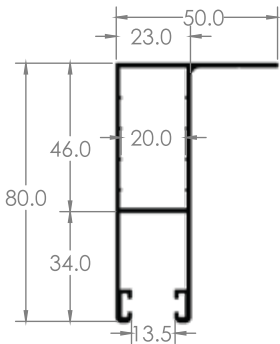


Code	Description	A* mm	Package
PVC22	Small PVC cover	135	Piece
PVC25	Medium PVC cover	165	1
PVC30	Large PVC cover	215	
PVC35	X-Large PVC cover	265	

Used with EPS shutter pockets.
A* depends on the EPS box size.

Shutter Accessories

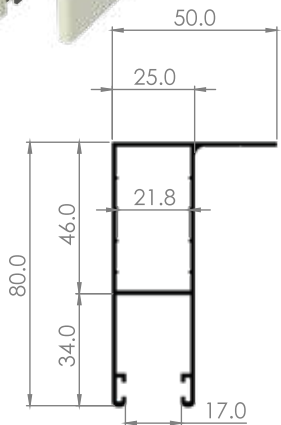




GR-23-80-T2

Weight	Length
g	m
766	up to 6.5

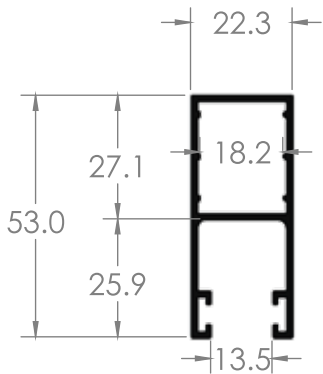
Used with slats: ARS-40-C, ARS-45-C, ARS-46-C, SRS-40-C, ASS-45-C and ASS-55-CL.



GR-25-80-T2

Weight	Length
g	m
807	up to 6.5

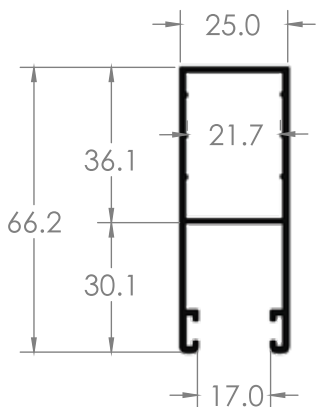
Used with: ARS-55-C, ARS-55-C2, ARS-58-C, SRS-55-C, ASS-55-C, ASS-55-S add ASS-55-CT, and ARS-59-C.



GR-22-53-T

Weight	Length
g	m
591	up to 6.5

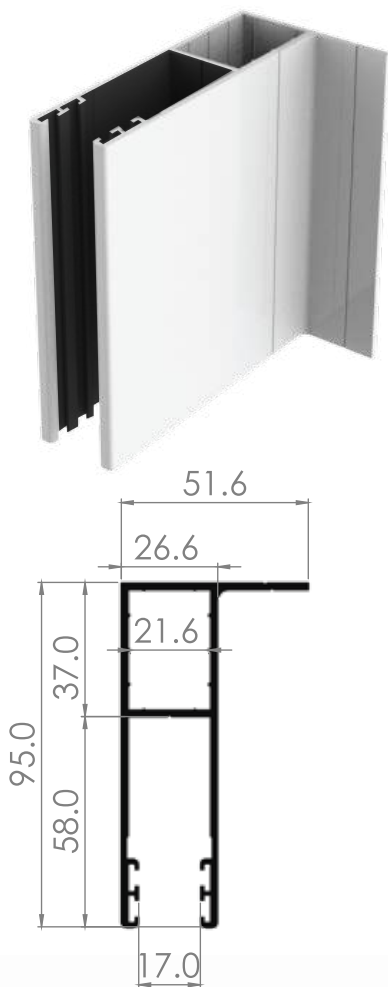
Used with: ARS-40-C, ARS-45-C, ARS-46-C and SRS-40-C



GR-25-66-T

Weight	Length
g	m
598	up to 6.5

Used with: ARS-55-C, ARS-55-C2, ARS-58-C and ARS-59-C.



GR-27-95-T

Weight	Length
g	m
1483	up to 6.5

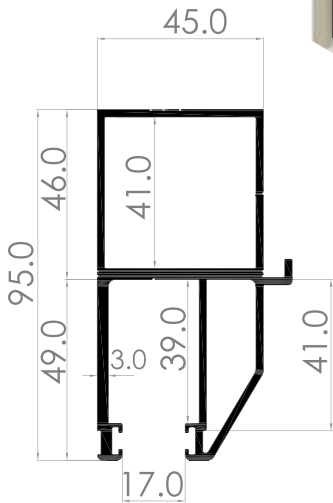
Used with: ARS-55-C,ARS-55-C2, ARS-58-C, ASS-55-C, ASS-55-S, SRS-55-C and ARS-59-C, ASS-55-CT.



GR-27-92-T

Weight	Length
g	m
1796	up to 6.5

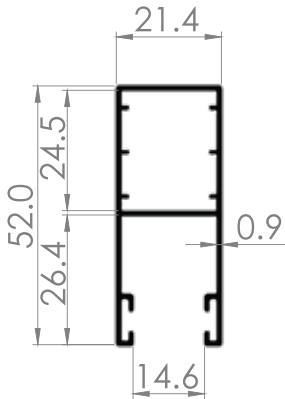
Used with: ARS-55-CT.



GR-45-95-T

Weight	Length
g	m
2130	up to 6.5

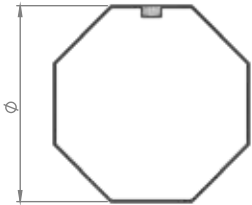
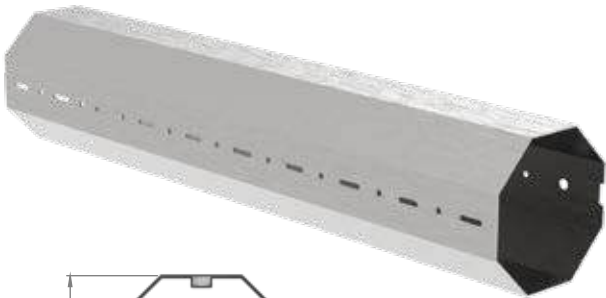
Used with: ASS-55-C, ASS-55-CT, ASS-55-S and SRS-55-C.



GR-21-52-T

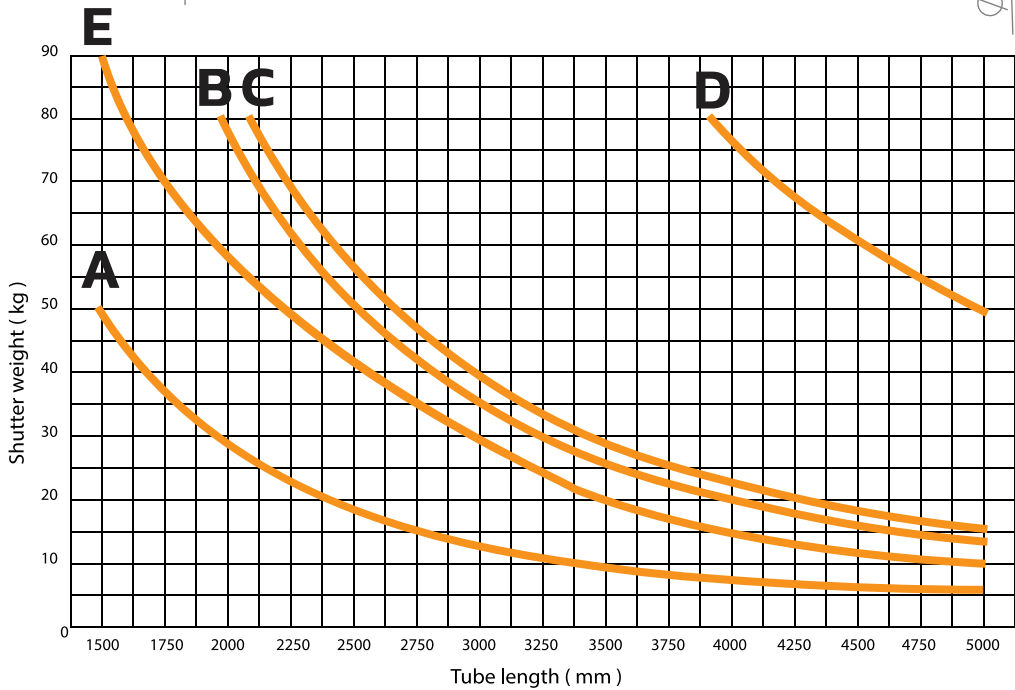
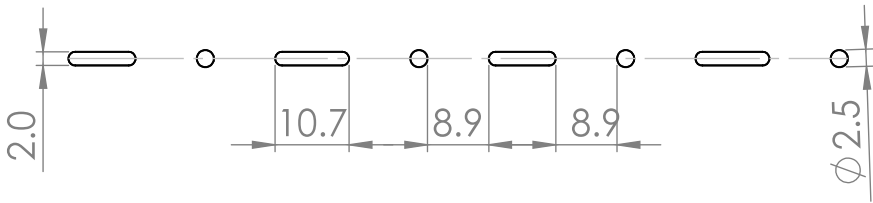
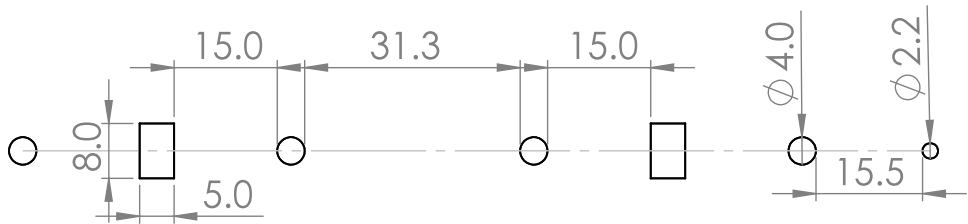
Weight	Length
g	m
416	up to 6.5

Used with: ARS-40-C, ARS-45-C, ARS-46-C, SRS-40-C, ASS-45-C and ASS-55-CL.

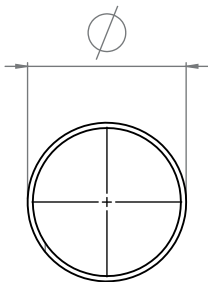


Galvanized octagonal tube

Code	Diameter	Length
	ϕ mm	m
TO-40-AF	40	6
TO-60-AF	60	6-7
TO-60-AG	60	6-7
TO-70-BC	70	4-4.5-7

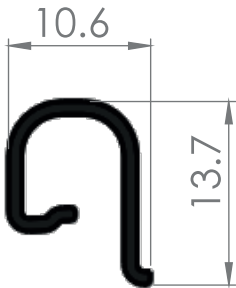


Curve	A	B	C	D	E
Tube code	TO-40-AF	TO-60-AF	TO-60-AG	TO-70-BC	TO-70-BA



Circular tube

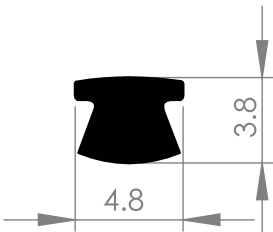
Code	Diameter	Length
	ϕ mm	m
TC-90-DA	90	6
TC-102-DA	102	6



PVC gasket for security shutter slat

Code	Package
	rod
RA0453	100
Length	UP TO 6.5 m

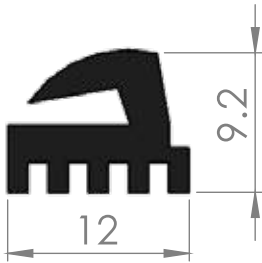
| Used with slats ASS-55-C and ASS-55-S. |



PVC gasket for security shutter slat

Code	Package
	rod
RA0408	200
Length	UP TO 6.5 m

| Used with slats ASS-55-C and ASS-55-S. |



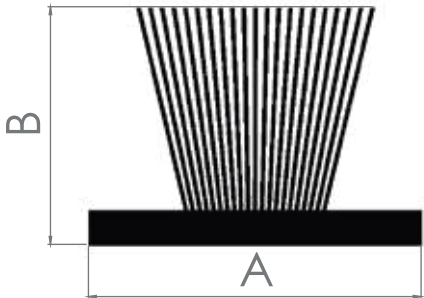
PVC gasket for security shutter

Code	Package
	rod
RAO420	200
Length	UP TO 6.5 m

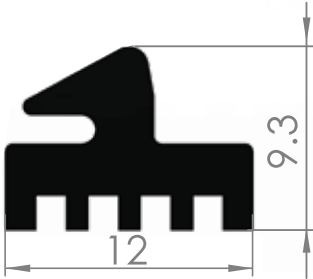
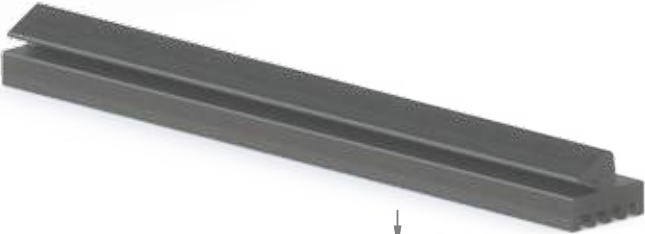
| Used with the end slat. |

Brushes

Code	Dimensions	Package
	AxB mm	m
RAO403	7x5	375
RAO405	7x7	300
RAO415	7x10	175



7x5 used with	7x7 used with	7x10 used with
ARS-45-C	ARS-40-C	ES-45
ARS-46-C		
ARS-55-C		
ARS-55-C2		
ARS-58-C		
ARS-59-C	SRS-40-C	ES-45-G
ASS-45-C		
ASS-55-C		
ASS-55-CT		ARD-77-D
ASS-55-S		
ASS-55-CL		
SRS-55-C		



PVC gasket for rolling door

Code	Package
	rod
RA0469	200
Length	UP TO 6.5 m

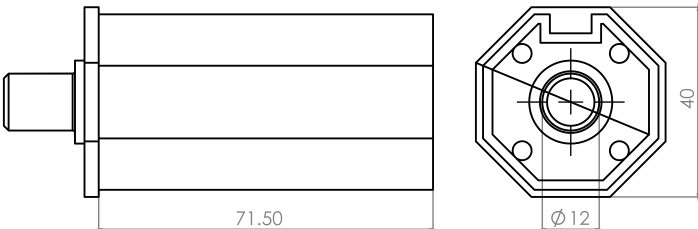
| Used with ARD-77-D. |



Plastic cap

Code	Package
RA01107	piece
	1-3-5

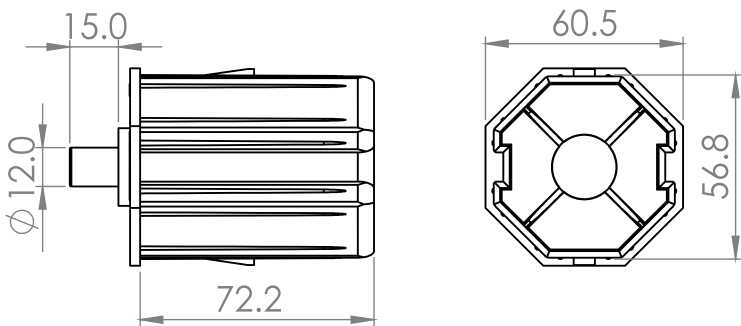
| Used with tube TO-40-AF. |



Plastic cap

Code	Package
CP-57	piece
	1-3-5

| Used with tube TO-60-AF and TO-60-AG. |

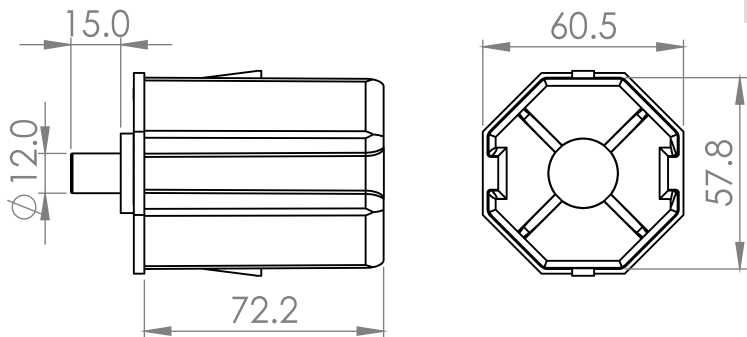




Plastic cap

Code	Package
CP-58	piece
	1-3-5

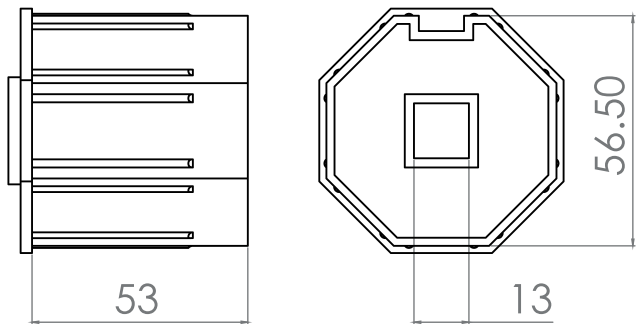
| Used with tube TO-60-AG. |

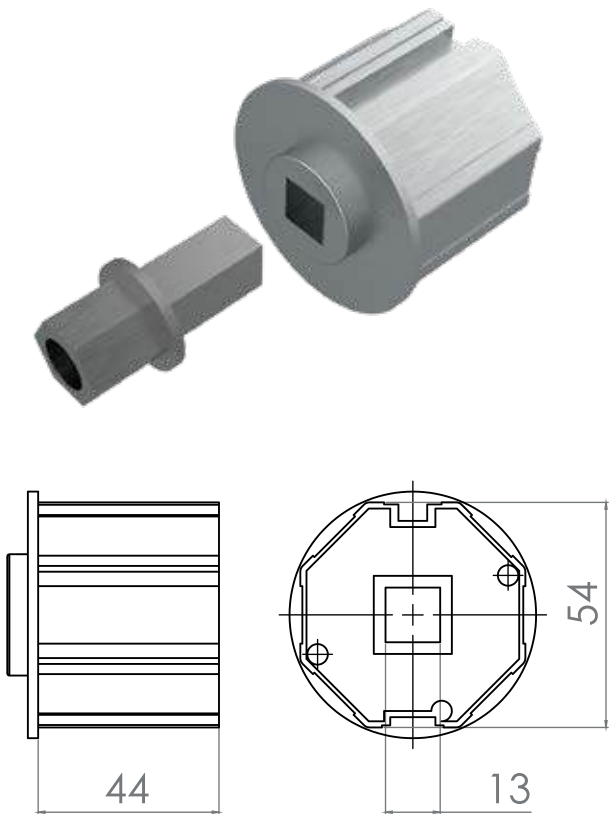


Plastic cap for TO-60-AG

Code	For crank gear with ratio	Package
RA07307	mm	piece
	1:5 / 1:8	1-3-5

| Plastic cap used with hand crank gears . |

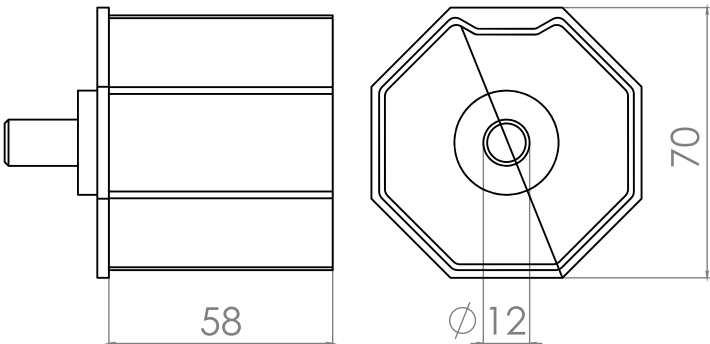
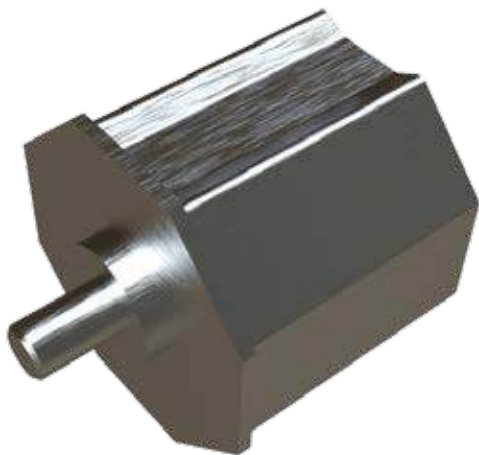




Aluminium cap

Code	For crank gear with ratio	Package
RA07306	mm	piece
	1:11	1-3-5

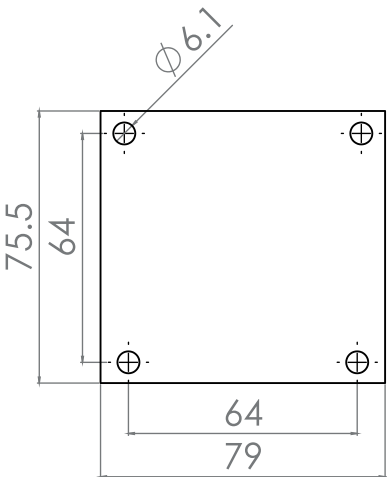
Aluminium cap is used for hand crank gears with tube (TO-60-AG).



Aluminium cap

Code	Package
RA01102	piece
	1-3-5

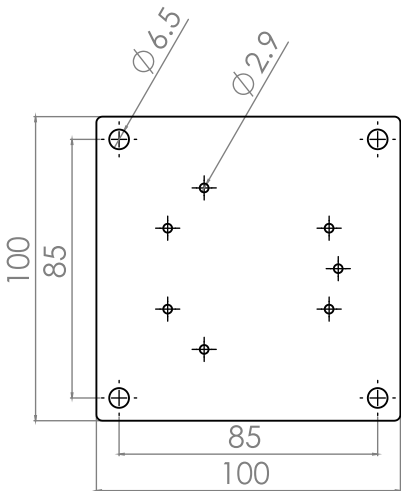
Used with tube TO-70-BC.



Plate

Code	Package
	piece
RA01421	1-3-5-10

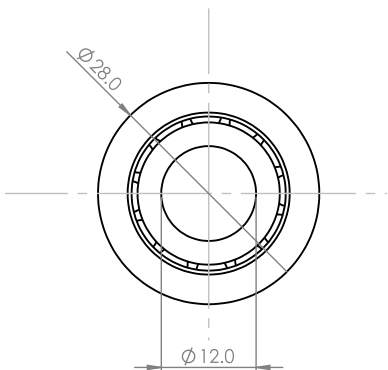
| Used with end caps (150, 165 , 180, 205) mm. |



Plate

Code	Package
	piece
RA01423	1-3-5-10

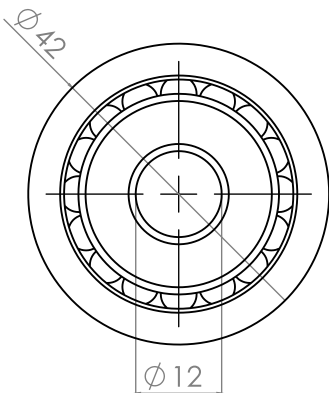
| Used with end caps (225, 250, 265, 300) mm. |



Ball Bearing

Code	For Pin	Package
	mm	piece
RA07208	12	1-3-5

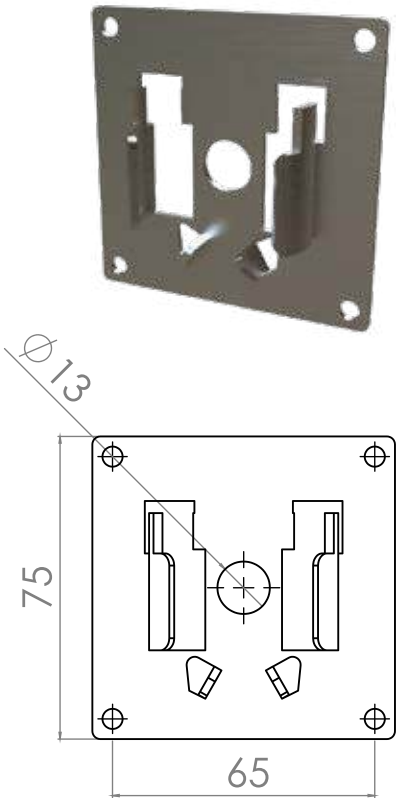
Ball bearing 28 mm galvanized steel for pin 12 mm.



Ball Bearing

Code	For Pin	Package
	mm	piece
RA07209	12	1-3-5

Ball bearing 42 mm galvanized steel for pin 12 mm.



Mini Plate for Ball Bearing

Code	For ball bearing	Package
	mm	piece
RA07207	42	1-3-5

Plate 75×75 mm used for ball bearing 42 mm with end cap 150, 165, 180, 205 mm .

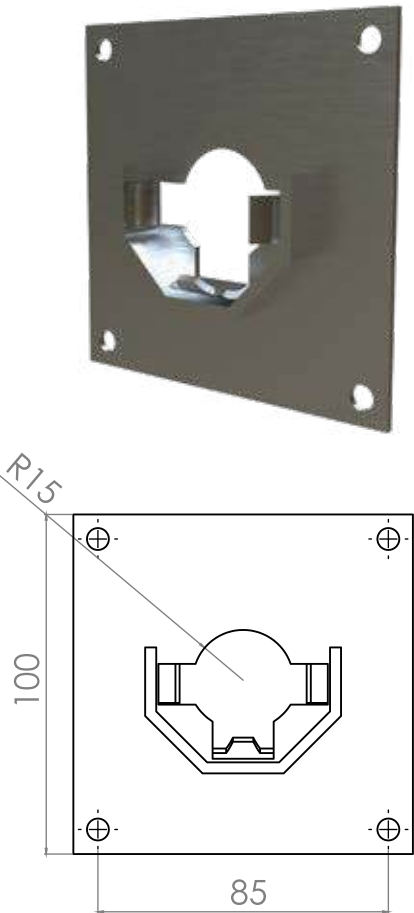


Plate for ball Bearing

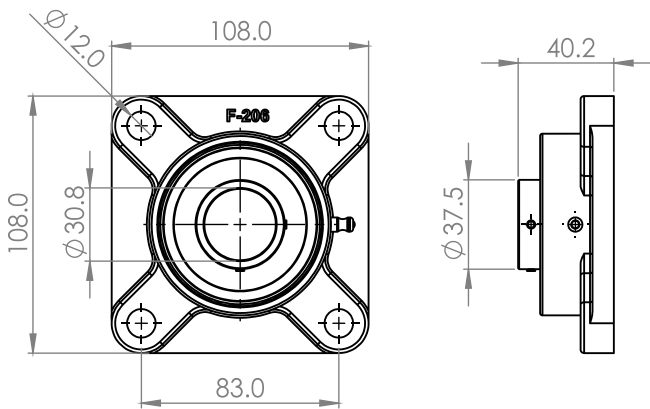
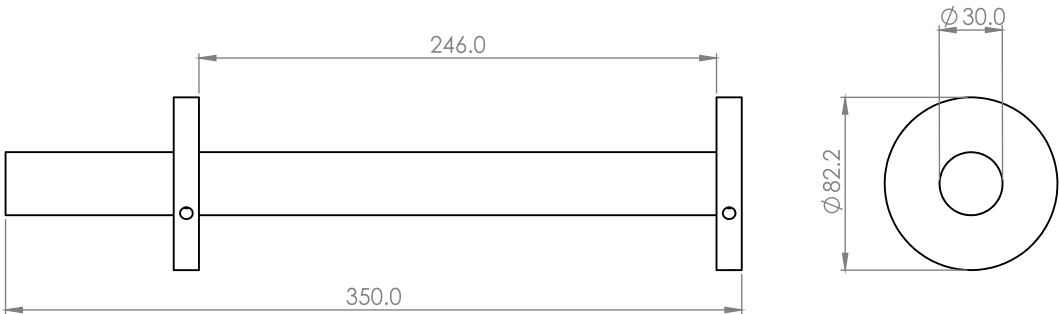
Code	For ball bearing	Package
	mm	piece
RA07206	42	1-3-5

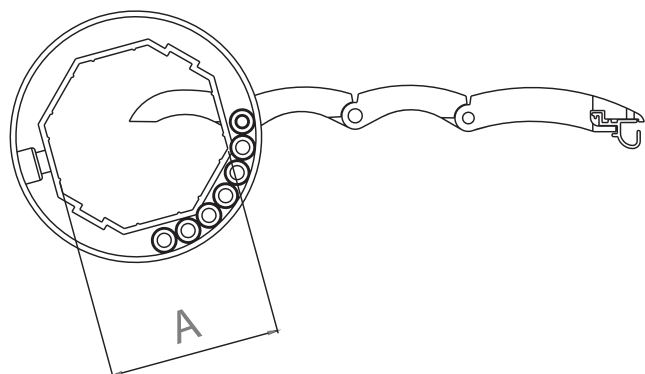
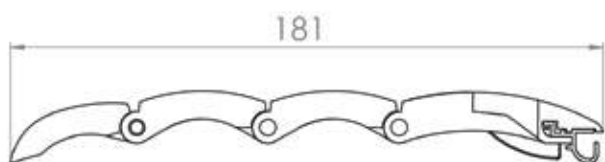
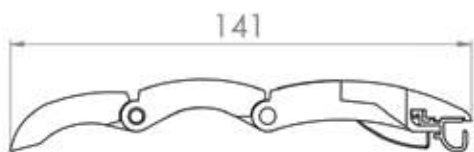
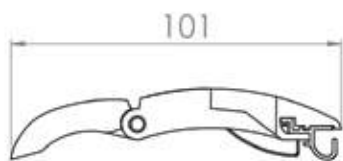
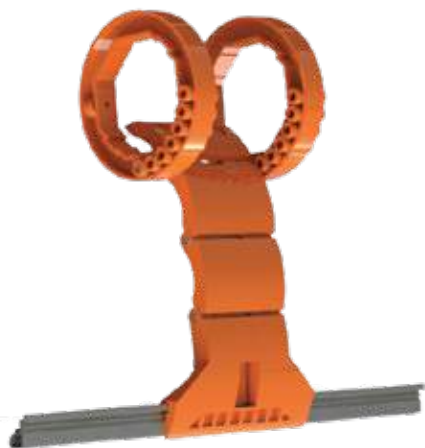
Plate 100×100 mm used for ball bearing 42 mm with end cap 225, 250, 265, 300 mm.

Cap with bearing

Code	Package
	piece
RA07214-206	1-3-5

Cap for 90 mm circular tube ; comes with motor adapters

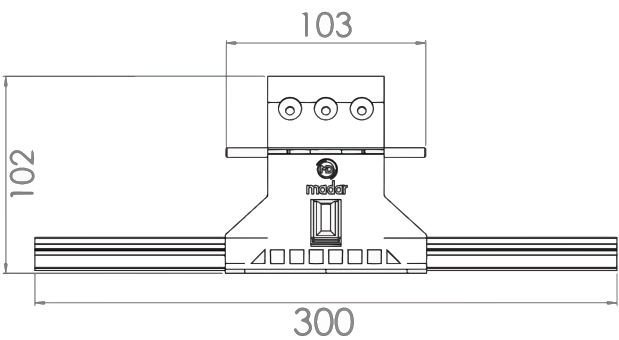




Security hangers

Code	Tube	Model	Package
	A mm	Element	piece
RA01413-2	60	1	2
RA01413-3	60	2	2
RA01413-4	60	3	2
RA01412-2	70	1	2
RA01412-3	70	2	2
RA01412-4	70	3	2

Both tubes 60 or 70 mm, use one security hanger for each 30 kg.
Minimum 2 security hangers for shutter.





Rigid hanger

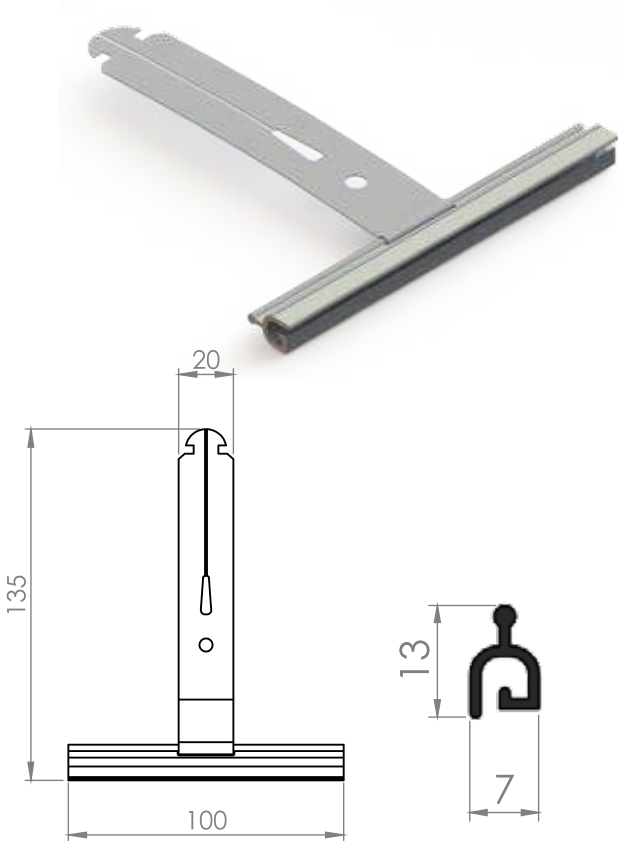
Code

RA01417

Use one rigid hanger for each 7 kg of shutter weight.

Minimum 2 rigid hangers for shutter.

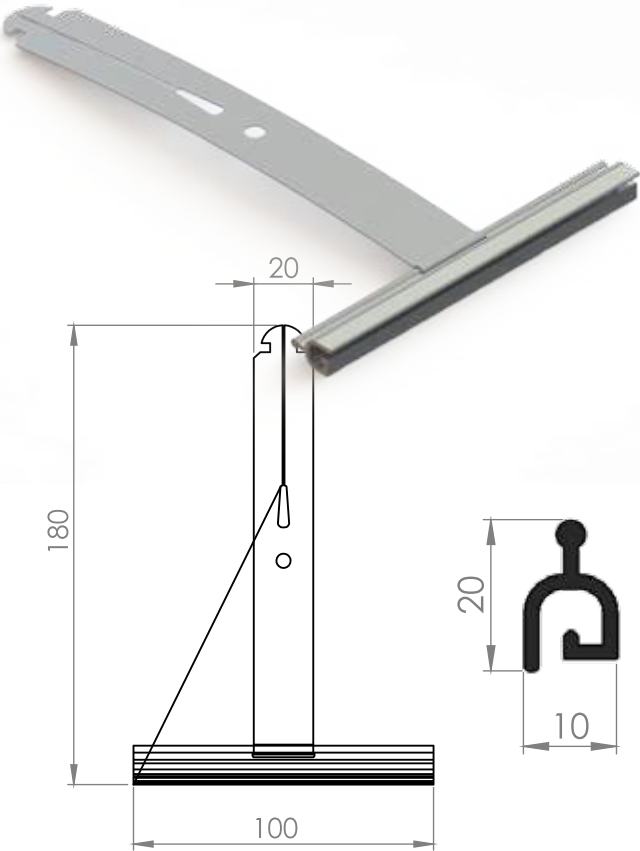
Used with: ARS-40-C, ARS-46-C, ARS-55-C, ARS-55-C2, ARS-58-C, ASS-45-C, ASS-55-CL, ASS-55-C, SRS-40-C, SRS-55-C



Spring hanger 135 mm

Code	For slat	Package
	mm	piece
RA01411	45	2-3-5

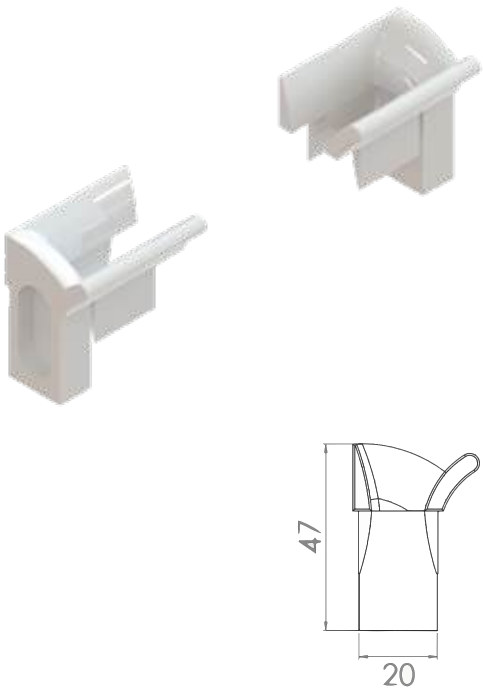
Spring hanger for stats: ARS-40-C, ARS-45-C and ARS-46-C.
Used with octagonal tube 40 mm and 60 mm .
Used a spring hanger for 1 m²
Minimum 2 spring hangers for shutter.
A screw must fix the hanger with the tube.



Spring hanger 180 mm

Code	For slat	Package
	mm	piece
RA01414	58	2-3-5

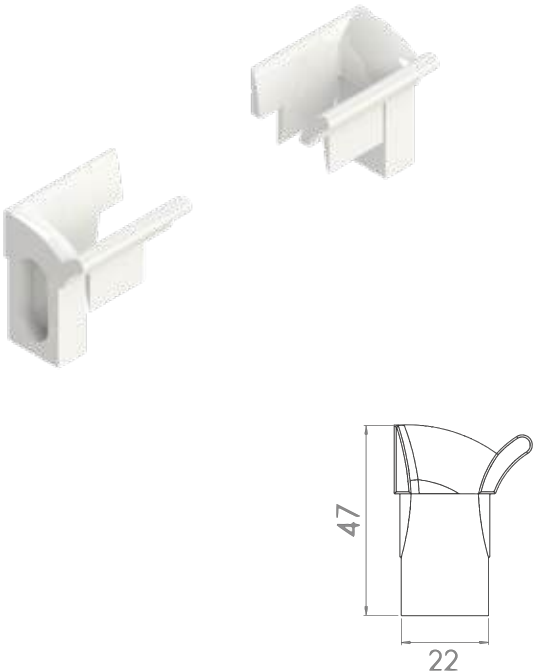
Spring hanger for stats: ARS-50-CL, ARS-55-C and ARS-58-C.
Used with octagonal tube 60 mm and 70 mm.
Used a spring hanger for 1 m²
Minimum 2 spring hangers for shutter.
A screw must fix the hanger with the tube.



ABS Guide Entry 45-180	
Code	Package
	Pair
RA01433	1

with guide rail GR-23-80-T2

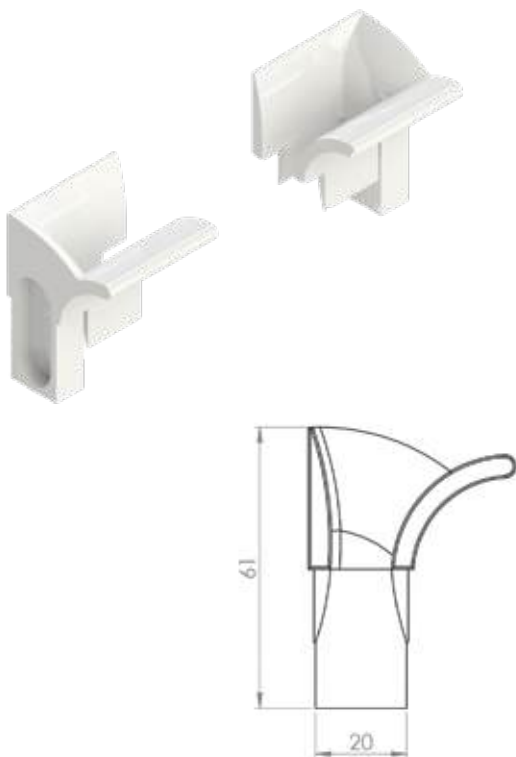
with side frame 150, 165, 180.



ABS Guide Entry 58-180	
Code	Package
	Pair
RA01434	1

with guide rail GR-25-80-T2

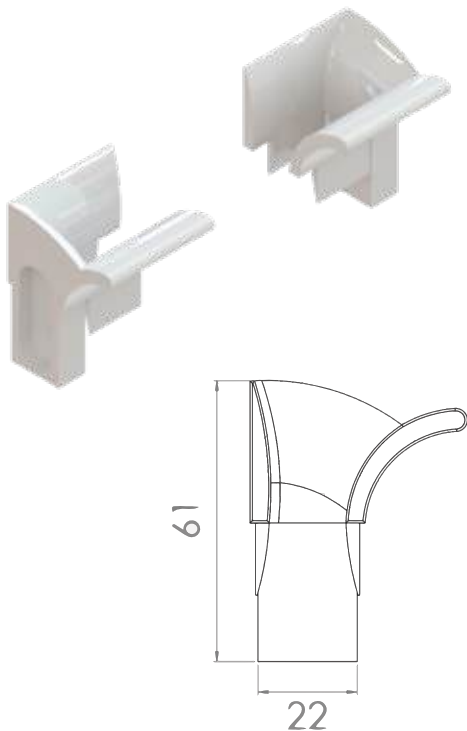
with side frame 150, 165, 180.



ABS Guide Entry 45-205

Code	Package
	Pair
RA01435	1

* with guide rail GR-23-80-T2
with side frame 205, 225, 250, 265, 300.



ABS Guide Entry 58-205

Code	Package
	Pair
RA01436	1

* with guide rail GR-25-80-T2
with side frame 205, 225, 250, 265, 300.



End lock for slat ARS-40-C and SRS-40-C

Code	Package
	kg
EL-40-C	5



End lock for slat ARS-45-C

Code	Package
	kg
EL-45-C	5



End lock for slats ARS-55-C and SRS-55-C

Code	Package
	kg
EL-55-C	5



End lock for slats ARS-55-C2

Code	Package
	kg
EL-55-C2	5



End lock for slat ARS-58-C and ARS-59-C

Code	Package
	kg
EL-58-C	5



End lock for slats ARS-58-C-H

Code	Package
	kg
EL-58-C-H	5



End lock for security slat ASS-55-C and ASS-55-S

Code	Package
	kg
EL-55-C-S	5



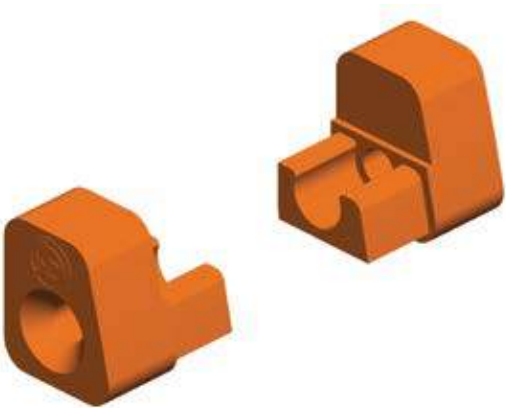
End lock for security slat ASS-55-CL and ASS-45-C

Code	Package
	kg
EL-55-CL	5



End lock for security slat ASS-55-CT

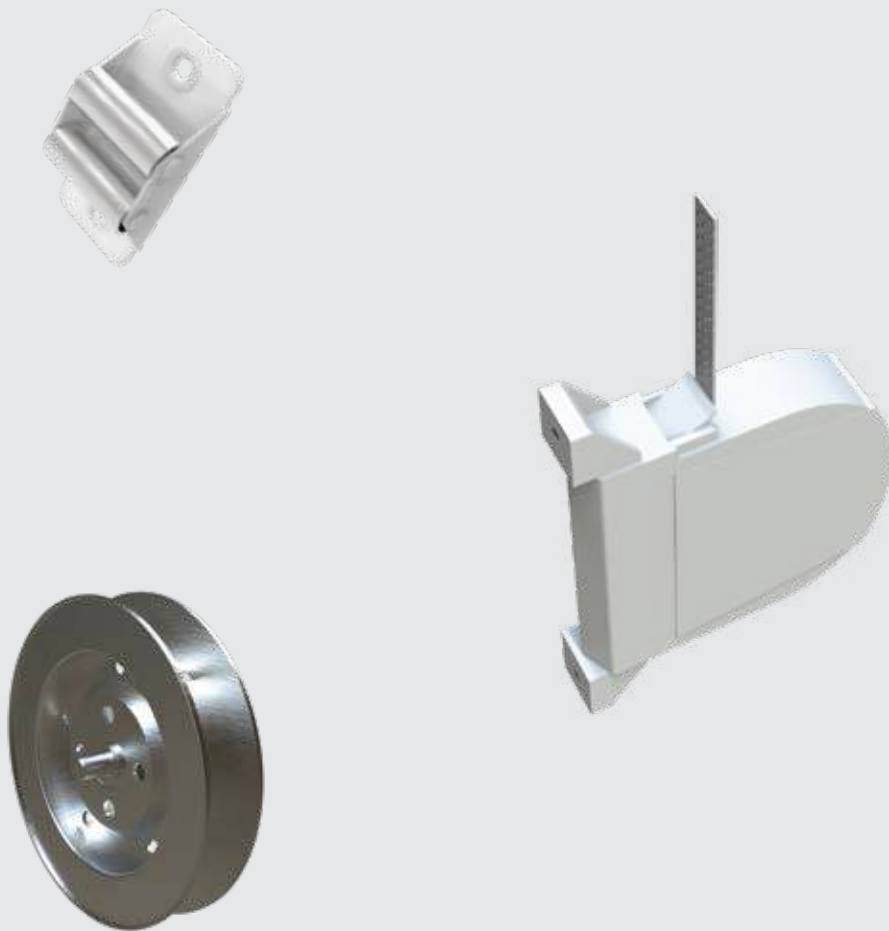
Code	Package
	kg
EL-55-C-T	5

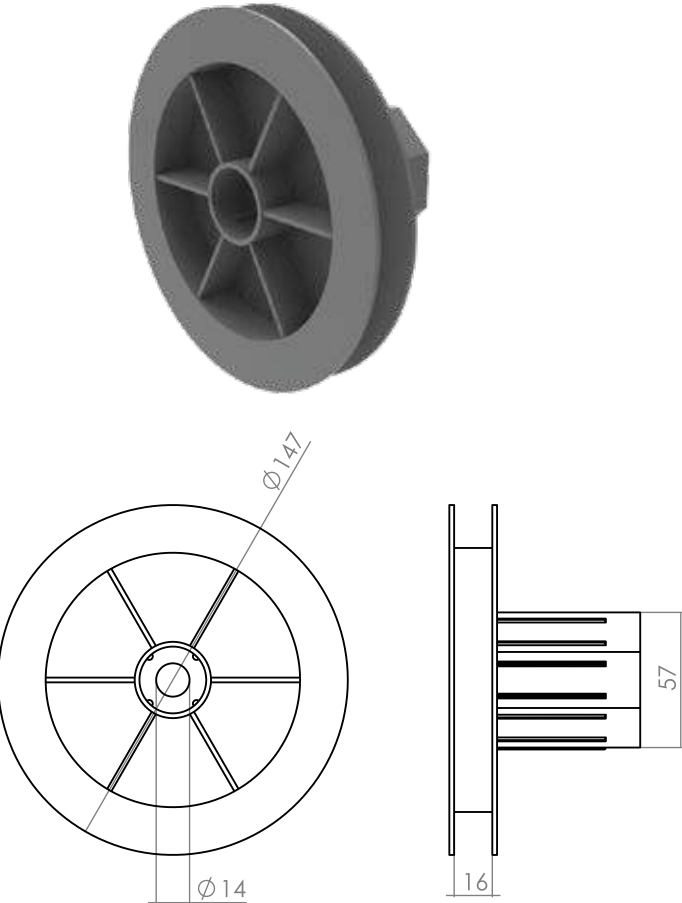


End lock for rolling door slat ARD-77-D

Code	Package
EL-77-R	kg
EL-77-L	5

Control System





Plastic pulley 60 mm

Code	Maximum load	For octagonal tube	Package
	KG	mm	set
RA07215	16	60	1

Used with 60 mm octagonal tube, coiler with 13 mm strap and 28 mm ball bearing.



Plastic pulley 40 mm

Code	Maximum load	For octagonal tube	Package
	KG	mm	set
RA07212	8	40	1

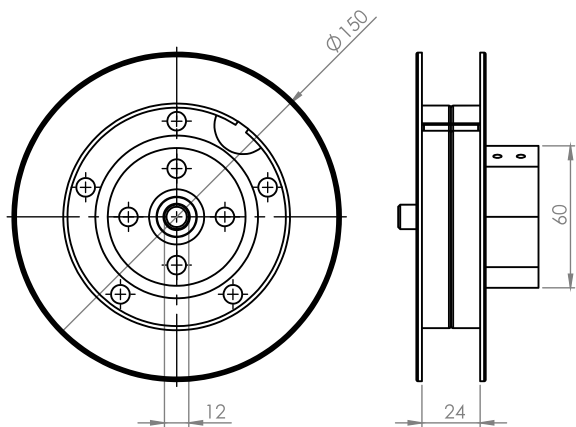
Used with 40 mm octagonal tube, coiler with 13 mm strap and 42 mm ball bearing.



Aluminium pulley 60 mm

Code	Maximum load	For octagonal tube	Package
	KG	mm	set
RA07202	12	60	1

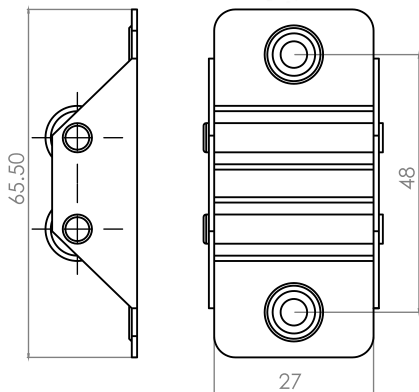
Used with 60 mm octagonal tube, coiler with 20 mm strap and 42 mm ball bearing.

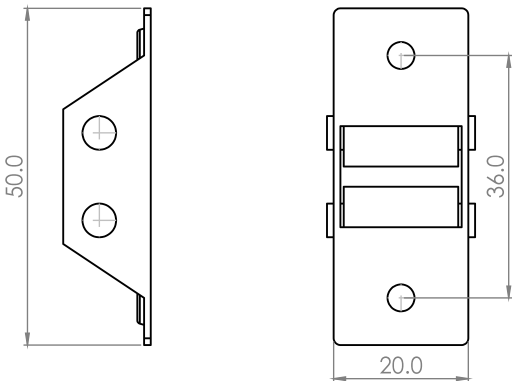


Large strap guide

Code	Strap	Package
	mm	set
RA07201	20	1

Horizontal guide 20 mm strap for roller shutters.

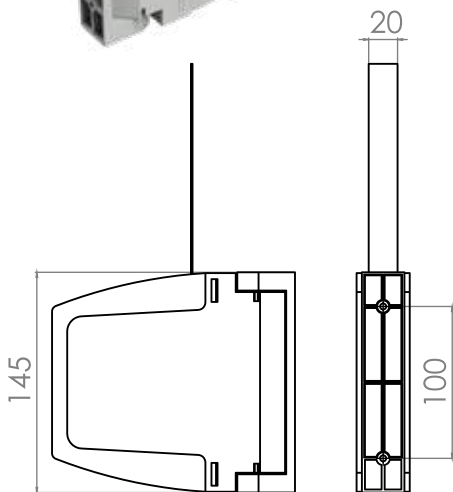




Mini strap guide

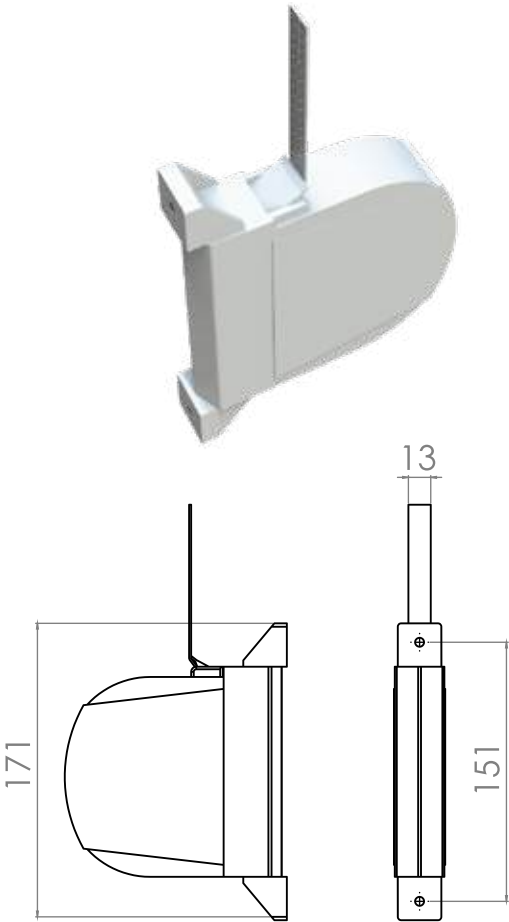
Code	Strap	Package
	mm	set
RA07203	13	1

Horizontal guide 13 mm strap for roller shutters.



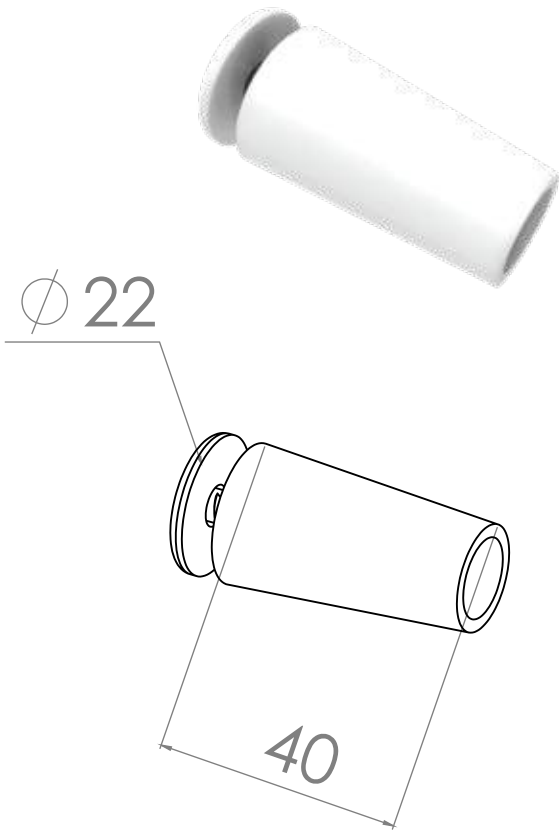
Large strap box

Code	Strap	Package
	mm	set
RA07210	20	1



Mini strap box

Code	Strap	Package
	mm	set
RA07211	13	1

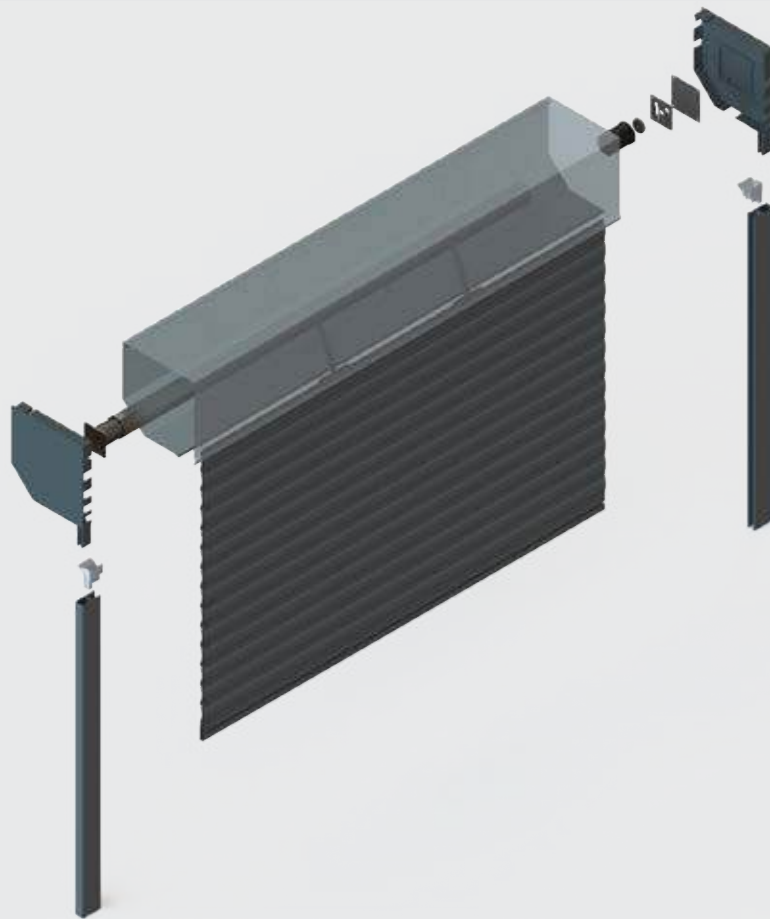


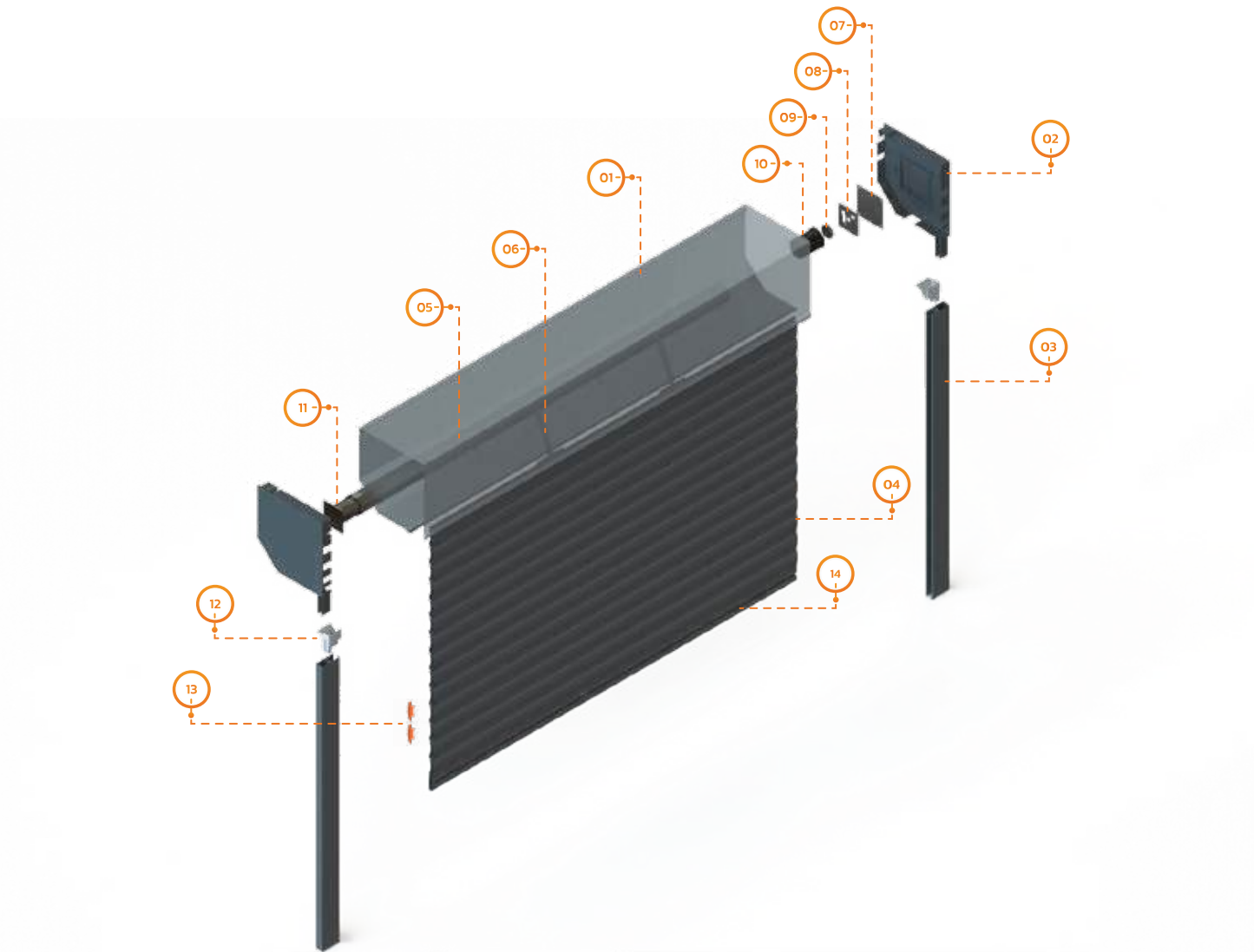
Stopper

Code	Length	Package
	mm	piece
RA01403	40	2

Stopper in plastic with screw.

Shutter Assembly And Installation Types

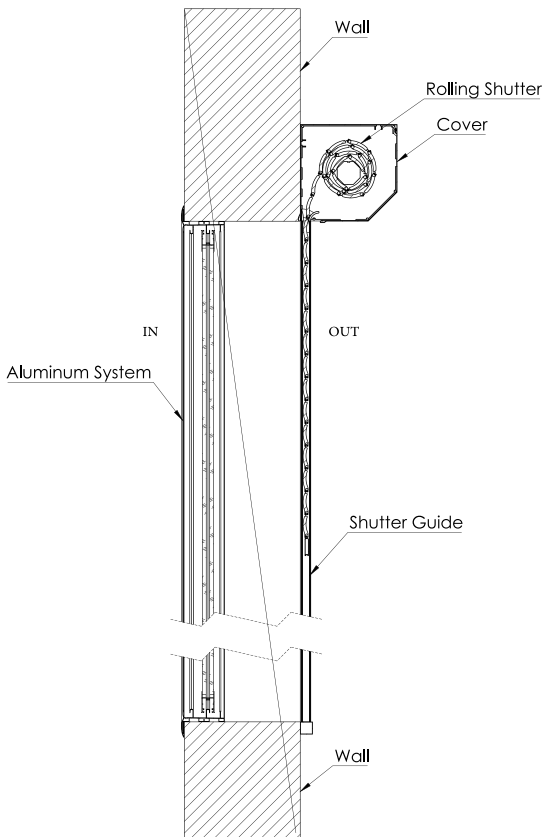




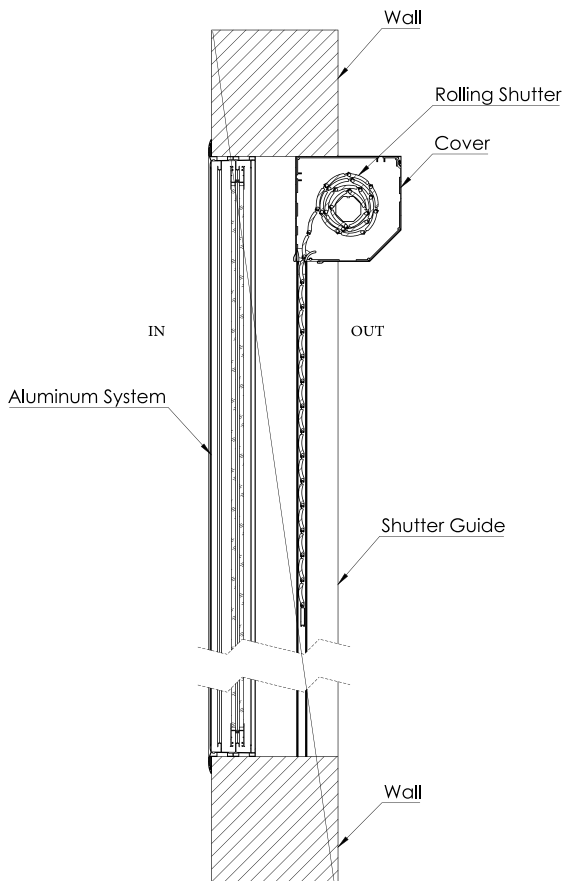
01	Box
02	End cap
03	Guide
04	Slat
05	Tube

06	Spring hanger
07	Plate for end cap
08	Plate for ball bearing
09	Ball bearing
10	Cap

11	Motor
12	Entry guide
13	End lock
14	End slat



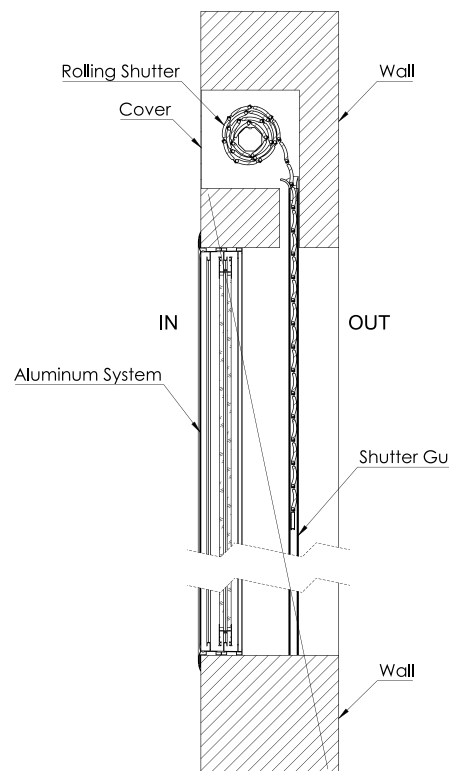
Flush to wall



Flush to Aluminum



Built in wall



Notes:

A series of horizontal dotted lines for taking notes, overlaid with a large, faint watermark of the Madar logo.



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