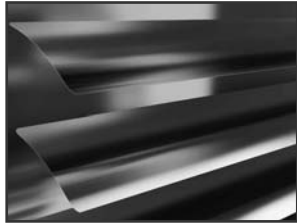


External Venetian Blinds



Flat Edge Slats: AF

Slat Widths: 50 / 60/ 80/ 100

Available Colours: Choose from 24 Standard RAL colours

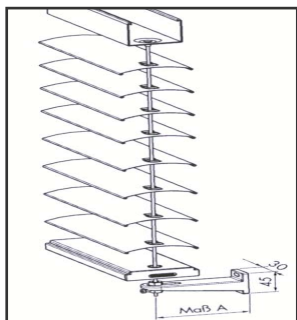
Contents:

1. Flat Edge slat features
2. Cable guidance
3. Rail guidance
4. Motor Drive
5. Crank drive
6. Dimension table
7. Stack height table
8. Weather cover/ Pelmet

Flat blade profile features a fine edge slat that barely interrupts the view and stacks into a compact space. The blades are manufactured from a special flexible aluminium alloy that spring-returns to shape if deflected in wind.

Features:

- Small packet/stack size.
- Good wind stability (10-12 m/s) when installed close to the glass.
- Daylight guidance feature available. "Daylight guidance" means that a Warema control system makes automatic adjustments to slats throughout the day, which keeps internal levels consistent, without excess glare.
- Ladder locked slats.
- Extensive customizable features.
- Tilts through 80 degrees.
- Perforated slats are available.
- Guide rails or guide cables.
- Self supporting version available.
- "Design" version available.



Cable Guidance: A2

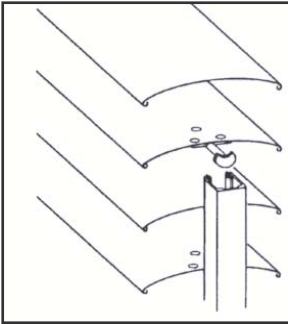
Available thickness: 3.3mm

Available colours: Black/ Transparent

Polyamide coated stainless steel guiding cables with an $\text{Ø}3.3\text{mm}$ are fixed in to the top rail of the external venetian blind and run through perforations of all slats to the end rail and are fixed to the window or wall by means of a suitable aluminium tension angle.

Features:

- Cable guides allow lateral guidance control for external venetian blinds with minimal visual impact.



Rail Guidance: A6

Available Types: Various

Available colours: Natural anodized/ RAL powder coat range

A range of extruded aluminium rail guides are available in various profiles to virtually suit any application.

Features:

- A black plastic sealing strip is inserted for sound absorption.
- Every third slat on a venetian blind is fixed with guiding nipples on both ends made of reinforced polyamide.
- Guide rails are the most stable form of guidance.



Crank Drive: C

Maintenance free bevel gears drive with an integrated brake.

Crank operation: Lifting and tilting of blinds is done via an articulated crank and crank rod made of an aluminium tube.



Motor Drive: E

Maintenance-free 230V covered electric motor with integrated limit switches and thermal protection switch

Motor operation: Lifting and tilting of the blinds is done via a wall switch/ remote control or Warema Control System (with connection into BUS systems if required)

Cable guidance



Tension cable bracket

■ Type S 01



Tension cable bracket

■ Type SH 02 with cross plate



Tension cable bracket for mullion-transom (MT) facades

■ Type SF 21



Tension cable bracket for mullion-transom (MT) facades

■ Type SF 22



Tension cable bracket for mullion-transom (MT) facades

■ Type SG 21



Tension cable bracket for mullion-transom (MT) facades

■ Type SG 22



Tension cable bracket for floors and window sills

■ Type S 04



Tension cable bracket for corner installations

■ Version 1



Tension cable bracket for corner installations

■ Version 2



Spring tension device

To compensate for lengthwise extension of the tension cable, integrated "unobtrusively" into the top rail of the external venetian blind



Tension bracket, large

Guide rails



Type 1, angled

- 25 x 18 mm
- Wall-mounted



Type 2, angled

- 25 x 18 mm
- Fits on guide rail brackets



Type 3, angled

- 50 x 18 mm
- Central guide rail to guide two blinds
- Fits on guide rail brackets



Type 4, round

- Ø 32 mm
- Fits on guide rail brackets



Type 7, round

- Ø 52 mm
- For use with self-supporting external venetian blinds



Type 8, round

- Ø 52 mm
- Central guide rail to guide two blinds
- For use with self-supporting external venetian blinds



Type 9, angled

- 25 x 50 mm
- For use with self-supporting external venetian blinds



Type 10, angled

- 50 x 50 mm
- Central guide rail to guide two blinds
- For use with self-supporting external venetian blinds



Fascia panel

- To reduce lateral incidence of light

Guide rail brackets



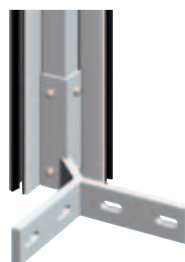
H 1

- Bracket for guide rail type 1, 2, 3, 4



H 101

- Bracket for guide rail type 7, 8, 9, 10



Corner bracket version 1

- Bracket for 90° external corner with 40 x 40 mm square tube and guide rail type 1

Cover panels

(Pelmet Types)



Cover panel ABL 01

- Angular cover panel, folded



Cover panel ABL 02

- Angular cover panel, with upturn beam



Cover panel ABL 03

- Angular cover panel, folded with upturn beam



Cover panel BL 04

- Angular cover panel, folded, sloped



Cover panel ABL 05

- Gallery cover panel



Cover panel ABL 06

- U-shaped cover panel, folded



Cover panel BL 07

- U-shaped cover panel, sloped on one side



Cover panel BL 08

- U-shaped cover panel, folded, angled on both sides



Cover panel BL 09

- Round-shaped cover panel, folded



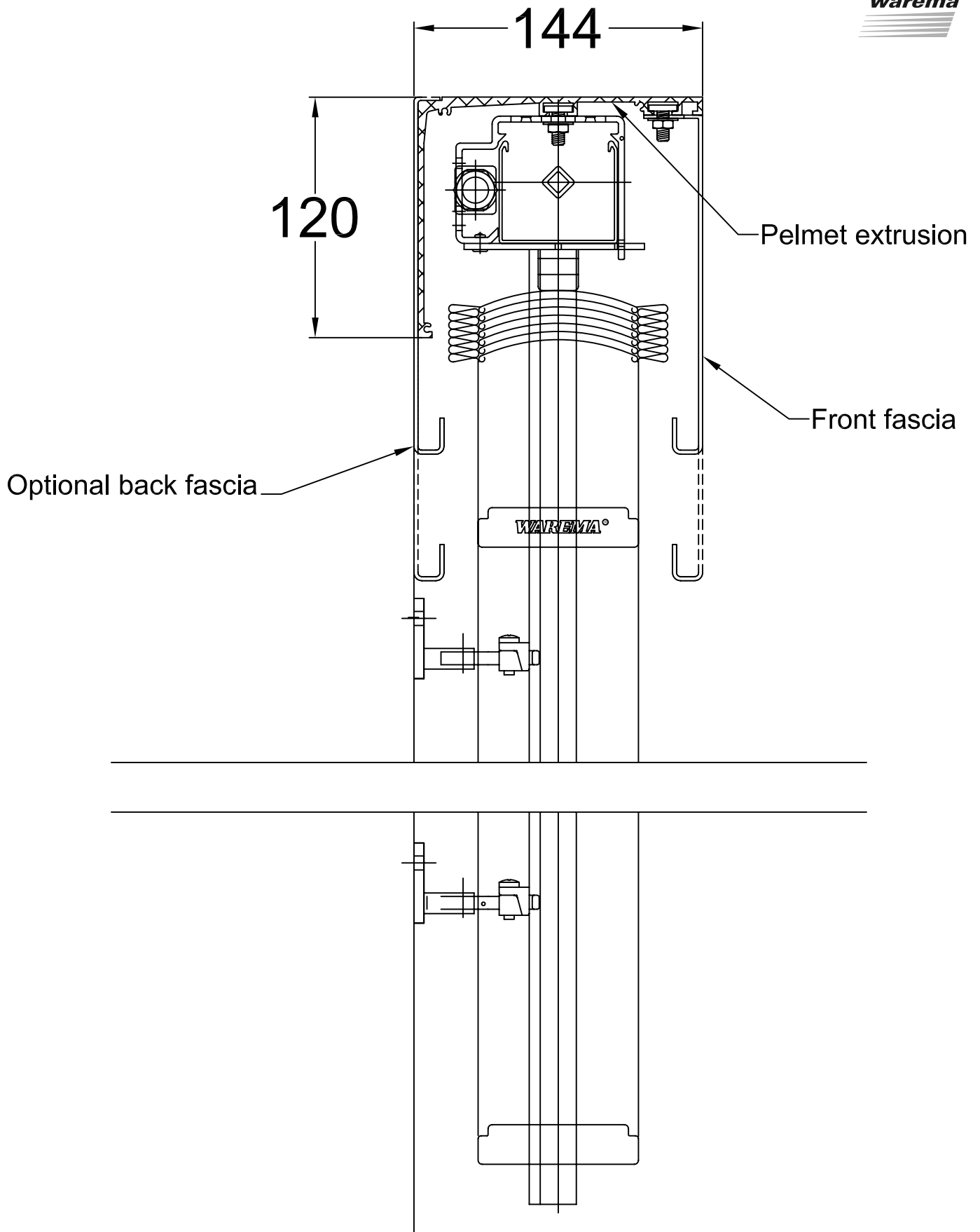
Cover panel BL 31

- U-shaped cover panel, folded, to accommodate baseboards
- Optional 8 mm polystyrene baseboard available



Cover panel, special version, with perforations, grooves or special folds

- Available on request



Detail Type ABL Pelnets



External Venetian Blinds

Data Tables for Flat edge slats

Stack Height Table for flat edge slats when fully retracted																	
Operation	Slat width [mm]	Guidance	Type	External Venetian Blind Height / Drop (including Stack) [mm]													
				1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200	3,400	3,600	3,800	4,000
Motor	60	Rail	E 60 AF A6	161	170	178	186	195	203	211	219	228	236	244	253	261	269
Motor	80	Rail	E 80 AF A6	152	158	165	172	179	186	193	199	206	213	220	227	234	240
Motor	100	Rail	E 100 AF A6	141	146	152	157	162	167	173	178	183	188	193	199	204	209
Motor	60	Cable	E 60 AF A2	155	160	170	175	185	190	195	205	210	220	225	230	240	245
Motor	80	Cable	E 80 AF A2	145	150	155	160	165	170	175	182	188	195	200	205	210	215
Motor	100	Cable	E 100 AF A2	140	145	150	155	160	165	170	175	180	185	190	195	200	205
Crank	60	Rail	C 60 AF A6	141	149	158	166	174	183	191	199	208	216	224	233	241	249
Crank	80	Rail	C 80 AF A6	131	138	145	152	159	166	172	179	186	193	200	207	213	220
Crank	100	Rail	C 100 AF A6	121	126	131	137	142	147	152	158	163	168	173	179	184	189
Crank	60	Cable	C 60 AF A2	135	140	150	155	165	170	175	185	190	200	205	210	220	225
Crank	80	Cable	C 80 AF A2	125	130	135	140	145	150	155	162	168	175	180	185	190	195
Crank	100	Cable	C 100 AF A2	120	125	130	135	140	145	150	155	160	165	170	175	180	185

A small decrease in Stack Height can be achieved if eyelets are omitted.

Stack heights are approximate values; for technical reasons these may deviate above or below the actual dimensions

External venetian blinds with work setting: Stack is 7mm higher if the bracket (article no.551012) is required for installation to the ceiling or lintel.

Additional wind protection device with AF A6¹⁾

Slat length	Cable guide
over 2.4m	1
over 4.0m	2

¹⁾ Also valid for customised designs with one side cable guide and one side guide rail (type 80 A6 and 80 AF A6)



External Venetian Blinds

Data Tables for Flat edge slats

Maximum/ Minimum Dimension Table											
Operation	Slat width [mm]	Guidance	Type	Single units				Units linked on a common drive		Number of blinds	Average weight [kg/m ²] ¹⁾
				Width [mm]		Height [mm]	Surface [m ²]	Width [mm]	Surface [m ²]		
				min. ²⁾	max.						
Motor	60	Rail	E 60 AF A6	600	5000	4000	20	12000	32-35 ³⁾	5	2.5
Motor	80	Rail	E 80 AF A6	600	5000	4000	20	12000	32-35 ³⁾	5	2.7
Motor	100	Rail	E 100 AF A6	600	5000	4000	20	12000	32-35 ³⁾	5	2.7
Crank	60	Rail	C 60 AF A6	450	5000 ³⁾	4000	12	12000	13	5	2.3
Crank	80	Rail	C 80 AF A6	450	5000 ³⁾	4000	13	12000	13	5	2.4
Crank	100	Rail	C 100 AF A6	450	5000 ³⁾	4000	13	12000	13	5	2.5
Motor	60	Cable	E 60 AF	600	5000	4000	20	12000	32-35 ³⁾	5	2.5
Motor	80	Cable	E 80 AF	600	5000	4000	20	12000	32-35 ³⁾	5	2.7
Motor	100	Cable	E 100 AF	600	5000	4000	20	12000	32-35 ³⁾	5	2.7
Crank	60	Cable	C 60 AF	450	5000	4000	13	12000	13	5	2.3
Crank	80	Cable	C 80 AF	450	5000	4000	13	12000	13	5	2.4
Crank	100	Cable	C 100 AF	450	5000	4000	13	12000	13	5	2.5

- Special versions outside of these sizes may be possible subject to project requirement.

¹⁾ Cable strength of 450 N per tension cable.

²⁾ Narrower slats may not run straight

³⁾ Additional guide cables are required for widths in excess of 240 cm.