

envioblinds®

LOW CARBON TECHNOLOGY

technical brochure



envioblinds external blinds & shutters

the secret to low carbon comfort

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Manual and motorised units for ease of use. Installations to suit a variety of window and door sizes. Side guides to suit all options.

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We are here to advise you from A - Z. Our team includes experts in building technology, sustainability and low energy design. Please contact us with your request or complete and return our enquiry form.



BENEFITS

ENERGY EFFICIENCY – Part L compliance

Enviroblinds external blinds are an effective passive measure to reduce the need for air conditioning and heating in a building. In winter, the foam filled slat and air buffer between the blind and the window will keep out the cold and lock in the heat. In summer the opposite applies, keeping out the solar heat so that you can enjoy a cool and comfortable environment.

EXTERNAL SHADING DEVICE

External shading is more effective than internal shading in preventing overheating. Enviroblinds external blinds prevent the solar radiation from reaching the window glazing and transferring the heat into the room.

ADJUSTABLE SHADING DEVICE

Enviroblinds external blinds are adjustable to allow you to use according to the weather and time of day. In winter raise the blinds to allow the solar heat to warm the room. In summer lower the blind to stop the solar heat from overheating the room. Less heating bills in winter and little or no cooling in summer! The height of the blind is fully adjustable and the slats that form the blind curtain are designed with optional perforations that allow natural light and ventilation into the room.

THERMAL INSULATION – improve window U-value

Enviroblinds external blinds provide a high performance shading solution with the added benefit of reducing heat loss in cold weather. When the insulated blind is closed at night, a trapped layer of air is created providing additional insulation. Existing window performance is typically improved from U-value of 2.6 to 1.7 W/m²K (34%), new window U-value is improved from 1.8 to 1.3 W/m²K (27%).

SOUND INSULATION

Enviroblinds external blinds reduce noise levels coming from the outside to the inside of your building. Essential for busy streets and city living.

VISUAL COMFORT

Our blinds reduce glare from direct sunlight and can black out the room in a fully closed position. Great for good quality sleep or for viewing TV and computer screens without glare.

SECURITY AND PRIVACY

By providing protection to the window and concealing the view of the room, Enviroblinds external roller blinds are a valuable deterrent to burglary and vandalism. Enviroblinds external shutters made from extruded aluminium with a unique inter locking system are specifically designed for high security applications.

LIFE CYCLE PERFORMANCE

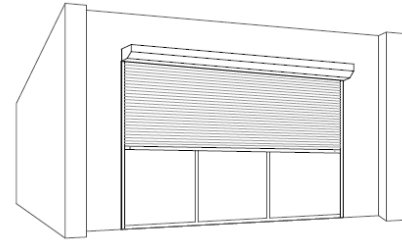
Enviroblinds external blind can compensate for its embodied greenhouse gas emissions within 6 months of operation. The blind is mainly formed of aluminium that is 100% recyclable at the end of the blind life cycle.



BUILT ON EXTERNAL BLINDS & SHUTTERS

Enviroblinds built on external blinds and shutters are ideal for retrofit installations. The blind case is located on the outside of the building allowing improvement of existing windows or doors with minimum disturbance.

The built on external blinds improve the thermal performance of existing windows and doors by up to 44% depending on the existing specification. Typical existing window U-value improvement is from 2.6 to 1.7 W/m²K.

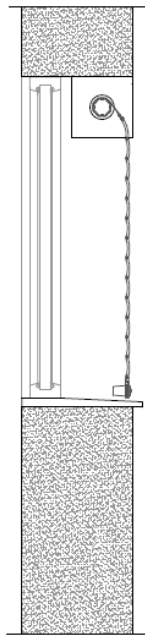


Enviroblinds built on blinds are very adaptable and versatile. They can be mounted on almost any existing substrate as external face fix or reveal fix. The blinds coil with the concave side facing the casing axle. The fixing position of the blind casing determines the visible external face of the slats; convex or concave.



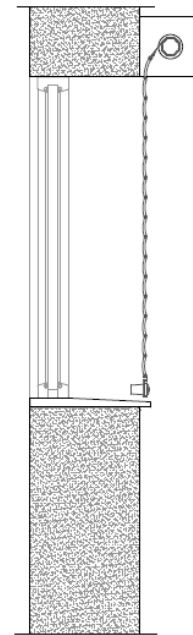
REVEAL FIX CONCAVE

Built on blind with reveal fix case head detail, reveal fix side guides, concave slat face towards outside.



REVEAL FIX CONVEX

Built on blind with reveal fix case head detail, reveal fix side guides, convex slat face towards outside.



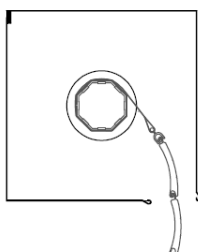
WALL FIX CONCAVE

Built on blind with wall fix case head detail, face fix side guides, concave slat face towards outside.

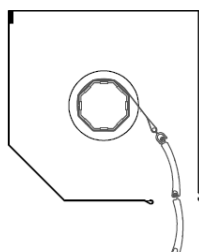


BUILT ON EXTERNAL BLINDS & SHUTTERS

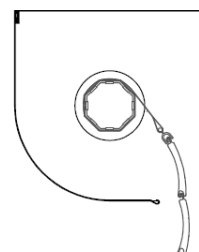
Enviroblinds casing boxes which house the blind curtain, are available in three different design: 90° angle, 45° angle and curved. Boxes are made of roll formed aluminium and can be colour matched with the blind curtain and side guides to stylise and enhance the window.



90° CASING



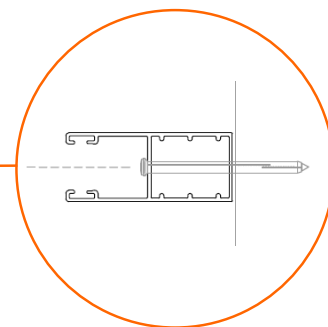
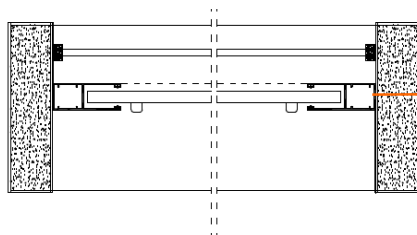
45° CASING



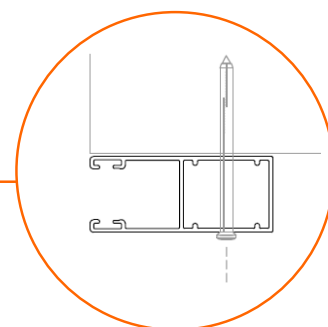
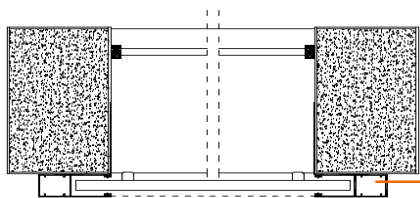
CURVED CASING

The side guides that support the slats are available as reveal fix or face fix and are made of extruded aluminium.

SIDE GUIDES
REVEAL FIX



SIDE GUIDES
FACE FIX

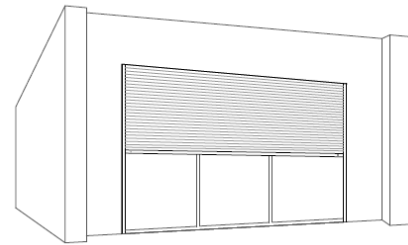


BUILT IN EXTERNAL BLINDS & SHUTTERS

Enviroblinds built in external blinds and shutters are designed for new build or replacement of the whole window system. The blind casing is located above the window and can be concealed into the wall or even exposed in matching colours to the blind curtain and window frame to stylise and enhance the window.

The built on external blinds improve the thermal performance of new windows and doors by up to 35% depending on the proposed specification. Typical window U-value improvement is from 1.9 to 1.3 W/m²K.

The built in blinds coil with the convex slat face towards outside.

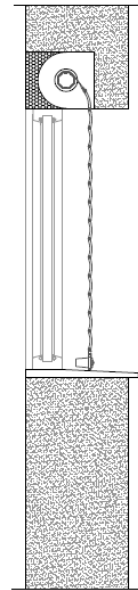
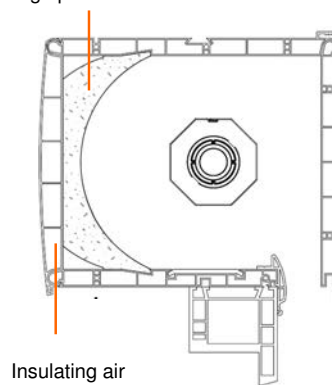


ROLLER CASING

Enviroblinds built in casing includes high performance polyurethane insulation and insulating air compartments, achieving a U-value of 1.8 W/m²K and acoustic insulation of 30dBA. The casing provides a thermal bridge break and water seals the internal components.

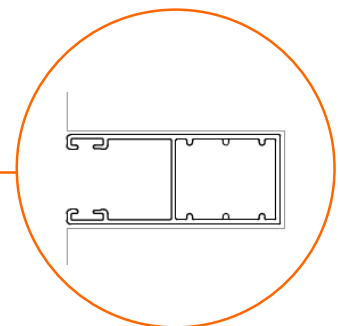
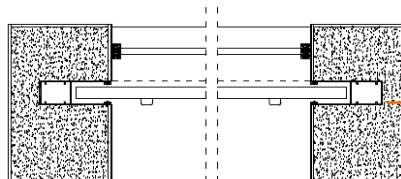
The removable back panel allows access to blind casing form inside the room.

High performance insulation



SIDE GUIDES

Enviroblinds side guides are concealed within the wall or combined with the window frame.



SLATS

Enviroblinds external blinds are made from insulated foam filled slats and are designed to conserve energy, reduce utility bills and improve your privacy and environmental comfort. Enviroblinds external shutters are made from extruded aluminium for maximum strength and do not include the insulation, these slats are primarily for security applications.

INSULATING BLIND SLATS

Enviroblinds external roller blinds are made from aluminium double skin slats with polyurethane insulation. We also offer a high density polyurethane slat which increases the overall strength of the blind and protection to the window. Locking devices for the bottom slat are available to deter intruders from lifting the blinds.



The U-value is a measurement of heat transfer through a building element, the lower the value, the better the thermal performance. Insulated external blinds reduce the heat transfer through the window system and improve the system U-value.

- Single glazing improvement 20-44%
- Double glazing improvement 16-35%
- Triple glazing improvement 7-17%

Typical U-value improvement

Window		Window + blind
U 2.6 W/m ² K	⇒	U 1.8 W/m ² K
U 1.9 W/m ² K	⇒	U 1.3 W/m ² K

SECURITY SHUTTER SLATS

Enviroblinds external roller shutters are made from extruded aluminium double skin slat with a patented inter locking system for added security. Choose either a solid slat curtain or a selection of different size cut outs in the slat curtain for light and viewing. Great for retail and other commercial applications.

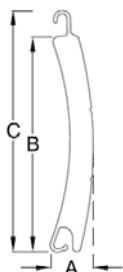


Our blinds and shutters feature a bottom slat made from extruded aluminium for extra strength and a weatherproof seal. Special side caps are provided to prevent the slats from sliding together.



SLATS

SLAT DIMENSIONS



	EB30	EB39	EB39-x	EB41	EB41-d	EB45	EB45-s	EB55	EB55-x	EB77	EB90-x
Slat thickness (A) (mm)	8.2	8.3	10	8.7	8.7	9	8.9	14	13.5	20	18
Covering height (B) (mm)	32.6	39	38	41	41	45	45	53	55	77	90
Total height (C) (mm)	39.5	44	45	48.4	48.4	50	51	61	63	84	101.2
Maximum width (mm)	3000	2500	4000	4000	4000	2900	2800	3200	4500	5000	6000
Maximum wind load width (mm)*	2600	2375	4000	3400	3400	2400	2470	3200	4500	5000	6000
Maximum height (mm)	3000	2500	3000	3000	3000	2600	2375	2800	3500	3500	5000
Maximum area (m ²)	6	6.25	9	8	8	7.5	8	8.9	15.75	17.5	30
R _{SH} (m ² .K/W)**	0.003	0.004	-	0.003	0.003	0.002	0.004	0.003	-	0.003	-
ΔR (m ² .K/W)***	0.14	0.11	-	0.14	0.14	0.11	0.17	0.14	-	0.14	-

- * Recommended maximum width for sites with high wind load
 ** Thermal resistance of the insulated slat curtain
 *** Additional thermal resistance of the air gap and closed blind



SLATS

ROLLED BLIND / SHUTTER CURTAIN DIAMETER

	EB30		EB39		EB39-x	EB41		EB41-d		EB45	EB45-s		EB55	EB55-x			EB77			EB90-x			
Curtain height	Axle diameter																						
	Ø40	Ø60	Ø40	Ø60	Ø60	Ø40	Ø60	Ø40	Ø60	Ø40	Ø60	Ø40	Ø60	Ø60	Ø70	Ø80	Ø100	Ø133	Ø100	Ø133	Ø220	Ø133	Ø170
800mm	-	-	105	110	120	-	-	-	-	100	120	125	130	-	-	-	-	-	200	225	280	-	-
1000mm	120	118	112	120	125	138	134	138	134	120	130	135	150	170	175	175	185	195	250	230	285	215	255
1200mm	120	132	123	125	130	140	146	140	146	130	140	145	160	175	180	-	-	-	230	245	295	-	-
1400mm	134	134	130	135	140	154	150	154	150	135	145	155	170	185	190	190	200	205	235	250	300	240	265
1600mm	144	144	138	143	145	156	160	156	160	145	155	170	175	195	200	-	-	-	245	255	310	-	-
1800mm	146	152	145	150	155	170	162	170	162	150	160	180	185	205	210	205	215	225	260	275	315	255	285
2000mm	158	156	150	155	165	170	172	170	172	160	165	185	195	215	220	-	-	-	265	280	325	-	-
2200mm	158	162	150	160	170	176	176	176	176	165	170	195	200	220	250	225	230	235	280	290	330	270	300
2400mm	170	170	160	165	180	186	178	186	178	170	175	200	210	230	235	-	-	-	285	295	335	-	-
2600mm	172	170	165	170	185	186	192	186	192	-	-	-	-	235	240	240	245	250	295	305	345	285	315
2800mm	172	184	-	-	-	200	192	200	192	-	-	-	-	240	250	-	-	-	300	310	350	-	-
3000mm	186	184	-	-	-	200	200	200	200	-	-	-	-	250	260	250	260	270	310	320	360	305	330
3400mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	270	280	285	-	-	-	315	345
3800mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	280	290	295	-	-	-	330	360
4200mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	295	305	310	-	-	-	345	377
4600mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	315	320	325	-	-	-	350	380
5000mm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	330	340	345	-	-	-	375	395



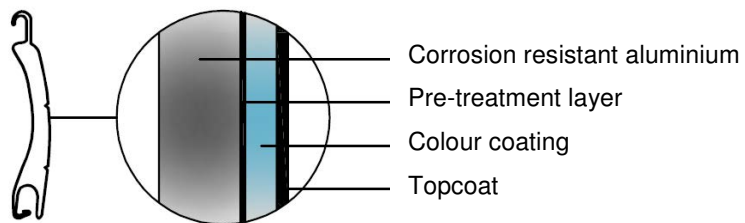
COLOURS

Envioblinds slats and other visible aluminium components are coated with durable triple lacquered paint coating. We offer 12 standard RAL colours and a selection of imitation wood finishes. There is even a choice of a textured coating which is a popular scratch resistant and self-cleaning finish as it sheds water and dirt. In most cases the roller shutters can be perfectly matched to your door and window frames to enhance the aesthetics of your building.

We can offer the full range of RAL colours as an option.



Triple lacquered paint coating to
ECCA Standard T1



RAL1015
Light ivory



RAL3005
Wine red



RAL5011
Steel blue



RAL6009
Fir green



RAL7016
Anthracite grey



RAL7021
Black grey



RAL8019
Grey brown



RAL9001
Cream



RAL9005
Jet black



RAL9006
White aluminium



RAL9007
Grey aluminium



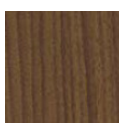
RAL9016
Traffic white



Bronze



Light wood



Medium wood



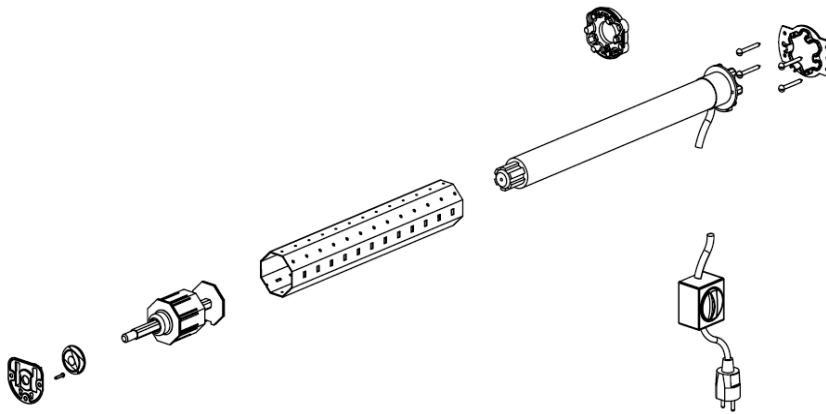
Dark wood

Printed colours may not be truly representative.



SYSTEMS – operation

All Enviroblinds external blinds and shutters can be operated with a motorised or manual system, or both for emergency manual operation.



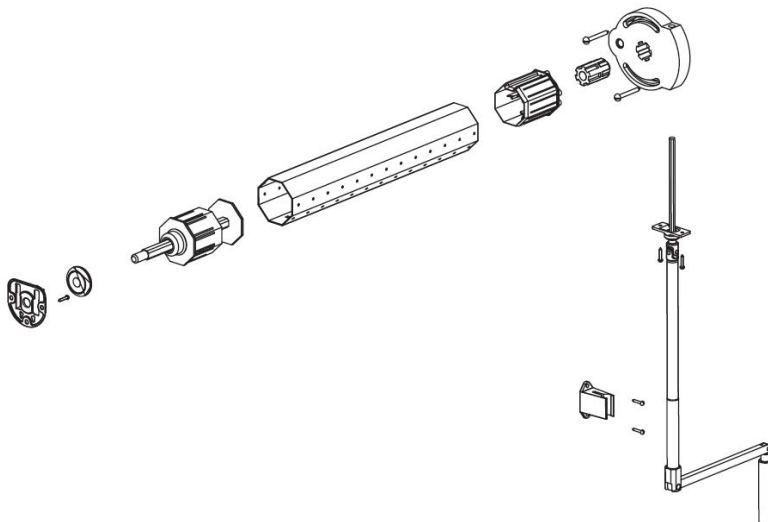
MOTORISED OPERATION

We recommend the motorised option for ease of use. You can even connect it to your home or office automation systems. A motor with operation via remote control can be programmed to open and close the blinds individually or collectively at the touch of a button. Alternatively the motor can be wired to a switch on the wall that can be used with a time switch.

A blind up to 5m²/50kg typically draws 1.1A/240W.

A blind up to 10m²/100kg typically draws 1.5A/320W.

Programming blinds and shutters to open and close at different times of the day, is ideal for making it appear that your home or office is occupied, giving you extra peace of mind.



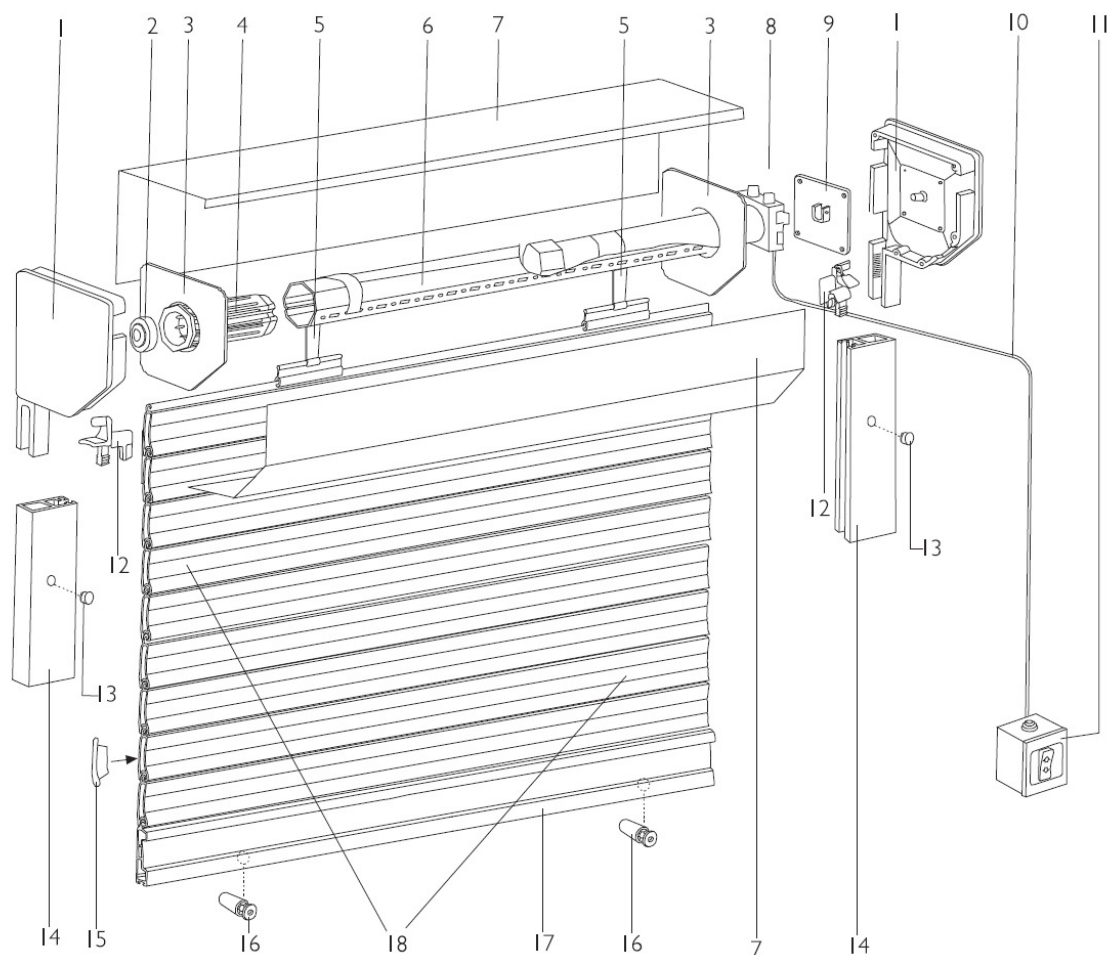
MANUAL OPERATION

Raise and lower your blind with a foldable crank which is easy to use and requires little physical effort. After use, the crank can be straightened, replaced and secured in the bracket supplied for the adjacent wall.



SYSTEMS – components

MANUAL BUILT ON BLIND



- 1) Roller casing end section
- 2) Bearing
- 3) Inside casing cap
- 4) Telescopic shaft for axle
- 5) Fixing strap
- 6) Octagonal axle
- 7) Roller casing lid 45° angle
- 8) Motor
- 9) Motor bracket

- 10) Cable
- 11) Switch
- 12) PVC lug connector
- 13) Screw caps
- 14) Side guide
- 15) Slat side cap
- 16) Blind stops
- 17) End slat
- 18) Slat curtain

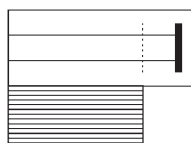


SYSTEMS – installations & side guides

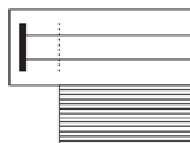
INSTALLATIONS

Enviroblinds offer installation configurations to suit most window and door arrangements. The systems can be operated on left or right side and the units are split to cover multiple or wider openings.

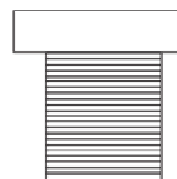
Right side operation



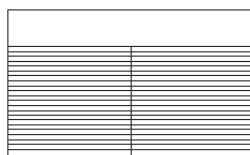
Left side operation



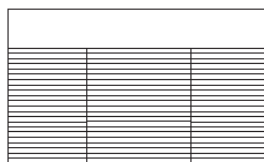
Single blind



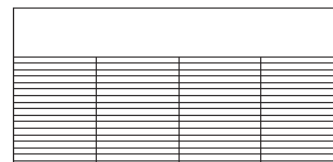
Double blind



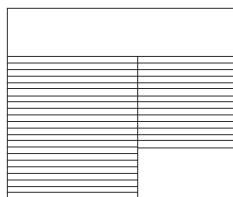
Triple blind



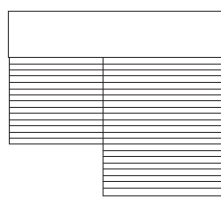
Quadruple blind



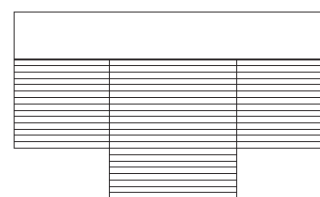
Split height right



Split height left

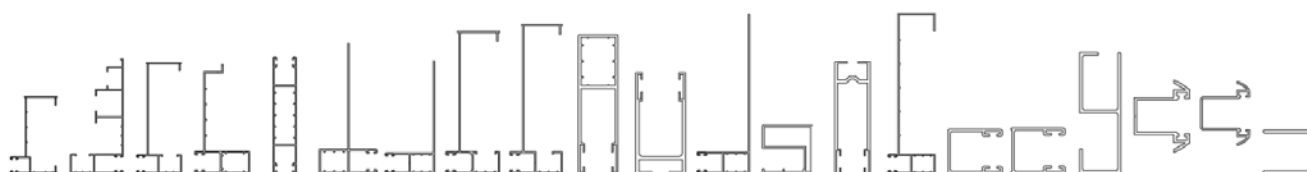


Split height both sides



SIDE GUIDES

Side guides are an important part of all blinds and there are guide rails to suit all installation options. Guide rails are made of thick extruded aluminium and can be colour matched to the blind curtain. Depending on the application guide rails are installed as reveal fix, face fix or concealed fix.



QUALITY

TECHNICAL SUPPORT

We pride ourselves on the quality of our service and products. Our team of specialist technical advisors are always at hand to guide you from your initial enquiry through to delivery, installation and after sales care. We can even calculate the energy saving benefits for your project using bespoke IES VE dynamic thermal simulations.

GUARANTEE

Using state of the art technology, all Enviroblinds external blinds and shutters are proudly manufactured in the European Union and are guaranteed for 5 years against defective material or workmanship subject to correct installation and operation.*

EASY MAINTENANCE

Enviroblinds external blinds and shutters are easy to clean with a damp cloth. Opt for textured coating for a self-cleaning and scratch resistant blind. Regular cleaning is required in coastal areas.

CONTACT

Please feel free to contact us, we are happy to help!

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LOW CARBON TECHNOLOGY

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a  Business



* This guarantee is not valid for installations within 1 mile of the coastline.

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