

MECHOSHADE®

Uniclass	L422		
CI/SfB	(76.7)		



MechoShade® is a heavy duty, commercial quality roller blind system designed to provide an effective solution to the contradictory requirements of solar protection while maintaining a view to the outside. The guaranteed hardware system, which can be manually or electrically operated, is used in conjunction with visually transparent ThermoVeil fabrics, available in a number of different colours and weaves, and varying degrees of density. This wide choice of both colour and openness enables a fabric to be selected to suit specific environmental factors and be compatible with

the window glass, to give the required shading co-efficient and solar control. ThermoVeil fabrics are also extremely resistant to bacteria and fungal organisms and are particularly suitable for use in healthcare environments.

MechoShade® is the manually operated chain driven system that can be installed as single blinds or, dependent on size, with multiple blinds linked to one control. In this way large areas of glazing can be covered, with a single point of control. The blinds can be recess fixed into pockets, for which provision can be made at the building design stage.

Alternatively there is the option of a continuous fascia for use when the blinds are face mounted.

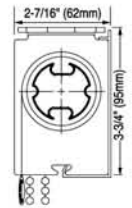
The ElectroShade® system is the electrically controlled version, operated by means of a tubular motor contained within the roller tube. Blinds may be ganged so that a single motor can drive a number of blinds. Motors can also be linked to automatic electronic control systems such as the IQ/MLC™ Window Management – a software based blind management system.

Applications:

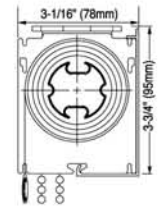
- Offices, meeting rooms, lobbies and other glazed circulation areas.
- PC environments and areas where VDUs are used.
- Hospitals, laboratories and other healthcare establishments.
- High, wide and inaccessible areas of glazing.
- Installations requiring sunscreening & blackout fabrics to be installed in a common ceiling pocket.

Features

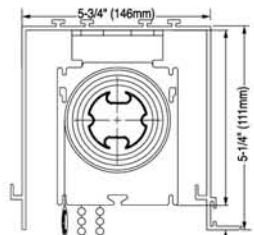
- ① Extruded aluminium tube with 0.065 in. (1.65 mm) wall containing two SnapLoc tracks to take SnapLoc spline/fabric assembly. This ensures correct alignment and easy removal of the fabric.
- ② System includes universal one-size drive-end and idle-end brackets, together with 1.55 in. (39.4 mm) and 1.875 in. (47.6 mm) diameter tubes suitable for both standard and extra wide blinds.
- ③ De-mountable tube mechanically keys to the drive bracket assembly to prevent slippage.
- ④ SnapLoc spline is fused to the fabric and snaps into the extruded slot in the roller tube. Fabrics can be fully replaced on site without the necessity to remove the drive/idle end brackets or the tube.
- ⑤ ThermoVeil/EuroVeil FR screen fabrics made from PVC with polyester core in a number of different weaves and a variety of colours, with densities ranging from 0 - 15% openness.
- ⑥ Narrow edge clearances with fabric close to the window jamb to minimise the light gap. Edge clearances are as follows: Mecho III: Drive end 0.688 in. (17.5 mm), Idle end 0.5 in. (12.7mm), Mecho V: Drive end 0.813 in. (20.7 mm), Idle end 0.5 in. (12.7mm).
- ⑦ Drive end bracket with braking system designed to withstand a pulling force of up to 18 Kg for a 4.5 Kg blind in the stop position, providing a high safety factor in use. Braking system is maintenance free, with a self lubricating hub design to ensure smooth operation in raising/lowering the blind.
- ⑧ Patented clutch design - an over-running clutch which disengages by 90% during the raising and lowering operation.
- ⑨ Sprocket made from one-piece injection moulded high-density Delrin. The ball chain is fully engaged, with each ball fully supported and cupped in the sprocket.
- ⑩ Stainless steel bead chain with accurate pitch to ensure smooth and precise operation, designed to withstand a 40 Kg test.
- ⑪ An offset chain drive is available suitable for the optional blackout channels. This can fall on the room or window side of the tube as required.
- ⑫ Recessed end cap which fits over the idle-end support plug, thus preventing the tube binding against the idle-end bracket.
- ⑬ Predetermined stop positions are available, either static (infinite-stop positions) or dynamic (preset). System also incorporates 0% to 100% friction to control the rate at which the blind can be pulled down.
- ⑭ Choice of two extruded aluminium bottom bars: enclosed bottom bar for standard blinds sealed into a pocket in the fabric, or for blackout applications an exposed bottom bar with light seal.
- ⑮ Multi-blind option available using a universal angled-drive assembly with up to 12° offset at each window mullion. System can accommodate up to four fabrics/tubes operated by a single drive chain.
- ⑯ Range of extruded aluminium ceiling pockets for recessing into any type of ceiling construction, suitable for single or double blind installations.
- ⑰ SnapLoc fascia made from 0.065 in. (1.65 mm) extruded aluminium with baked enamel finish, or powder coating as an option. Fascia snaps into slots in the fixing bracket and can be continuous across two or more windows for a wall-to-wall valance effect.
- ⑱ Plastic components made from high-impact, high-density Delrin engineered plastic.
- ⑲ Optional SnapLoc side channels with concealed fastenings are available for use with blackout fabrics. These can also be used for installations requiring a combination of sunscreening and blackout fabrics.
- ⑳ Bead chain holder to keep the control chain tidy after use.
- ㉑ Child-safe chain retainers to securely hold the control chain at all times, for use in all residential and public buildings. Two styles are available, one for fitting to a vertical surface, and the other for fitting to a sill or floor.
- ㉒ Heavy duty bumper fitted above the chain stop to act as a shock absorber.



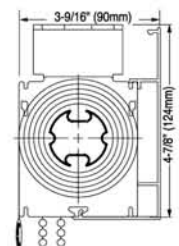
*Mecho® SlimLine Bracket



*Mecho®/5 Wide Bracket

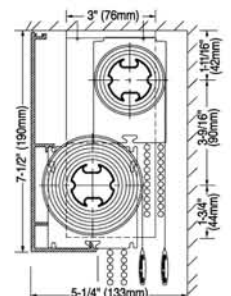


Optional Extruded Aluminum #4123 Pocket
Mecho®/5 Pocket Bracket

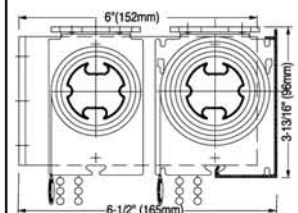


*Mecho®/5 Extended Bracket

Mecho DoubleShade Brackets



*Mecho®/5 DoubleShade
Bracket #15

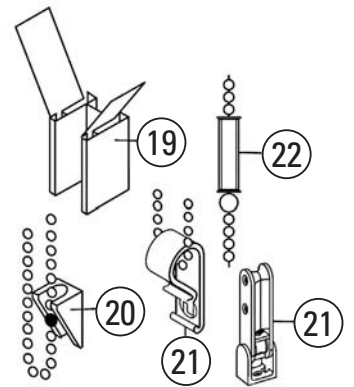
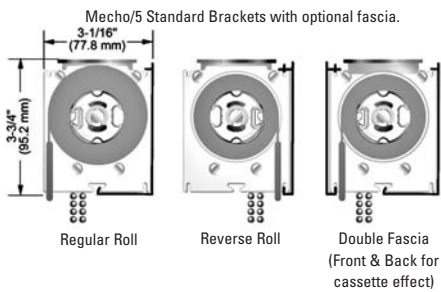
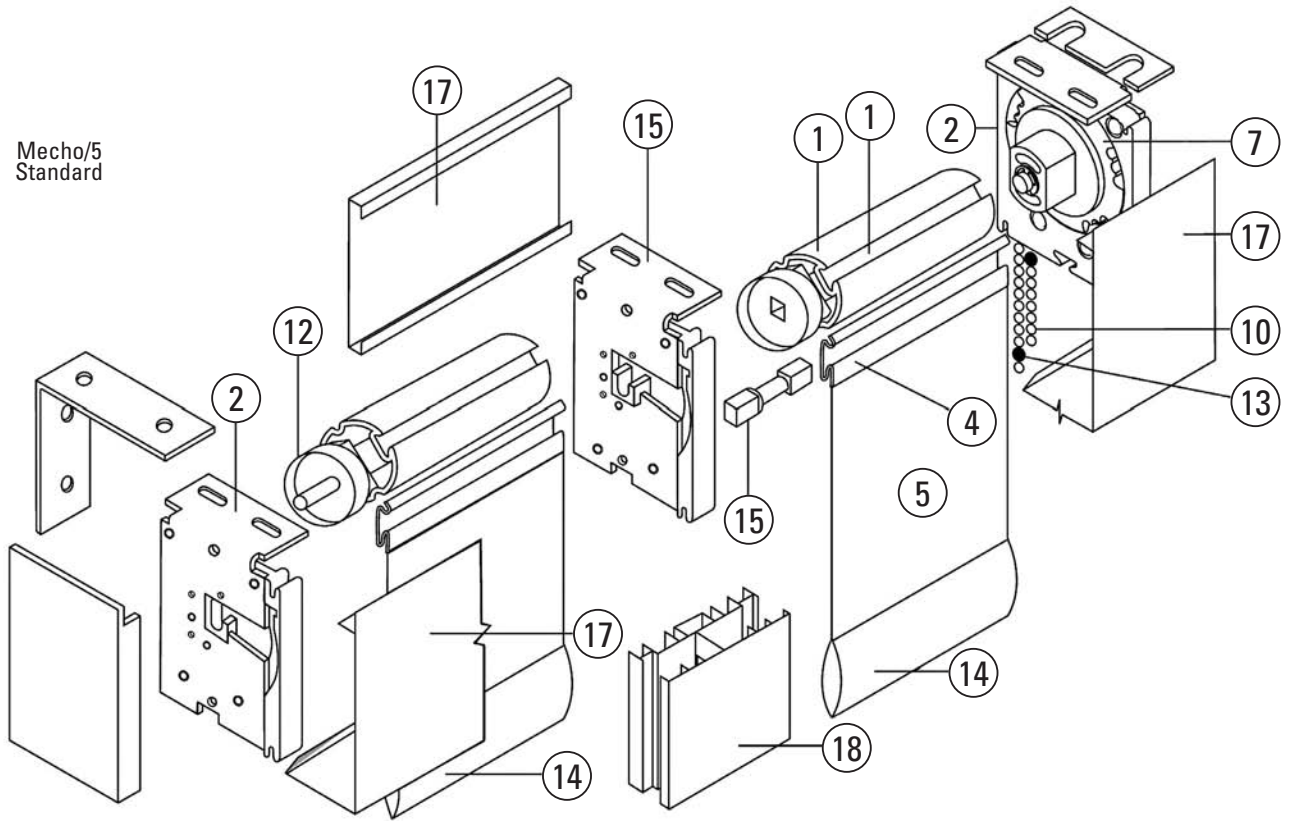


*Mecho®/5 DoubleShade
Bracket #10

*Optional Snaploc® Fascia.

Technical drawings

Mecho/5 Standard



5-1/4" (111mm)

4-7/8" (124mm)

brackets

3-3/4" (95.2 mm)

3-1/16" (77.8 mm)

11/16" (42mm)

3-1/16" (77.8 mm)

1/4" (4mm)

3-13/16" (86mm)

Fixing Brackets

A 0.125 in. (3.2 mm) steel backplate is used to support the blind assembly, size 2.25 in. (57.2 mm) wide x 1.75 in. (44.5 mm), complete with 2.25 in. (57.2 mm) x 1.125 in. (28.6 mm) pre-formed top fixing plate. The top fixing plate is attached to steel angle brackets (or extension brackets) for face fix applications; and levelling shims are available for fine adjustment in both top and face fix installations. The brackets and blind assembly are designed to be completely concealed within a ceiling pocket, or hidden behind the SnapLoc fascia when face fixed.

Dimensions

Method of operation	Manual	Electric
Minimum Width	300 mm*	750 mm**
Maximum Width	3000 mm	6000 mm
Maximum Drop	4570 mm*	10000 mm**
Maximum Area	12 m ²	16 m ²

* To avoid excessive fabric tracking when the blind is raised the width to drop ratio should be no more than 1:3 for manually operated blinds. For longer drop blinds electric operation or side guide wires are recommended.

** Dependent on width/drop ratio and fabric selected - longer drop blinds with electric operation may still need guide wires.

The above sizes are a general guide only to single blind applications. It is possible to supply several blinds coupled together operated from a single chain control or electric motor, or larger blinds to suit specific projects. For these types of application please ask for further dimensional details and weight ratios.

Fabrics

ThermoVeil and EuroVeil screen fabrics are woven vinyl with a polyester core in a range of colours and different weaves. They are all flame retardant and tested to BS 5867 Pt 2 standard. Fabric weight varies with the density of the fabric and yarn diameter: EuroVeil fabrics range between 450 - 490 g/m² and ThermoVeil fabrics are 460 - 600 g/m². Independent laboratory testing has shown ThermoVeil fabrics to be extremely resistant to bacteria and fungal organisms, and they have also been tested to show a very low fire gas toxicity value as required by the State of New York. In addition they have been tested and approved for product emission levels for acceptable indoor air quality in accordance with the Greenguard™ Code.

Warranty/guarantee

There is a Lifetime Limited Warranty on both manual and electric hardware, with the exception of the Slimline Bracket which carries a 10 year warranty and the bead chain which is a maintenance service item. The system carries a twenty five year fit-for-use warranty with the provision that it will not deteriorate, sag or warp, and will remain fit for use for the full warranty period. There is a 5-Year Limited Warranty on motors and electronics.

Disclaimer

With ongoing product development we reserve the right to make alterations to the product specification without prior notice.

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ThermoVeil/EuroVeil/EuroTwill and SnapLoc are trademarks of MechoShade Systems Inc., Long Island City, NY

Openness Factor for Different Types of Weave

0900 Translucent Weave	0-1%
1000 Dense Vertical Weave	2-3%
1300 Dense Basket Weave	5%
1500 Dense Basket Weave	3%
1800 Open Vertical Weave	15%
2100 Open Basket Weave	10-12%
3000 Satin Textures	1-2%
3200 Diamond Pastels	1-2%
3300 Diamond Earthtones	1-2%
5300 EuroVeil	± 5%
6000 EuroTwill	± 3%

Maintenance

ThermoVeil/EuroVeil fabrics can be cleaned by occasionally wiping them down with an anti-static chemical on a dry mop to remove any dust build-up. Spots of dirt or grease can be removed with mild soap and a damp sponge. The fabrics are also washable and suitable for specialist commercial cleaning using ultrasonic equipment. Depending on the environmental conditions they will benefit from this type of cleaning every 2 - 3 years.

All plastic parts are manufactured from Delrin, are self-lubricating and require no maintenance.

Testing

ThermoVeil and EuroVeil fabrics are tested to the British Standard BS 5867 Pt2 for flame retardancy.