



The Mecho® Manual Shade System

Mecho®, first developed in 1970, is the original manual chain-driven heavy duty hard-ware system. Mecho's Mecho®/5 system is the only hardware and shadecloth system with a **Lifetime*** Limited Warranty, with 100% replacement and no depreciation over the life of the warranty.

Mecho brackets are available in Standard, Pocket Extended and Extended sizes. (Size is determined by the roll up diameter of the shade.)

Mecho®/5:

Mecho's new patented over-running clutch drive system provides 67% more lift capacity than the previous model. The Mecho/5 requires no adjustments resulting in faster, easier installation. Available in Standard, Pocket Extended and



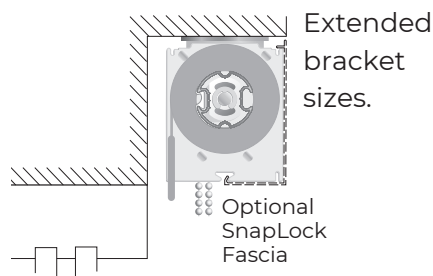
* Mecho/5 Lifetime Limited War-ranty, for the life of the interior project, not to exceed 25 years. *Please contact Mecho for com-plete details.*

DoubleShade® brackets: DoubleShade brackets allow for both sunscreen and blackout shades on a single bracket in a compact space for faster, easier, more economical installation of two shades per window.

Mecho®/5 feature:

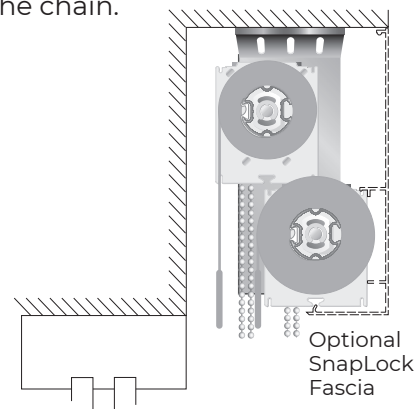
Energy-conserving Shade-Cloths. Mecho offers the most extensive line of sun screens and blackout shade cloths in the industry. ThermoVeil®, EuroVeil® and EuroTwill™ ShadeCloths provide visually transparent shading, with excellent glare control, energy savings and reduction in solar gain. Densities range from 0 to 15% openness factor, translucent to highly transparent.

• **Optional Lift-Assist Mechanism™ (LAM)** provides the ability to lift heavy, oversized or multibanded manual shades. An important consideration for the frail or infirmed.



• **Multiband operation** with one drive chain.

• **SnapLoc® Fascia** (optional)—Conceals the entire shade assembly and may be used as a continuous one-piece architectural element to cover one or more shadebands without exposed hardware or butt joints or notching to accommodate the chain.



• **SnapLoc® Spline** for easy installation, removal and cleaning of the shadebands without tape or glue and without having to remove the tube or brackets.

• **Built-in offset chain** for recessing the chain away from the room or placing it in front of a blackout channel.

• **Full line of optional accessories.** Ceiling pockets, side and sill channels, and other optional accessories.



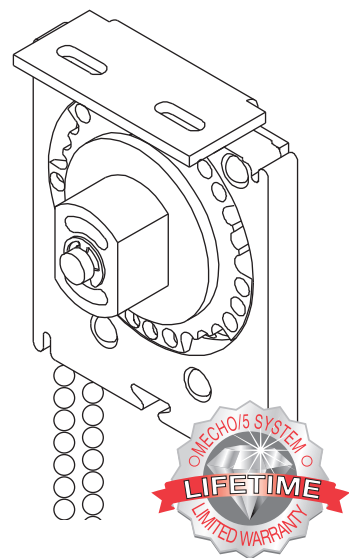
The Mecho® Manual Shade System

Mecho®/5

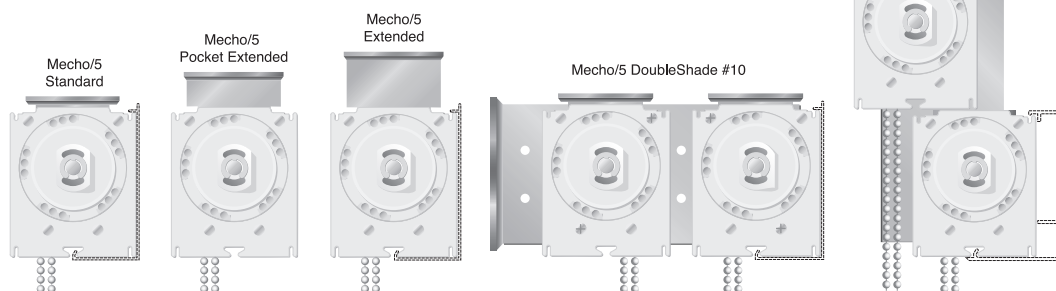
Mecho®/5, Mecho's latest patented design featuring an overrunning clutch, self lubricating components and larger diameter sprocket, providing 67% more lift capacity. As a result, Mecho/5 increases the shade size range that a manual drive system can lift before motorization is required. Plus, the Mecho/5 carries a **Lifetime*** Limited Warranty on the hardware and shadecloth.

Mecho/5 requires no adjustments, resulting in faster, easier installation. Mecho/5 has been field tested and performance proven on hundreds of thousands of shades installed worldwide. Available in Standard, Pocket Extended, Extended and DoubleShade® bracket sizes.

The Mecho/5 can accommodate shades up to 126" (320cm) wide by 180" (457cm) high.



Mecho® brackets are available in a variety of sizes:



Bracket Type	Max. Roll Diameter With Fascia	Max. Roll Diameter Without Fascia	Bracket Dimensions Without Optional Fascia, Roll Up Diameter or Wall Mount Bracket
Mecho®/5 Standard	2-1/4" (57mm)	2-3/4" (70mm)	3" (76mm) W x 3-3/4" (95mm) H
Mecho®/5 Pocket Extended	n/a	4" (102mm)	3" (76mm) W x 4-3/8" (111mm) H
Mecho®/5 Extended	3-7/16" (87mm)	5" (127mm)	3" (76mm) W x 4-13/16" (122mm) H
Mecho®/5 DoubleShades®			
#10 Rear shade Blackout	2-3/4" (70mm)	2-3/4" (70mm)	7-1/2" (191mm) W x 3-3/4" (95mm) H
#10 Front shade SunScreen	2-3/4" (70mm)	2-3/4" (70mm)	
#15 Top Shade Blackout	2-3/4" (70mm)	3-3/8" (86mm)	4-5/16" (110mm) W x 7-9/32" (185mm) H
#15 Bottom shade SunScreen	2-3/4" (70mm)	4-5/16" (110mm)	

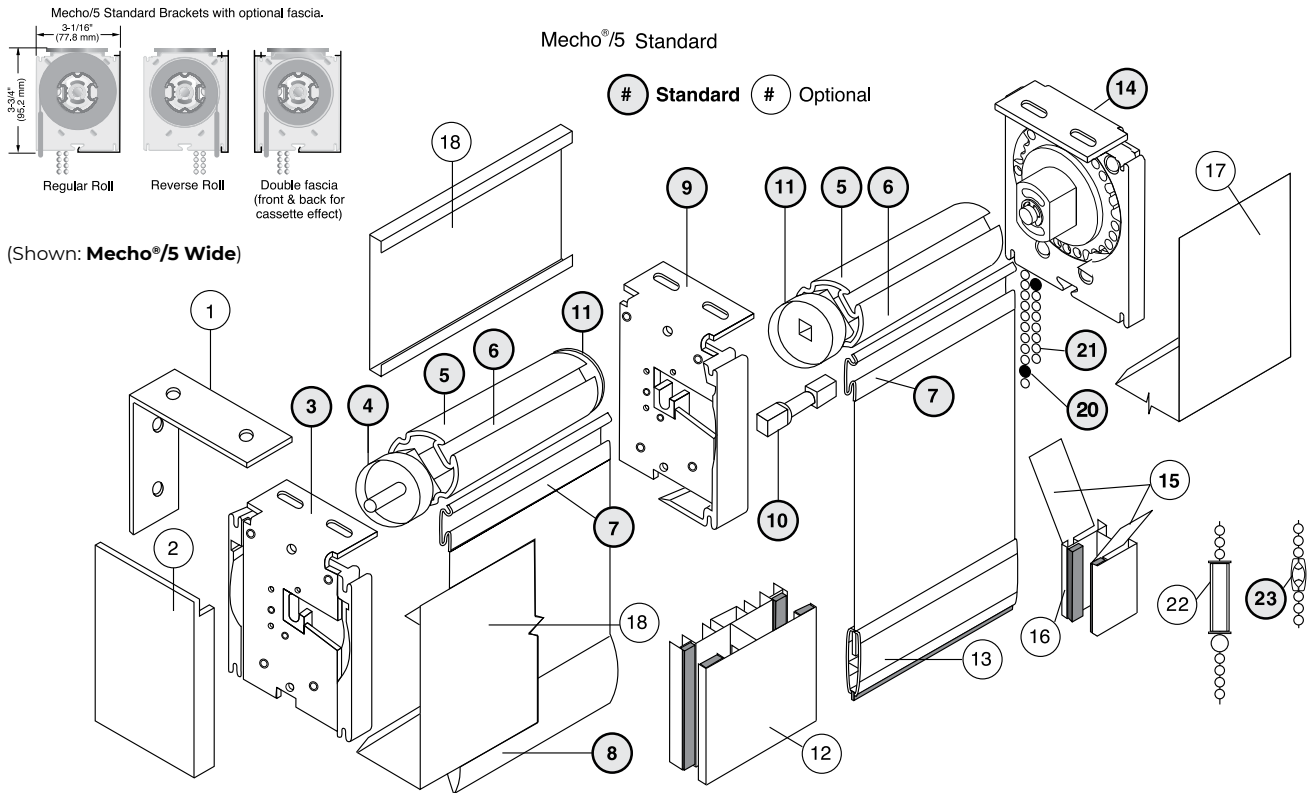
*Mecho/5 Lifetime Limited Warranty: for the life of the interior project, not to exceed 25 years.



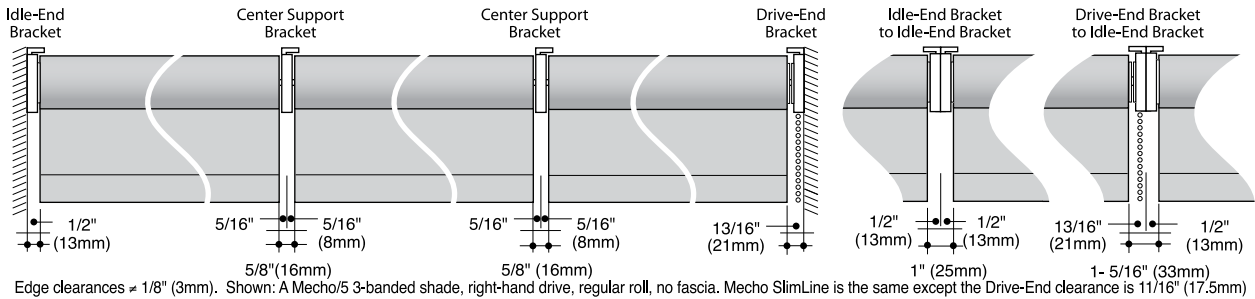


Mecho® Parts, Components and Optional Accessories

Multiband Mecho® exploded view and edge clearances



Edge Clearances



Edge clearances = 1/8" (3mm). Shown: A Mecho/5 3-banded shade, right-hand drive, regular roll, no fascia. Mecho SlimLine is the same except the Drive-End clearance is 11/16" (17.5mm)

Mecho are available in a choice of two drive systems in multiple bracket sizes.

- | | | | |
|------------------------------------|---|---|--|
| 1. Wall-Mount Angle | 9. Center Support Bracket | 15. Room Darkening Shadecloth Guides (pair) | 21. Drive Chain (stainless-steel-bead chain) |
| 2. Fascia End Caps | 10. Tube Connector ("dog bone") | 16. Room Darkening Side Channel (single) (with Polybond Insert) | 22. Heavy-Duty Bumper |
| 3. Idle-End Bracket | 11. Tube Plug (Center Support) | 17. SnapLoc Regular-Roll Fascia | 23. Bead Chain Connector |
| 4. Tube Plug (idle-end) | 12. Room Darkening Center Channel (double) (with Polybond Light Seal) | 18. SnapLoc Reverse-Roll Fascia | |
| 5. SnapLoc® Tube | 13. Exposed Hembar with Light Seal (Shown with Optional Welt) | 19. na | |
| 6. SnapLoc Spline Mounting Channel | 14. Mecho®/5 Drive-End Bracket | 20. Upper and Lower Bead Chain Stops | |
| 7. Snaploc Spline | | | |
| 8. Hembar (standard cloth covered) | | | |

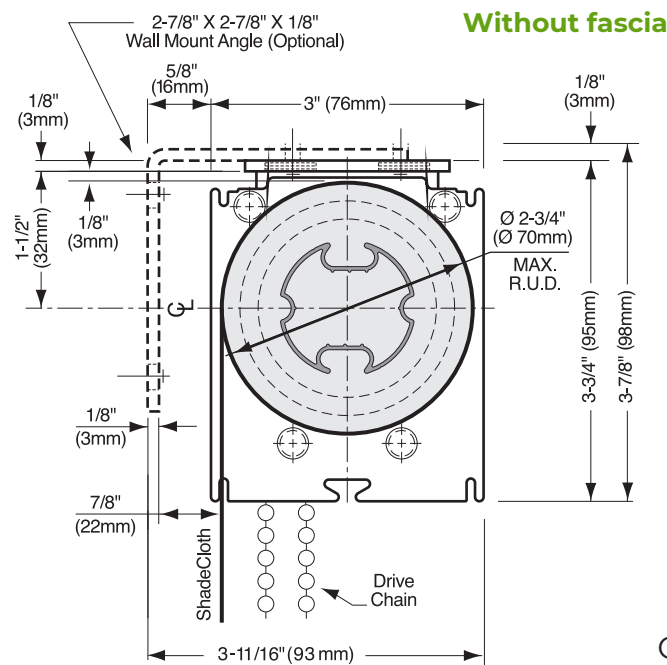
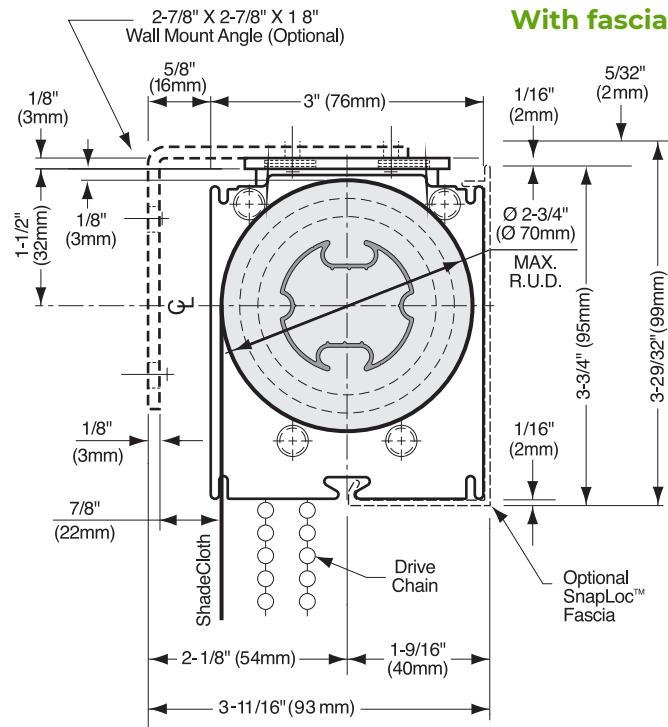
Aluminum Accessory Finishes:
Clear Anodized, White, Grey, Black,
Quaker Bronze (Duranodic color)
and Colonial White (fascia only)

- Optional **Regular-Roll Fascia** available for: Mecho/5 Standard and Extended brackets.
- Optional **Reverse-Roll Fascia** available for: Mecho/5 Standard brackets.
- **No Fascia** available: Mecho/5 Pocket brackets.

Mecho®/5 Standard Bracket Details

Mecho®/5 Standard Bracket

Maximum roll up diameter:
2-3/4" (70mm) with or without optional
fascia.



Optional Blackout Channels Available.



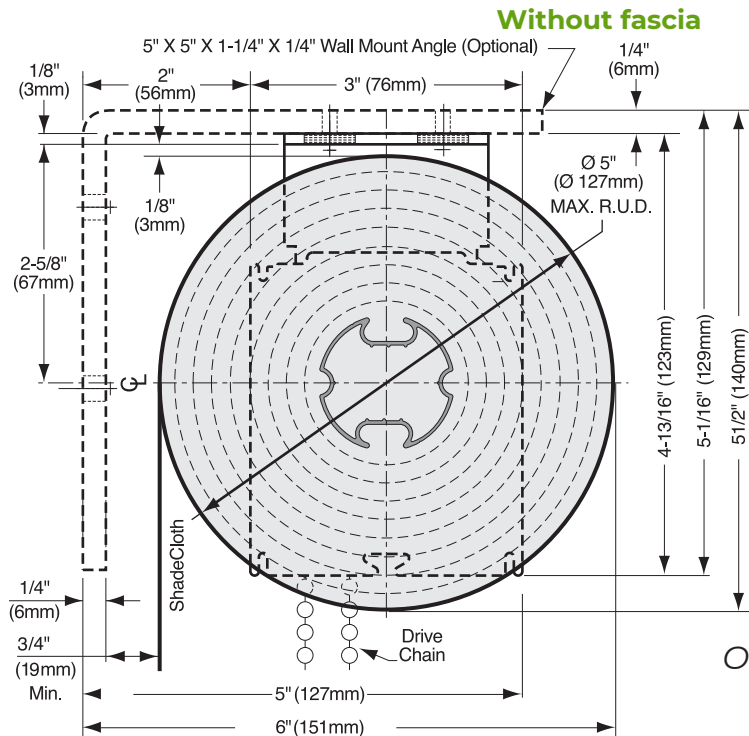
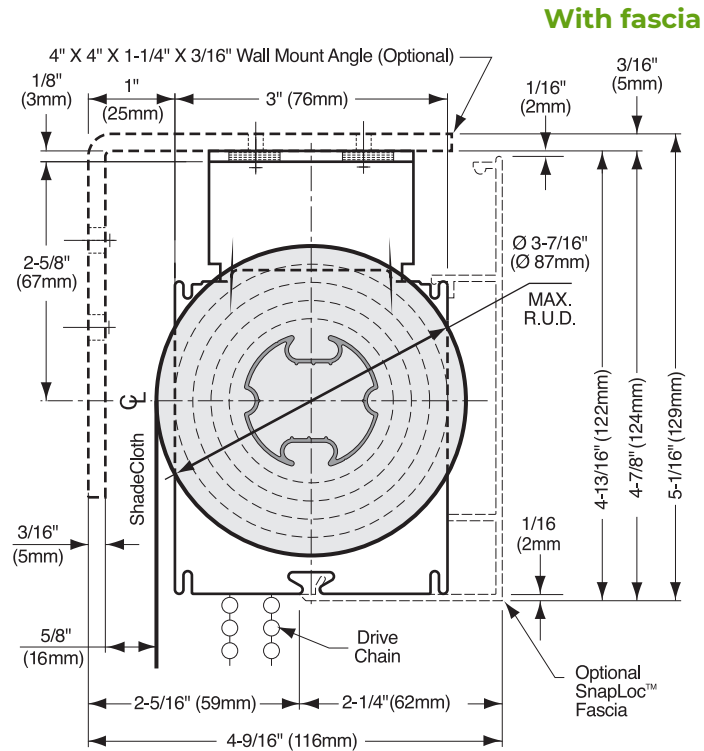
Mecho® /5 Extended Bracket Details

Mecho®/5 Extended Bracket

Maximum roll up diameter:

3-7/16" (87mm) with optional fascia,

5" (127mm) without fascia.

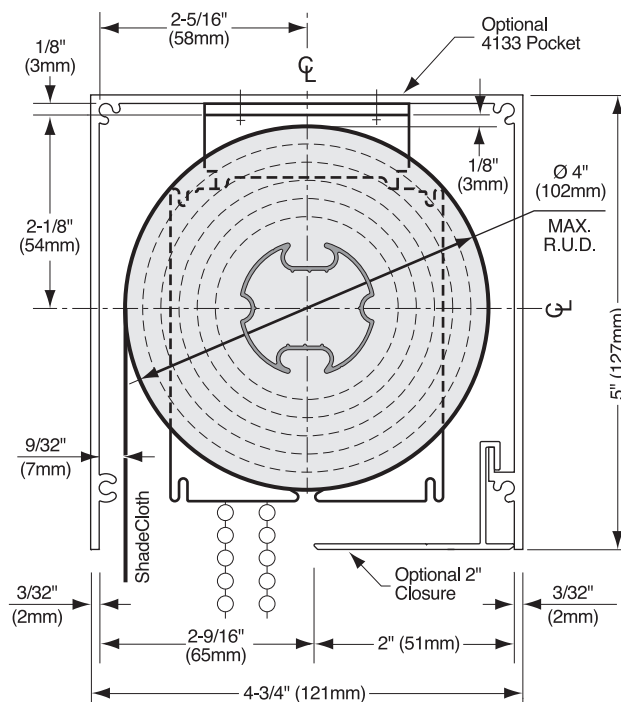




Mecho® /5 Pocket Bracket Details

Mecho®/5 Pocket Bracket

Maximum roll up diameter:
4" (102mm). Fascia not available.

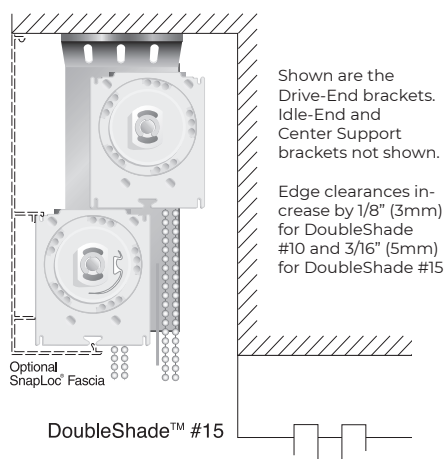
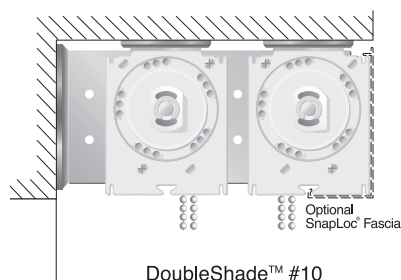


(Shown with optional 4133 Pocket. See Pocket section.)

Optional Blackout
Channels Available.

Mecho® DoubleShade® Brackets – #10

Mecho®/5 DoubleShade® Types



DoubleShades® have all the same features of the standard Mecho®/5 bracket, plus allow both sun screen and Room Darkening on a single bracket.

Compact Size

DoubleShade's compact size allows two shades to fit in a smaller room projection than two individually installed shades on the same window.

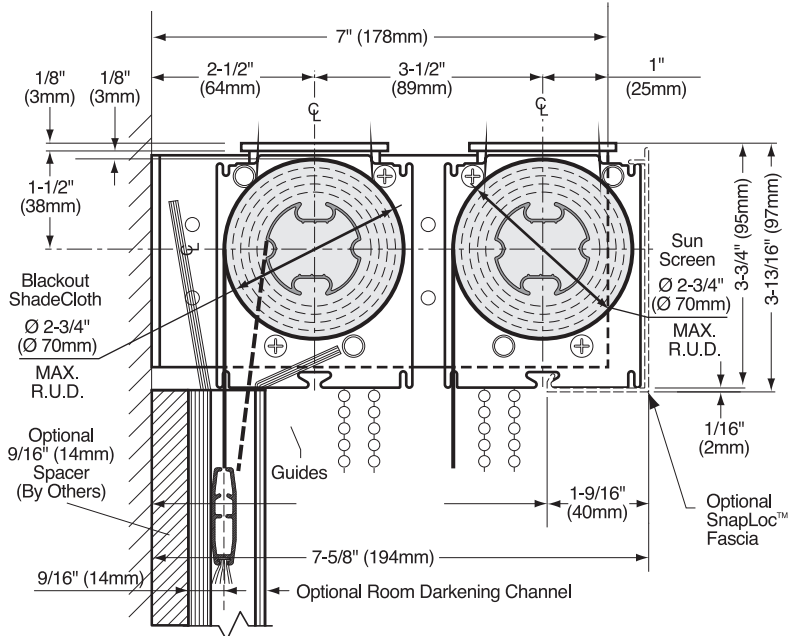
Ease of Installation

DoubleShades provide faster, easier, more economical installation of two shades per window. The mounting brackets require less measuring and are pre-spaced to insure proper alignment of both shades in relation to each other.

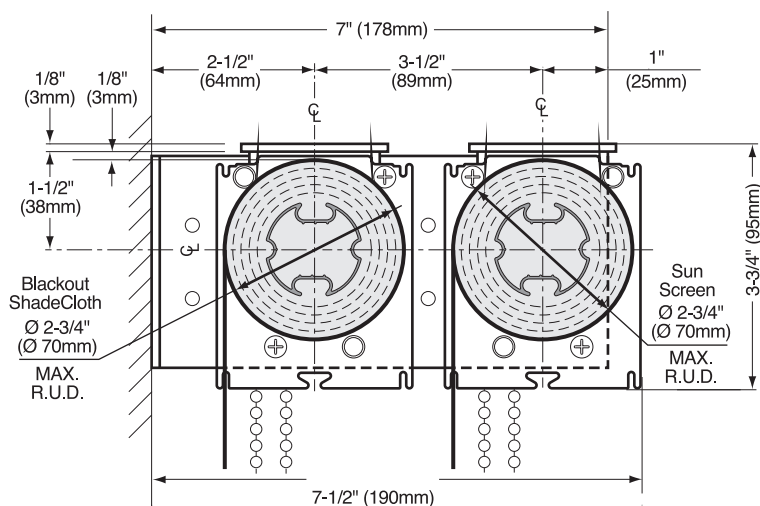
Mecho®/5 DoubleShade® Bracket #10

With and without fascia

With fascia



Without fascia



- **DoubleShade Brackets** require that both the solar and blackout operating brackets on a DoubleShade assembly have the same right-hand drive or left-hand drive orientation.
- **Shade height, span and fabric determine bracket and tube selection.** Please see the Maximum Shade Height Guide for DoubleShades on page 2.14.

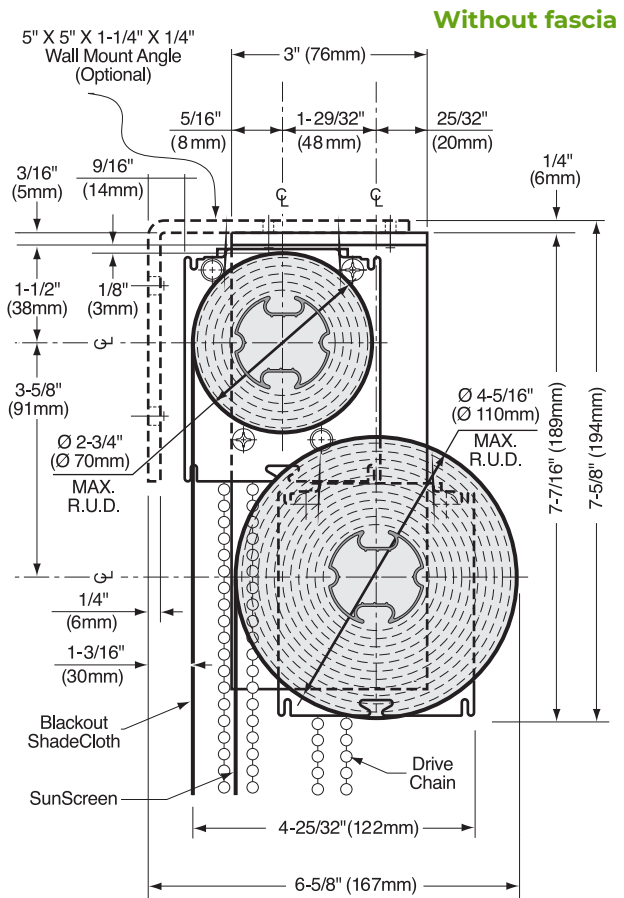
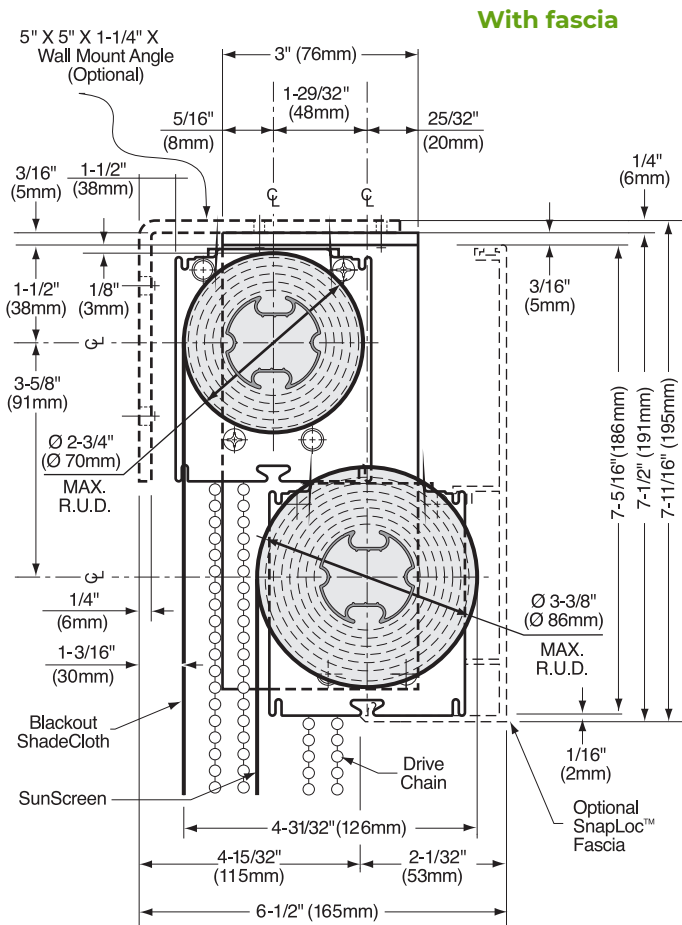
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Mecho®DoubleShade® Brackets – #15

Mecho®/5 DoubleShade® Bracket #15

With and without fascia

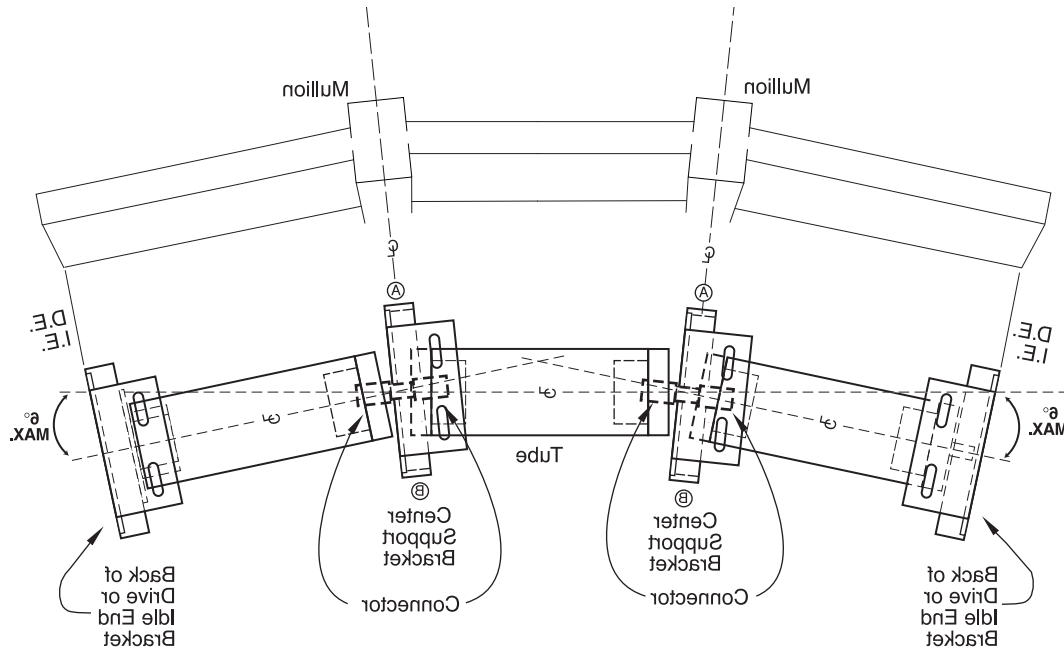




Mecho® <12° Radius Center Support

With or without SnapLoc® Fascia (Optional).

(Up to 12° = 6° + 6°)

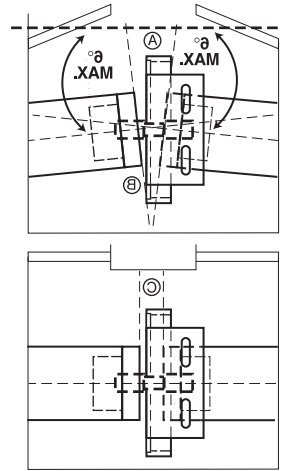


NOTE: Edge clearances A & B for angled shades, are determined based on:

- 1) Regular Roll or Reverse Roll,
- 2) Rolled up diameter,
- 3) Up or down position of the shade, and
- 4) Angle of the window wall.

The edge clearances shown below for Mecho/5 are at an 6 degree + 6 degree angle off the radius, with a 1-1/2" (38mm) tube and the shade in the full down position. As the shade rises edge clearances will increase on a Regular Roll shade and decrease on a Reverse Roll shade. The amount of variance will depend on height of the shade and the angle.

Edge clearance C, for non-angled shades, is unaffected by the above factors.



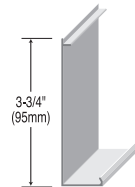
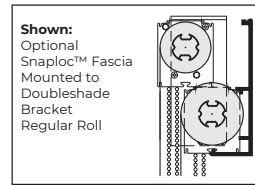
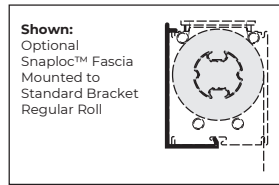
The following < 12° Radius Center Support applications use the standard Mecho® brackets, tube connector and tube plugs.

Maximum Roll Up Diameter	Center Support Edge Clearances			< 12° Center Support Bracket model
	(C)	(B)	(A)	
2-3/4" (60mm) with or without fascia	5/8" (16mm)	7/16" (11mm)	3/4" (19mm)	Mecho®/5 Wide
4" (102mm) No fascia	5/8" (16mm)	7/16" (11mm)	3/4" (19mm)	Mecho/5 Pocket
3-7/16" (87mm) with fascia	5/8" (16mm)	7/16" (11mm)	3/4" (19mm)	Mecho/5 Extended
5" (127mm) without fascia	5/8" (16mm)	7/16" (11mm)	3/4" (19mm)	
2-1/4" (57mm) with fascia	5/8" (16mm)	7/16" (11mm)	3/4" (19mm)	Mecho SlimLine™
2-3/4" (60mm) without fascia	5/8" (16mm)	7/16" (11mm)	3/4" (19mm)	

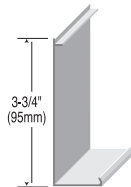
Not available for DoubleShade brackets.
Call for shop drawings.



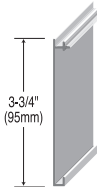
Other Mecho® Components & Optional Accessories



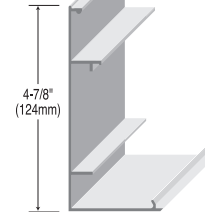
Fascia for Slimline Brackets
Regular Roll
MFAA SL15 AL



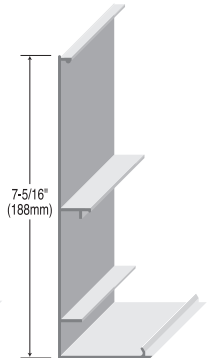
Fascia for Standard Doubleshade #10 Brackets
Regular Roll
MFAA RG15 AL



Fascia for Standard Brackets
Reverse Roll
MFAA RR15 AL



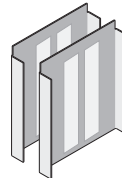
Fascia for Extended Brackets
Regular Roll
UFAA 4715 AL



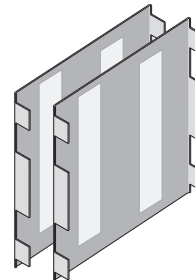
Fascia for Doubleshade #15 Brackets
Regular Roll
UFAA 7321 AL



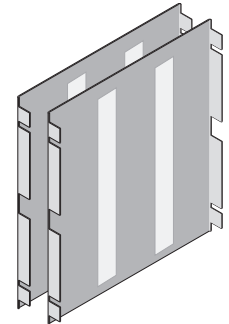
Slimline Fascia End Caps (Pairs)
MFCA 2336 AL



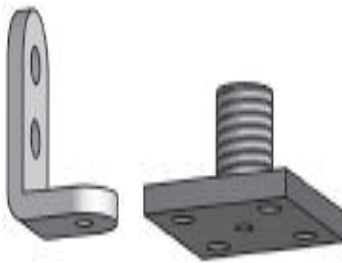
Mecho/5 or 3 Wide Fascia End Caps (Pairs)
MFCA 3036 AL



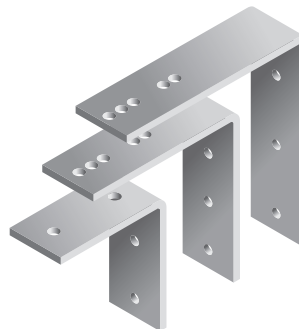
Mecho/5 or 3 Extended Fascia End Caps (Pairs)
MFCA 3346 AL



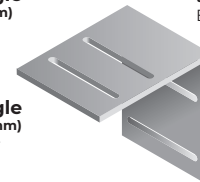
Mecho Doubleshades #15 Fascia End Caps (Pairs)
MFCA 3070 AL



Single Wall-Mount Angle
5" x 5" x 1-1/4" (127 x 127 x 32 mm)
For Extended & Doubleshade #15 Brackets
UWBX 5050 ST PL



Single Wall-Mount Angle
4" x 4" x 1-1/4" (102 x 102 x 32 mm)
For Slimline, Wide, Pocket & Extended Brackets
EWBX 4040 ST ZP

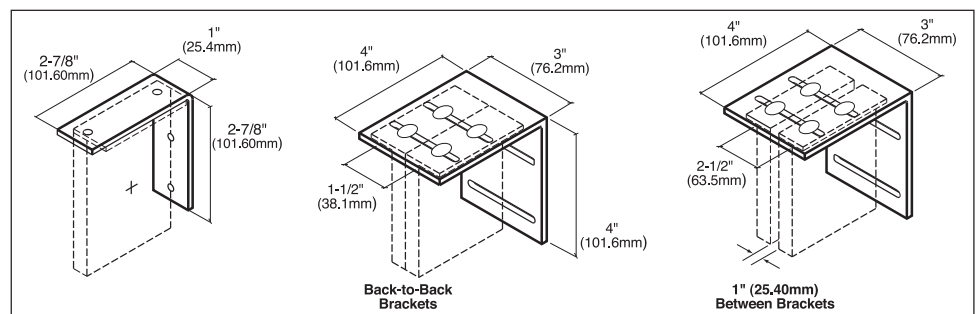


Single Wall-Mount Angle
2-7/8" x 2-7/8" x 1-1/4" (73 x 73 mm)
For Slimline, Wide, Pocket & Extended Brackets
MWBX 2727 ST ZP

Double Wall-Mount Angle
4" x 4" x 3" (102 x 102 x 76 mm)
For Slimline, Wide, Pocket & Extended Brackets
EWBX 4145 ST ZP

Guide Cables are used when shades are sloped or the width to height ratio (1:6) needs assistance in keeping the shade track-ing correctly.

Tension Idler Cable Kit w/ 20 ft. Cable
EGCA 4112 AS NP



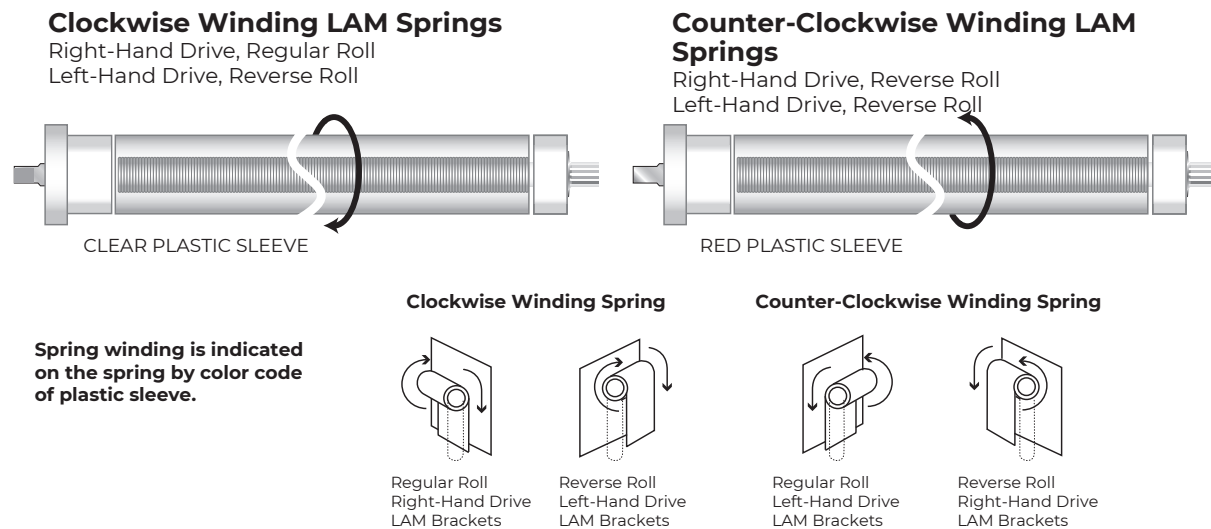


New, Improved Lift-Assist Mechanism™ (LAM™)

Optional Lift-Assist Mechanism™ for heavy, oversized or multibanded manual shades.

Mecho's optional Lift-Assist Mechanism™ (LAM™) enables users to lift heavy, oversized or multibanded manual shades weighing between 10 and 20 lbs. (4.5 kg and 9.0 kg) or more. In many cases a shade that formerly required motorization can now be lifted with the Lift-Assist Mechanism. The Lift-Assist Mechanism can also provide exceptional lifting capacity for shades less than 10 pounds. An important consideration for the frail or infirmed.

The LAM system is comprised of a spring assembly inside the shade tube and one of a wide range of LAM idle-end brackets designed to wind the spring in the proper direction for regular or reverse roll for both right-hand or left-hand drive. LAM's are available for the Mecho®/5 in Wide, Pocket and Extended sizes and the Mecho® SlimLine™ Bracket.



LAM ASSEMBLY FOR
1-1/2" and 1-7/8" (38mm and 48mm)
SNAPLOC TUBES

Clockwise Winding LAM Spring for
RH Drive, Regular Roll or LH Drive, Reverse Roll
(210 coils)
MLAA 0210 DS SC

Counter-Clockwise Winding LAM Spring for
LH Drive, Regular Roll or RH Drive, Reverse Roll
(210 coils)
MLAA L210 DS SC

LAM ASSEMBLY FOR
1-3/4" (44mm)
SNAPLOC TUBE

Clockwise Winding LAM Spring for
RH Drive, Regular Roll or LH Drive, Reverse Roll
(248 coils)
MLAA R248 24 SC

Counter-Clockwise Winding LAM Spring for
LH Drive, Regular Roll or RH Drive, Reverse Roll*
(248 coils)
MLAA L248 24 SC

LAM ASSEMBLY FOR
2-1/8" (54mm)
SNAPLOC TUBE

Clockwise Winding LAM Spring for
RH Drive, Regular Roll or LH Drive, Reverse Roll
(248 coils)
MLAA R248 24 2S

Counter-Clockwise Winding LAM Spring for
LH Drive, Regular Roll or RH Drive, Reverse Roll*
(248 coils)
MLAA L248 24 2S



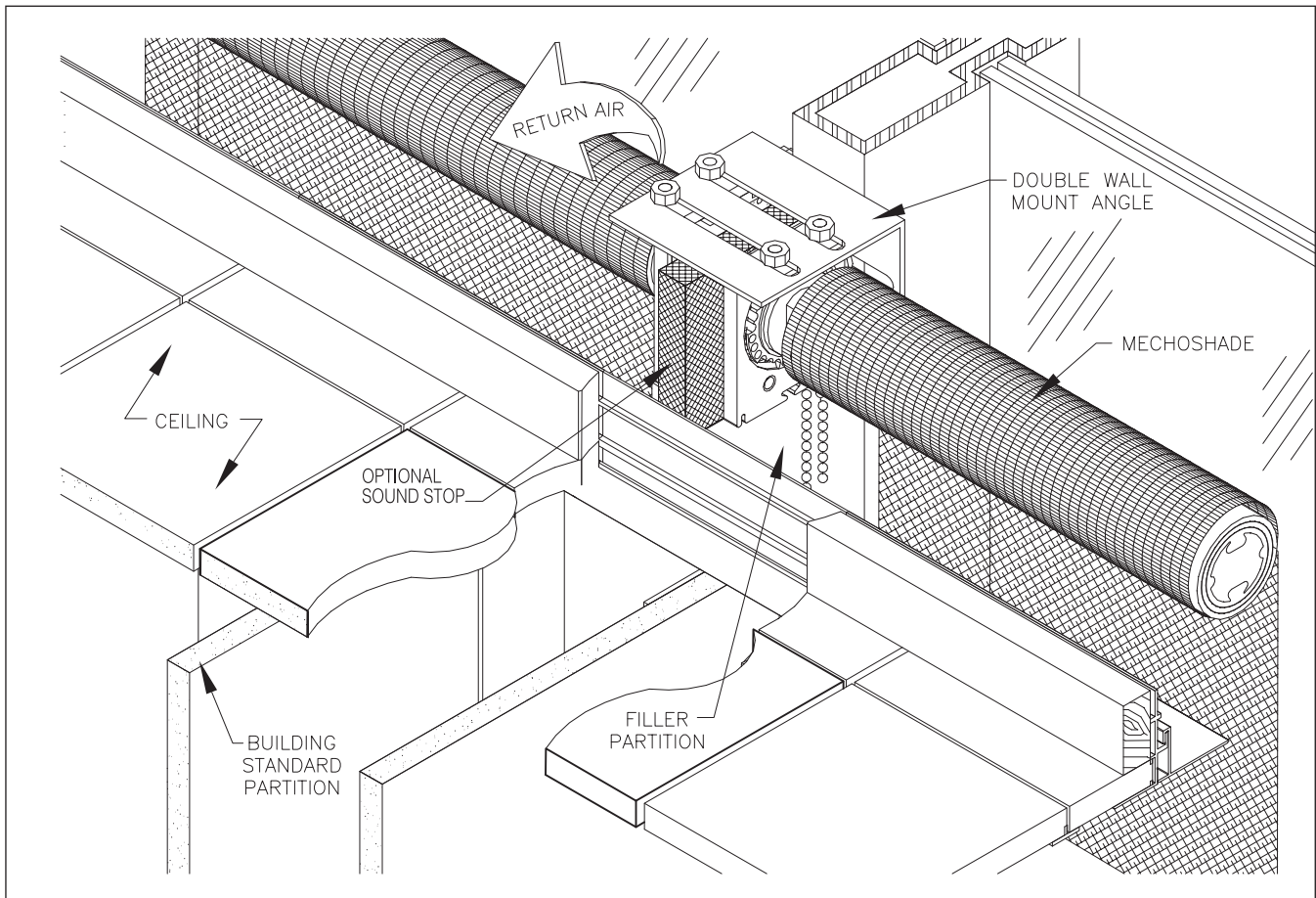
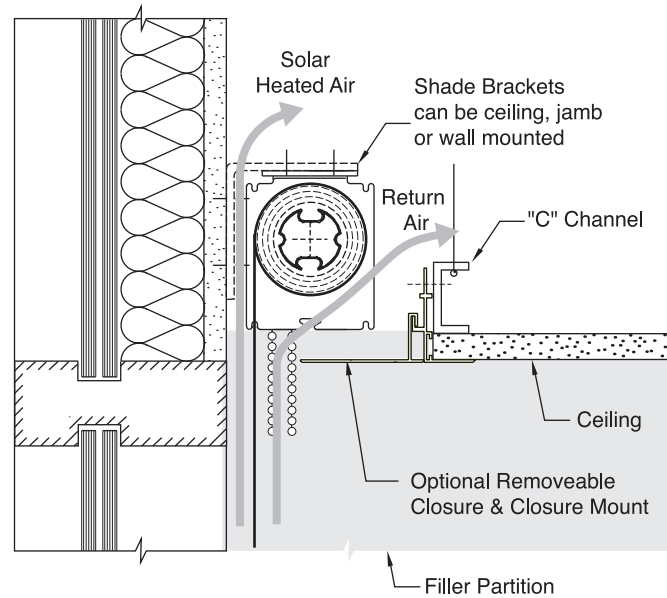
The Mecho® Return Air “No Cost Pocket™”

“No Cost Pocket™”

A “No Cost Pocket” can be made by installing an optional closure and closure mount to blocking just above the ceiling grid. The shade bracket is wall, jamb or ceiling mounted above the opposite window wall. This diagram is for example only and is not to be used as an installation guide. For proper installation instructions, detailed site specific shop drawings are necessary. Contact Mecho Estimating Department, CAD or Engineering departments to obtain proper shop drawings.

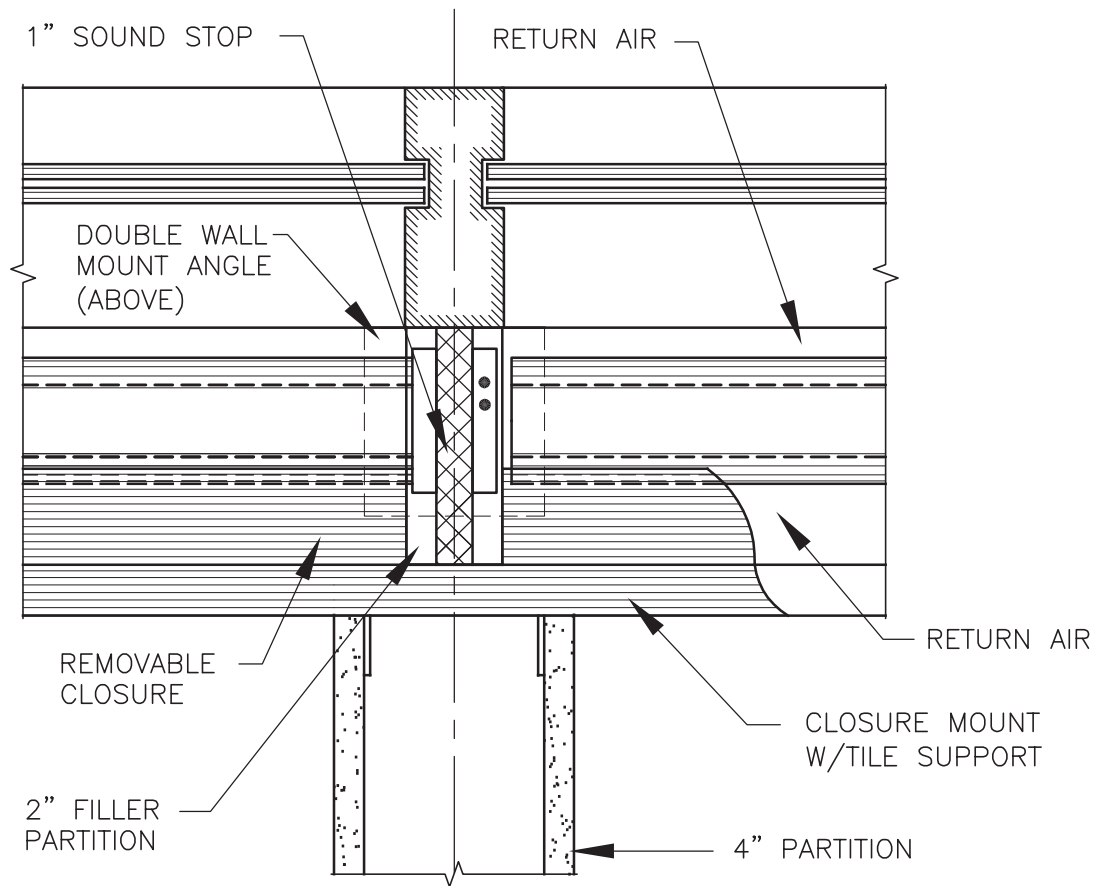
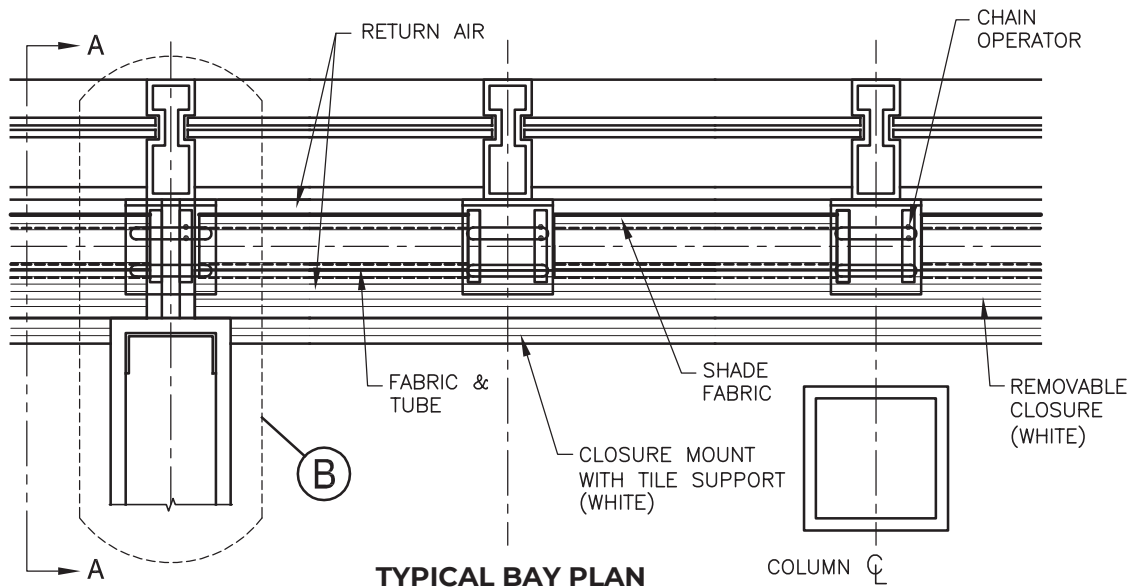
Optional Sound Stop

A 1” (25mm) fiberglass sound stop can be installed between shade brackets above partitions to help reduce noise between work areas.





The Mecho® Return Air “No Cost Pocket™”



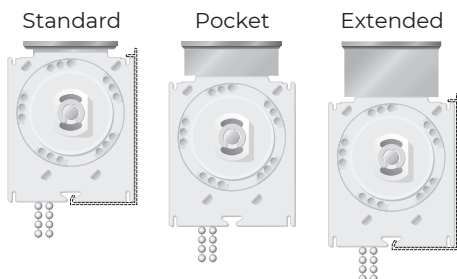
PLAN AT PARTITION (B)





Mecho® Hardware Features and Specifications

Mecho®/5



1. Mounting Brackets

The drive assembly, idle-end assembly, and center support systems are attached to an 1/8 in. (3mm) steel universal mounting bracket.

2. No Adjustment Necessary

Mecho®/5 drive-end bracket requires no adjustment, resulting in faster installations.

3. Braking

An overrunning clutch design that disengages to 90% during the raising and lowering of the shade and can withstand a pull force of 40 lbs. (18 kg). Recommended maximum lift shade-band 20 lbs. (9 kg).

4. Braking Surface:

The patented self-lubricating oil impregnated steel hub, on which the brake system is mounted, includes an articulated brake assembly which assures smooth, non-jerky operation in raising and lowering the shades.

5. Sprocket

A one-piece molded Delrin® chain sprocket.

6. Hardware

All hardware is available with a universal offset drive and left-hand or right-hand operations. The offset-drive chain assembly places both operating chains at the same location or to the rear of the shade cloth out of sight. The distance between the center line of the operating chain shall not exceed 1/2 in (13mm).

7. Tube Support

A Delrin® cover plate provides protection from the tube being dislocated. In the event the tube should be pushed out of place, the Delrin end of the

mounting plates contains the tube which may prevent the tube from falling out of the bracket.

8. Wide Spans

Depending on the height, weight and shade cloth specified, Mecho can be made up to 12 feet wide or more. Call your local representative or Mecho technical support.

9. Interchange or replacement

Bracket components can be interchanged or replaced without having to remove the brackets from the walls or ceilings. This feature is included in both inside and outside mountings.

10. Component Quality

Plastic components are made of strong, dimensionally stable DuPont Delrin™. Not ABS/polystyrene or nylon.

11. Bracket Metal

Support brackets are plated 1/8 in. (3mm) steel. Custom colors are available on special order.

12. Narrow-Edge Clearances

Drive-end: 13/16 in. (21mm), idle-end: 1/2 in. (13mm), and center support: 5/16 in. (8mm).

13. Multi-Band Shade

A single drive bracket can handle two or more shade bands permitting a single operator to operate the shade, assuring simultaneous alignment of all the bands (within Mecho recommended weight limits).

14. Faceted Window Installations

The offset drive permits up to a 12-degree (6° + 6°) angle between any two shades with a single operator. By special order only, up to six degrees each side maximum. Contact Mecho for details.

15. Optional SnapLoc® Fascia

SnapLoc® fascia shall be provided for standard and extended height brackets and center support brackets. Each bracket assembly permits the fascia to extend past the brackets, creating wall-to-wall fascia, with the brackets mounted inboard from the end of the fascia. SnapLoc fascia can be installed as a single unit over two or more shade band assemblies without exposed joints in lengths up to 15 ft. (457cm). SnapLoc fascia snaps on to the brackets without the use of glue, magnetic strips or any exposed fastening.

The fascia is made of extruded aluminum (hardness/alloy 6063T5) with an average thickness of .062 in. (1.6mm). The fascia is finished in PPG Duracon™ baked enamel in six standard colors plus clear aluminum.

16. Offset-Chain, No-Notch Fascia

The operating chain drops behind the return edge of the fascia without the necessity of notching or otherwise defacing the return leg of the fascia. The Mecho® Wide, and Extended brackets accommodate fascia returns no less than 1-1/2 in. (38mm) (50%) from the front of the hardware fully concealing the roll and tube.

17. Shade Mounting

The SnapLoc® spline permits positive SnapLoc mounting and unmounting of the shade cloth from the tube without having to remove the hardware, the tube or brackets and without the use of two-sided tape, staples or other fasteners.

Continued >>



Mecho® Hardware Features and Specifications

18. Non-Binding Recessed End Plug

The idle-end plug is fitted with a recess which prevents oversized tubes from being forced between brackets. This arrangement assures proper sizing and clearance between the tube and the brackets and minimizes light leaks.

19. End Brackets

Consist of 1/8 in. (3mm) thick sheet steel. Wall, jamb or ceiling mounted as required and permanently installed.

20. Center Support Brackets

For ceiling or wall mounted multi-banded shades. Center support brackets shall accept continuous lengths of fascia, which will span two or more Mecho bands. Minimum length 15 ft. (457cm).

21. Hembar Weights

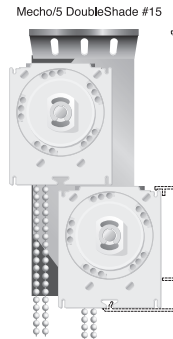
Mill-finished aluminum bars in single lengths as appropriate for the size shade, concealed in a fabric hem pocket.

22. Optional Exposed Hembars

In painted and baked PPG finishes with key way for shades.

23. DualShade® System

The patented DualShade system, by Mecho, for installing both a Ther-moVeil® sun screen together with either a room darkening shade cloth or MirroFilm™ attached to the same roller tube by means of the SnapLoc spline. The shade cloth and film shall be separated by 1/2 in. (13mm) of insulating air space.



24. DoubleShades®

A master mounting bracket assembly for drive-end, idle-end and center supports to facilitate installation of two shades, front-to-back or top and bottom, with perfect alignment

and minimum installation labor. DoubleShade® brackets have all the same features of the standard Mecho/5 bracket, plus allow both sun screen and blackout shades on a single bracket. DoubleShade's compact size allow two shades to fit in a smaller room projection than two individually installed shades on the same window.

25. Warranty

Failure of any part or component shall be replaced at no charge, subject to warranty conditions. The drive chain is a fail safe component that is designed to break in two at 60-90 lbs.

(27-41 kg) of shock and is not covered by the warranty. The chain may be quickly repaired or spliced on site by maintenance personnel in minutes. *(Contact Mecho for warranty terms and conditions.)*