

# Room-Darkening Systems

The Complete Program:  
Room-Darkening and Sunscreens Systems



# The Complete Program

## Room-Darkening, Blackout, and Sunscreen Systems

As the leading manufacturer of sunscreen roller shades, MechoShade Systems offers the most complete program for audiovisual and environmental-illumination control.

### Heavy-duty hardware

- Produced from high-quality, tough-wearing, and long-lasting materials and construction.
- Designed specifically for the contract, commercial institutional, and healthcare markets.
- Features a patented SnapLoc® spline for attaching the shadeband to the tube.

### Manual operation

- Operated by a patented assembly with a built-in offset chain-drive, which provides a neat, low profile and narrow-edge clearance.
- Designed to function both with and without Blackout side channels.

### Electrical operation

- Offers both single-or multiple-switching to control motorized shade from any remote location.
- Provides the ability to operate oversized, inaccessible, and skylight shades with ease.
- Features single-switch operation of a variety or single-shadeband and multi-shadeband configurations.

### Extensive inventory of optional accessories

- Various pockets and pockets accessories in numerous configurations for recessed installation.
- SnapLoc fascia (valance) for exposed manual and motorized installations.
- SnapLoc Blackout side and sill channels, eliminating exposed screws, buttons, and all visible means of fastening.

### Almost limitless installation types.

- Single shades: A typical single shadeband with a single operator.
- Multiband shades: Two or more shadebands with one operator.
- Overlapping shades: An overlapping configuration where side channels are not desirable, such as with silicon-butt glazing.

### Blackout Shadecloths

#### 0700 Series

The standard of the industry, laminated and embossed vinyl shadecloth with the same color on the front and back sides, except with 0.731 Black/White, where Black is on the side and white the other:

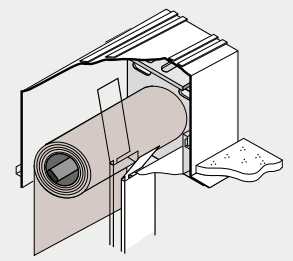
0701 White	0704 Ivory	0731 Black/White
0702 Grey	0705 Champagne	
0711 Dark Grey		

#### Equinox™ Series

A lustrous woven fiberglass blackout fabric with a supple acrylic coating; assured to lay flat, no curling and at 100" (2540mm) width. Same color on the front and back sides:

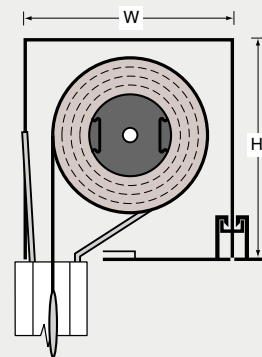
0101 White	0106 Dusk	0110 Neutral
0102 Alabaster	0107 Stone	0111 Sage
0103 Flax	0108 Onyx	0112 Burgundy
0104 Sandstone	0109 Wheat	0113 Dark Teal
0105 Silver		

4123 Shade Pocket  
5-3/8"W x 5"H  
(137mm x 127mm)  
standard



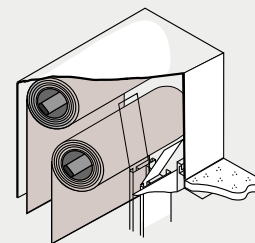
5113 Shade Pocket  
8-1/2"W x 9"H  
(216mm x 229mm)

6113 Shade Pocket  
9"W x 15"H  
(229mm x 381mm)  
For oversized shades

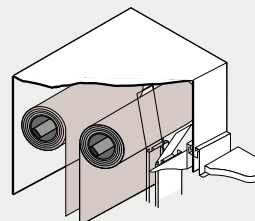


5113 Shade Pocket  
8-1/2"W x 9"H  
(216mm x 229mm)

6113 Shade Pocket  
9"W x 15"H  
(229mm x 381mm)  
For oversized shades



7113 Shade Pocket  
14"W x 8-1/2"H  
(356mm x 216mm)  
Standard for  
Side-By-Side Shades

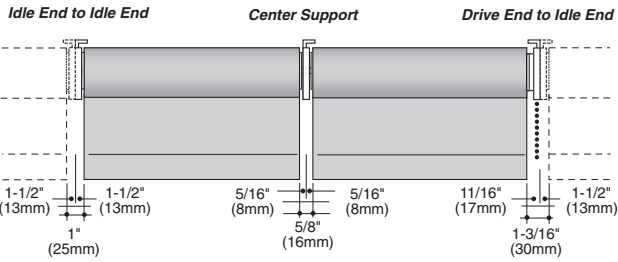


Front Cover and Above:  
GE Capital Training Room, Corporate Planning Group

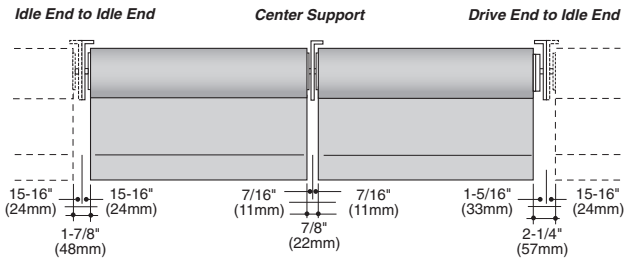
# MechoShade® Components

# ElectroShade® Components

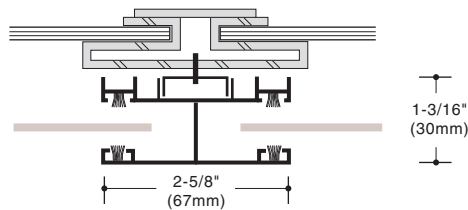
## Standard edge clearances



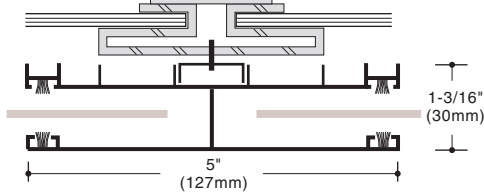
## Standard edge clearances



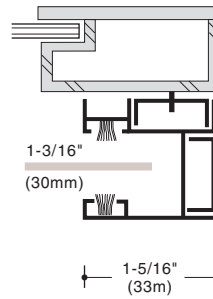
2-5/8" (67mm) or 5" (127mm) center channel, surface mounted



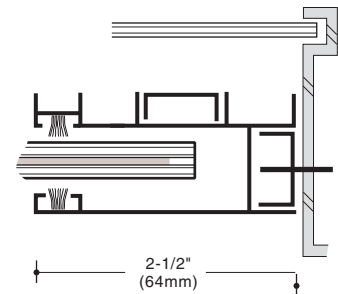
5" (127mm) center channel, surface mounted



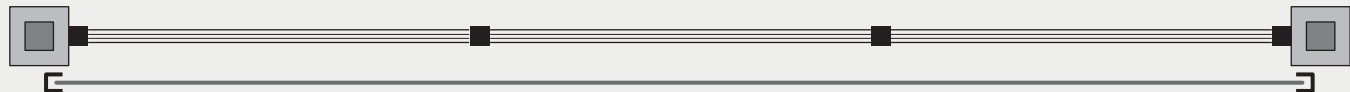
1-5/16" (33mm) side channel



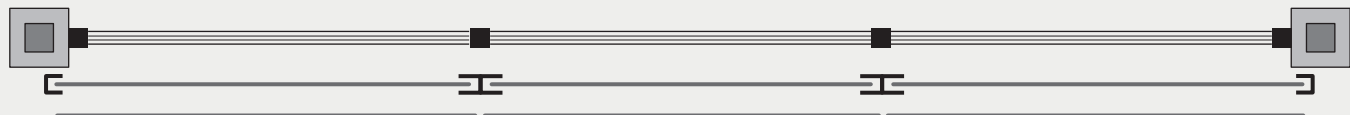
2-1/2" (64mm) side channel with exposed hemtube and light seal for shades over 8'-0" (2.4m)



Overlapping shades for room-darkening. (See 5113 and 6113 pockets, page 2.)



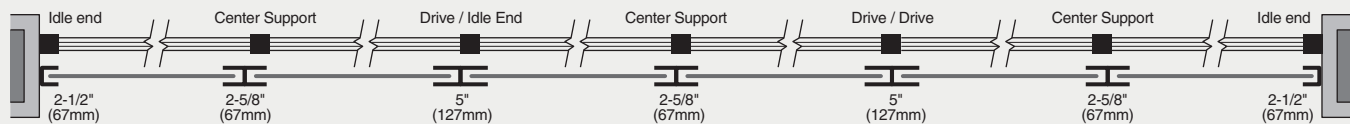
Extra-wide single band shadeband. (See 5113 pocket, page 2.)



Blackout shades with side and center channels in tandem with sunscreen shades.



Electroshades using 2-1/2" (64mm) side channels and 2-5/8" (67mm) center channels.



Electroshades using 2-1/2" (64mm) side channels and 2-5/8" (67mm) center channels.

# The MechoShade® System

## Manually Operated Room-Darkening Blackout, and Sunscreen Roller Shades

MechoShades are available in a choice of two drive systems in up to four bracket sizes. Shown below is the Mecho/5 Wide which is available in Standard Wide, Pocket and Extended bracket sizes. Mecho/3 is available in SlimLine, Standard Wide, Pocket and Extended bracket sizes. Plus DoubleShade brackets #10 and 15.

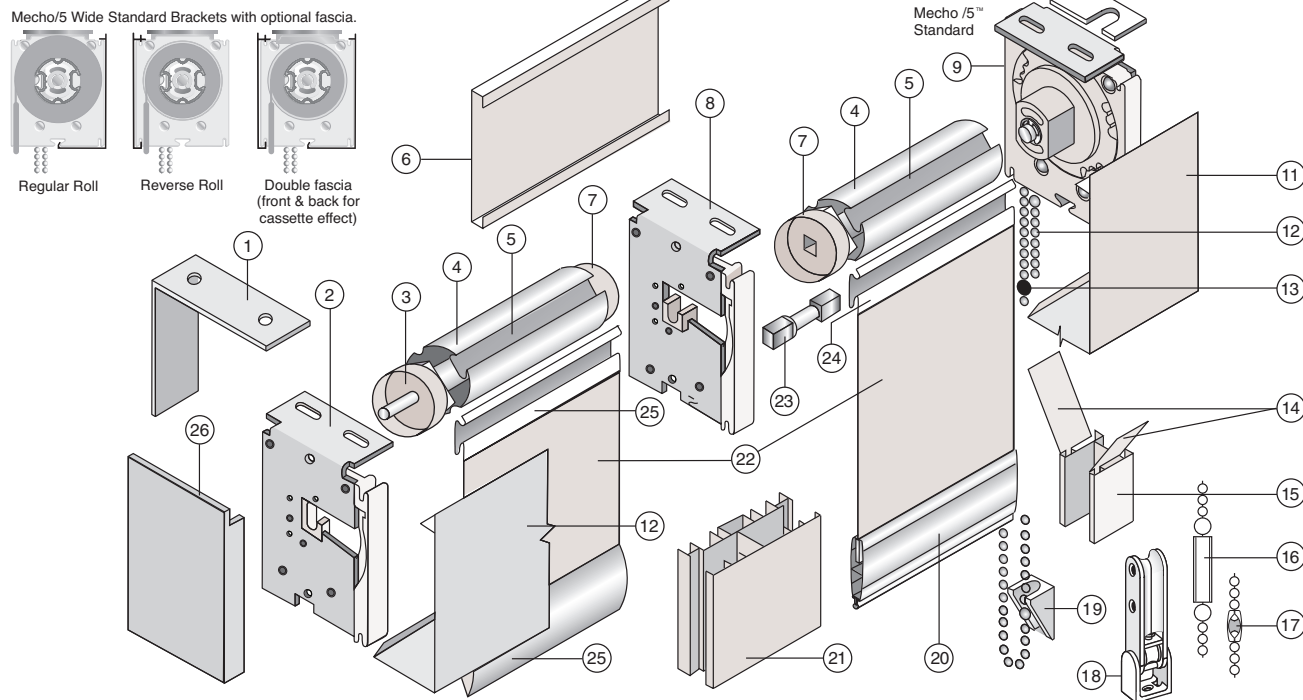
1. Wall-Mount Angle\*
2. Idle-End Bracket
3. Tube Plug (idle-end)
4. SnapLoc® Tube
5. SnapLoc Spline Mounting Channel

6. SnapLoc Reverse-Roll Fascia\* (Standard Wide size only)
7. Tube Plug (Center Support)\*
8. Center Support Bracket
9. Mecho®/5 Drive-End Bracket
10. Leveling Shim
11. SnapLoc Regular-Roll Fascia\* (SlimLine, Standard Wide & Extended sizes only)
12. Drive Chain (stainless-steel bead chain)
13. Upper and Lower Bead Chain Stops
14. Room Darkening Shadecloth Guides (pair)\*
15. Room Darkening Side Channel (single)\*

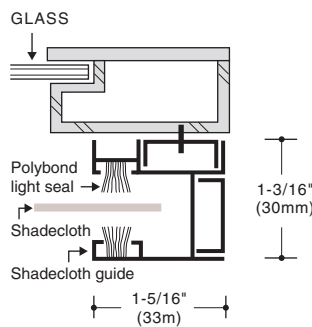
16. Heavy-Duty Bumper\*
17. Bead Chain Connector
18. Chain Retainer\*
19. Bead Chain Keeper
20. Exposed Hembar with Light Seal\*
21. Room Darkening Center Channel (double)\*
22. Shadecloth
23. Tube Connector ("dog bone")\*
24. Snaploc Spline
25. Hembar (standard cloth covered)
26. Fascia End Caps\*

\* Optional accessory

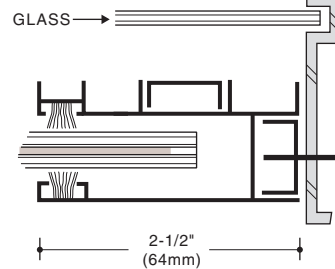
### Multiband MechoShade Exploded View



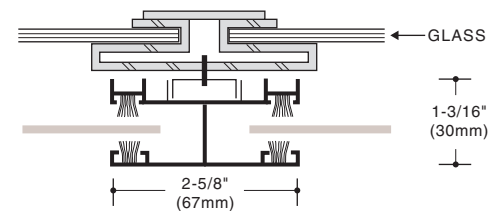
1-5/16" (33mm) side channel



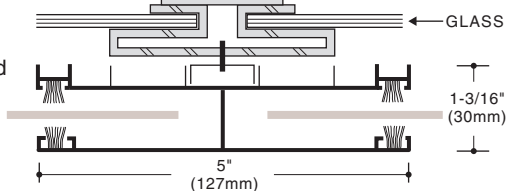
2-1/2" (64mm) side channel with exposed hemtube and light seal for shades over 8'-0" (2.4m)



2-5/8" (67mm) or 5" (127mm) center channel, surface mounted

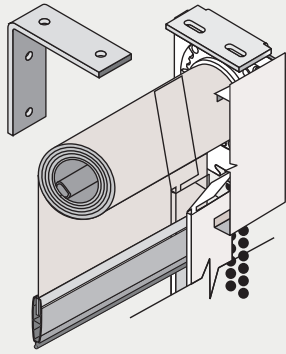


5" (127mm) center channel, surface mounted

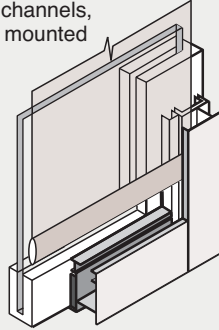


## Edge and Sill Conditions and Details

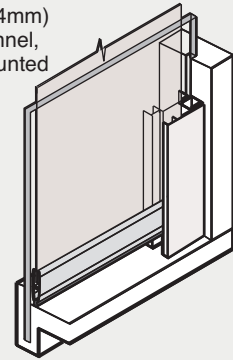
Mecho®/5 Standard drive end



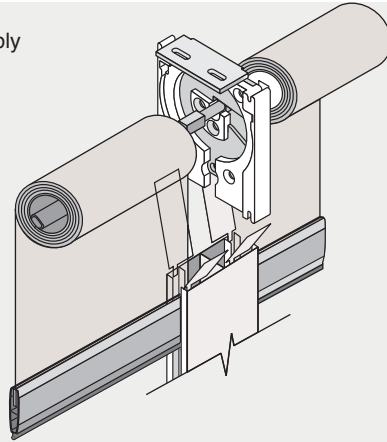
1-5/16" (33mm) side and sill channels, surface mounted



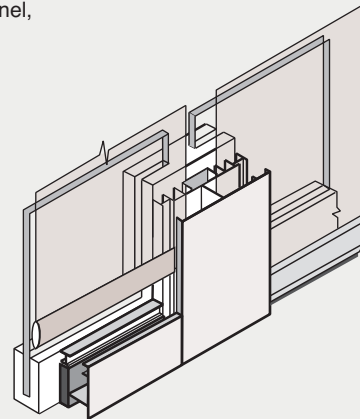
2-1/2" (64mm) side channel, jamb mounted



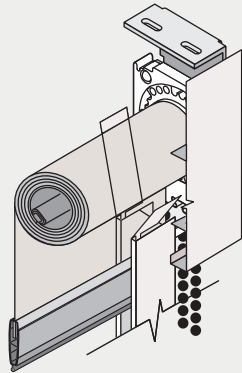
Mecho®/5 Standard center support assembly



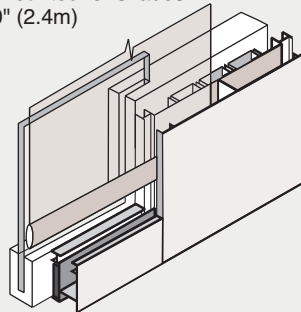
2-5/8 (67mm) center channel, surface mounted



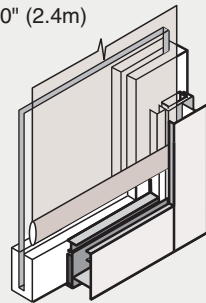
Mecho®/5 Standard extended bracket



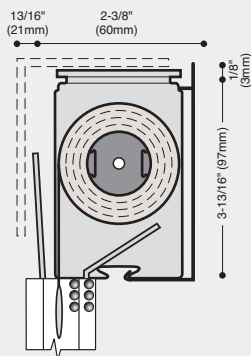
5" (127mm) center channel, surface mounted for shades over 8'-0" (2.4m)



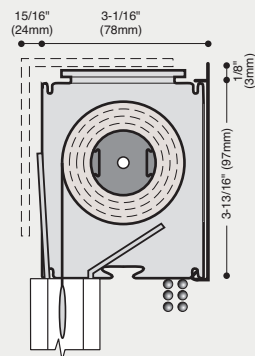
2-1/2" (64mm) side and sill channels, for shades over 8'-0" (2.4m)



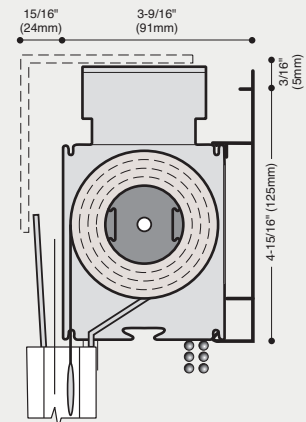
Slim Line



Mecho/5 Standard



Mecho/5 Standard extended bracket with regular-roll fascia



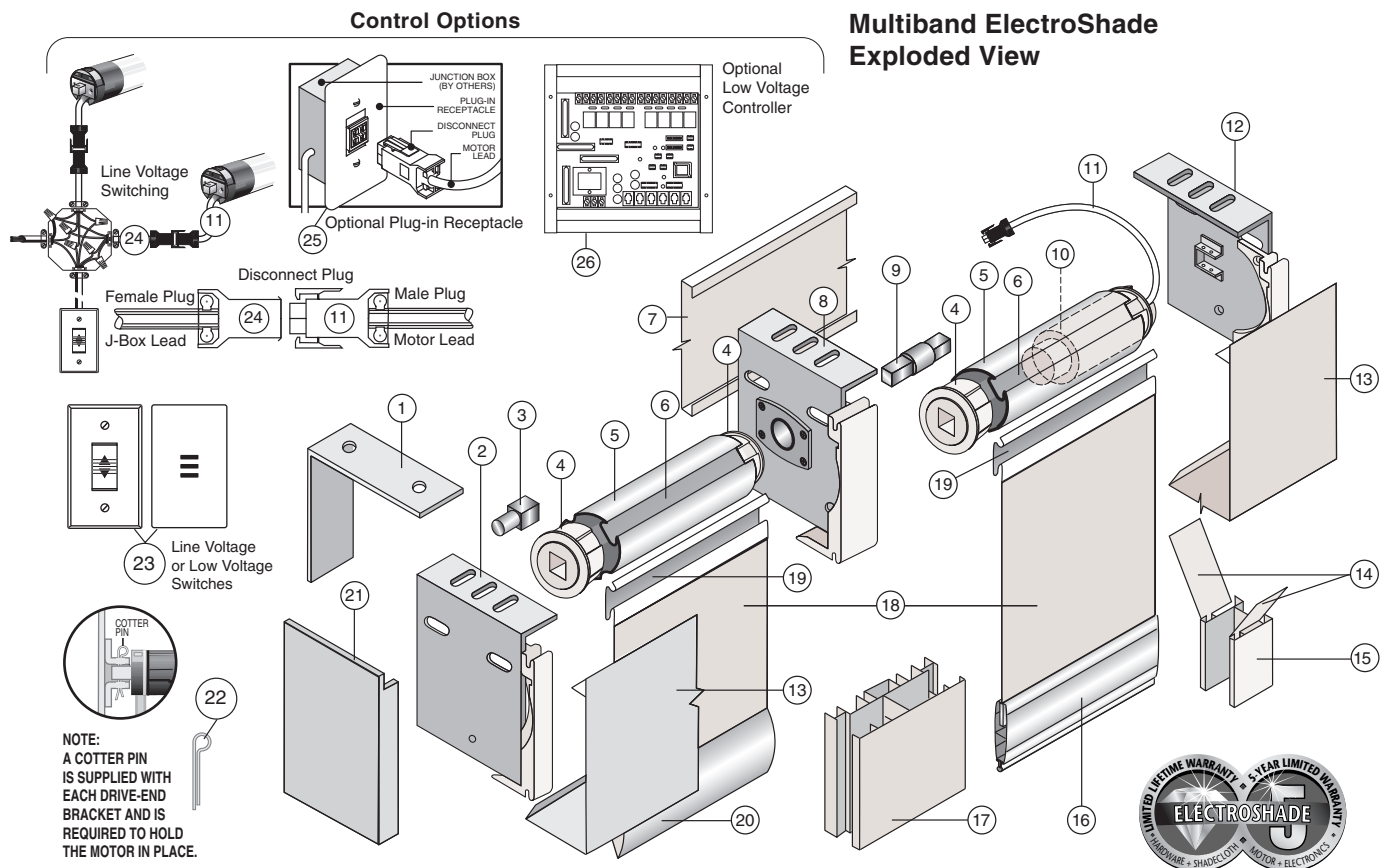
# The ElectroShade® System

## Electrically Operated Room-Darkening, Blackout, and Sunscreen Roller Shades

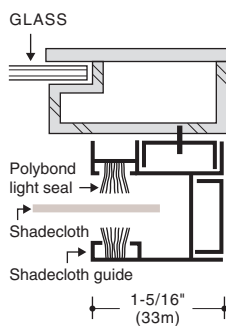
ElectroShades are available in 40mm and 50mm motor systems in up to three bracket sizes. Shown below the Electro®/2. Other sizes available are Electro®/1, Electro®/1 Extended, Electro®/2 Extended, Electro®/3, Electro®/3 Pocket and Electro®/3 Extended. Plus DoubleShade brackets #13 and 17.

- |                                                      |                                                  |                                                                        |
|------------------------------------------------------|--------------------------------------------------|------------------------------------------------------------------------|
| 1. Wall-Mount Angle*                                 | 6. SnapLoc Spline Mounting Channel               | 17. Room Darkening Center Channel (double)*                            |
| 2. Idle-End Bracket*                                 | 7. Reverser Roll Fascia                          | 18. Shadecloth                                                         |
| 3. Idle-End Pin                                      | 8. Center Support Bracket                        | 19. Snaploc Spline                                                     |
| 4. Tube Plug                                         | 9. Tube Connector*                               | 20. Hembar (standard cloth covered)                                    |
| 5. SnapLoc® Tube (1-3/4", 2-1/2", 3-1/2" & 4-1/2" ø) | 10. Tubular Motor (A/C)                          | 21. Fascia End Caps* (Electro/2, Electro/3 & Electro/3 Extended only)* |
|                                                      | 11. Motor Lead with Disconnect plug (power plug) | 22. Cotter Pin to hold motor in place                                  |
|                                                      | 12. Drive-End Bracket                            | 23. Line voltage or low voltage Switches*                              |
|                                                      | 13. SnapLoc Regular-Roll Fascia*                 | 24. J-Box Lead with Disconnect Plug                                    |
|                                                      | 14. Room Darkening Shadecloth Guides (pair)*     | 25. Plug-in Receptacle*                                                |
|                                                      | 15. Room Darkening Side Channel (single)*        | 26. Control Systems*                                                   |
|                                                      | 16. Exposed Hemtube with Light Seal*             |                                                                        |

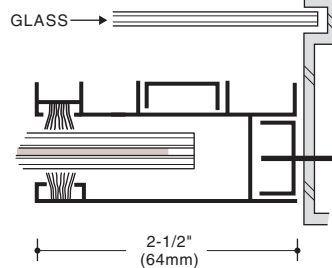
\* Optional accessory.



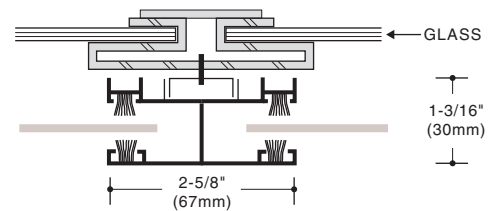
1-5/16" (33mm) side channel



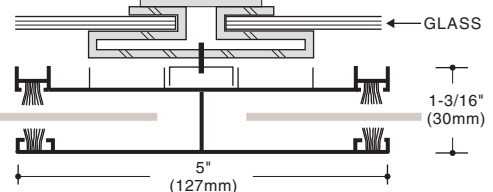
2-1/2" (64mm) side channel with exposed hemtube and light seal for shades over 8'-0" (2.4m)



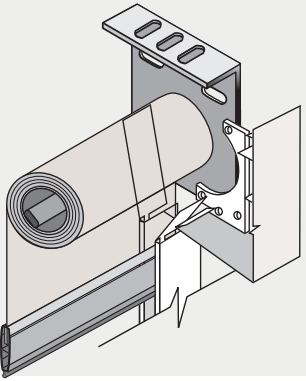
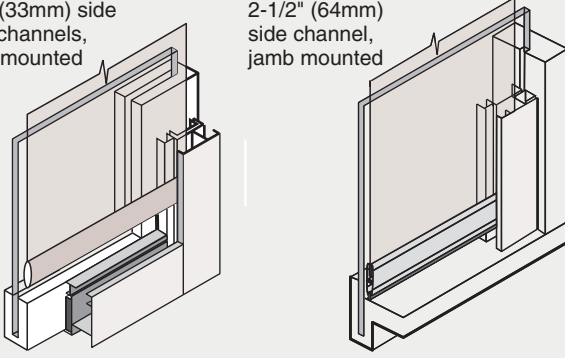
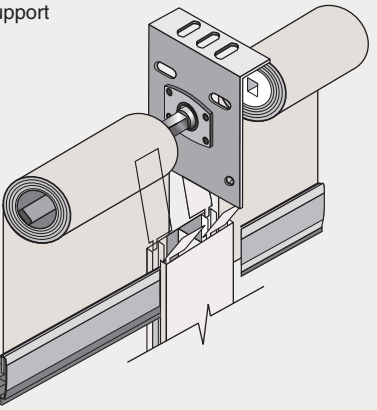
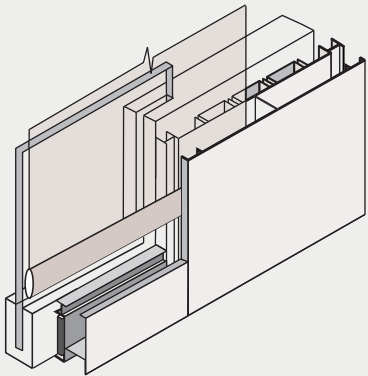
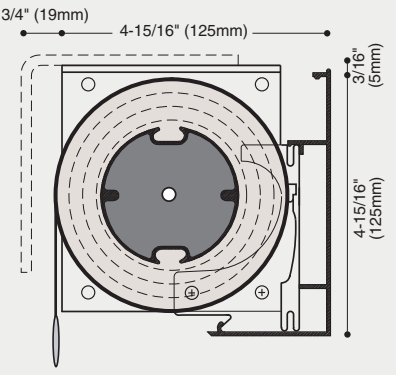
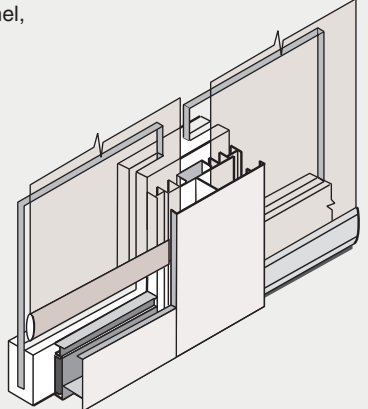
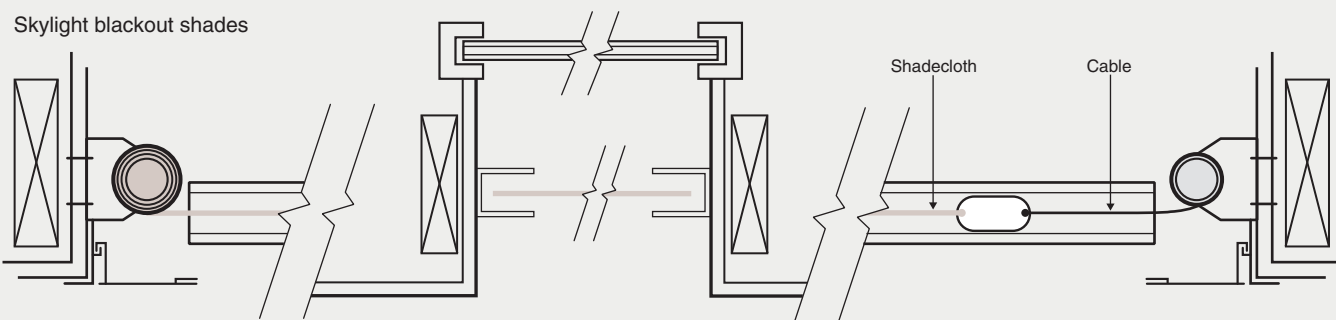
2-5/8" (67mm) or 5" (127mm) center channel, surface mounted



5" (127mm) center channel, surface mounted



## Edge and Sill Conditions and Details

<p>Electro<sup>®</sup>/2 with blackout channel</p> 	<p>1-5/16" (33mm) side and sill channels, surface mounted</p> <p>2-1/2" (64mm) side channel, jamb mounted</p> 
<p>Electro<sup>®</sup>/2 Center Support</p> 	<p>5" (127mm) center channel, surface mounted for shades over 8'-0" (2.4m)</p> 
<p>Electro<sup>®</sup>/2 in detail</p> 	<p>2-5/8 (67mm) center channel, surface mounted</p> 
<p>Skylight blackout shades</p>  <p>Shadecloth end      Horizontal Section      Cable end</p>	

## Specifications

Short Form-Section 12520: Window Shades:  
Room Darkening / Blackout / Sunscreen Roller Shades

### Part 1 / General

#### 1.01 Summary

- A. Provide window shades and accessories as follows:
- Shade fabric: Fire resistant, openness factor as specified and required by orientation and glazing.
    - Single sunscreen shadeband with specified weave.
    - Single blackout shadeband with side or center channels, concealed fastening with no exposed screws or plugs in the face of the channels.
    - Single insulating MiroFilm™ shadeband.
    - DualShade shadeband w/ sunscreen and blackout material.
    - DualShade shadeband with sunscreen and insulating MiroFilm.
  - Operation / Manual
    - Offset side-mounted chain operator for manual operation as either single-band or multi-band shades.
    - Public facility assembly: Chain hold down, spring-tension pulley and shock absorber.
  - Operation / Electric with the following features:
    - Individual switching.
    - Group switching.
    - Manual activation.
    - Uniform Mode.
    - 5 position/aligned switching.
    - Sun activation.
    - Wind and sun activation.
    - Temperature operation.
    - SolarTrac computer hardware, software and sensors for multi-zone control system.
    - IMC (Intelligent Motor Control): Software managed on a bus line. Programmable zones and switches.
  - Mounting: Pocket-mounted.
  - Mounting: Wall-mounted with brackets.
  - Mounting: Overhead mounted.
  - Mounting: Jamb-mounted.
  - Mounting: Window frame mounted.
  - Shade orientation: Regular roll, shade cloth falls at window side of roller.
    - Shadeband orientation: Reverse-roll, shade cloth falls at room side of roller.
  - Configuration: Single band or multi-band shades.
  - Accessories without exposed fastening:
    - Single fascia: One-piece extruded aluminum.
    - Double fascia: One-piece extruded aluminum, front and back mounting.
    - Extruded aluminum hembar with vinyl light seal.
    - Blackout side and center channels.
    - Blackout side, center and sill channels.

#### 1.02 Submittals

- A. Submit the following for approval prior to fabrication: Samples, shop drawings, product drawings, product data and warranty.
- Submittals shall specifically note any deviations from specified requirements and the reasons thereof.
  - For electrically-operated units, include detailed wiring diagrams and schematics.

#### B. Unsolicited alternative product.

- Should the bidder wish to offer a bid on an unsolicited alternative product, secure pre-bid approval from the architect. The bidder shall provide pricing on the specified product. The approved alternative product, if any, shall be specifically identified and made available to all bidders. Any costs incurred by the alternative product are the responsibility of the bidder.

#### 1.03 Quality Assurance

- A. Comply with governing codes/regulations. Provide products of acceptable manufacturers with satisfactory use in similar service for three years. Use experienced installers. Deliver, handle and store materials in accordance with manufacturer's instructions.

### Part 2 - Products

#### 2.01 Materials And Fabrication

##### A. Manufacturer:

- MechoShade Systems, Inc.  
Long Island City, New York 11101, USA.
- MechoShade® manually operated units.
  - ElectroShade® electrically operated units.

##### B. Shade cloth:

- Shade cloth shall meet requirements of Fed. Spec. CCC-C-521E for fire retardency, NFPA 701 Small-Scale and/or NFPA 701 Large-Scale requirements. Antimicrobial without topical treatment. NY State Fire-Gas Toxicity Text: LC50 22.5 g. ASTM E-84-90: Flame Spread 17, Smoke Density Index 118, Shade cloth seconds or shade cloth manufactured using reprocessed materials are not acceptable.

##### C. Manual Shade System

Mecho/3 system is a pre-engineered unit with one-piece molded sprockets and a linear disc brake opposed to a flat steel backing plate and concealed variable-adjustment mechanism. Shade mechanism shall be adjustable from 100% friction (static mode) with infinite positions to 15% friction (dynamic mode) with only pre-selected positions. The operator shall be a side-mounted gear and sprocket mechanism located within the drive-end bracket.

Mecho/5 system is a patented pre-engineered overrunning clutch design that disengages to 90% during the raising and lowering of the shade. The brake can stand a pull force of 40 lbs. (18 kg) for a 10 lb. (4.5 kg) shade in the stop position. Requires no adjustment, resulting in faster installations. The drive assembly, the idle-end assembly, and the center support systems are attached to the 1/8 in. (3.175mm) steel universal mounting bracket. Self-lubricating hub on to which the brake system is mounted includes an articulated brake assembly which assures smooth, non-jerky operation in raising and lowering the shades.

In both systems the shade cloth shall be removable with a snap-on and snap-off mounting (SnapLoc®) spline without having to remove the shade tube.

#### D. ElectroShade Motorized System:

- The motor shall be tubular asynchronous and concealed inside an extruded aluminum tube with asymmetrical channels to which the shade and the mounting spline are affixed. Internal limit switches shall be readily removable without having to remove the motor or the shade-tube assembly.

#### E. Control System

Manufacturer's standard system customized to project requirements. Multi-zone shade controls and operations as specified.

#### F. Pockets / Blackout Channels / SnapLoc® Fascia

- Extruded aluminum pocket with exposed tile support and pocket closure with baked-enamel finish.
- Accessibility by removing closure. No exposed screws or mounting means. Pocket shall be sized for:
  - Single shadeband.
  - Front and rear shades (sunscreens and blackout material) side-by-side mounting.
  - Overlapping shades (two rolls of shade cloth) either high-low or side-by-side mounting for room darkening without center blackout channels.
  - Side and center blackout channels appropriately sized for manual or motorized operation.
- Extruded aluminum SnapLoc® fascia which continuously fits on the end and center brackets as a one-piece section over two or more shadebands.

### Part 3- Execution

#### 3.01 Installation

- A. Take field measurements prior to the fabrication to ensure fit.
- B. Install materials and systems in accordance with manufacturer's instructions and approved submittals.

#### Warranty: Interior Shades Summary

Limited Fit-For-Use Warranty: MechoShade Systems warrants its products to be free of manufacturing defects and will meet the manufacturer's intended use for the specified warranty period. The bead chain incorporated in the manual system is a fail-safe system and is not warrantied. All warranties are for product only.

**The MechoShade/5 system** incorporates a Limited Lifetime Fit-For-Use Warranty on all hardware and shade cloths except as noted above.

**The MechoShade/3 system** includes a Limited 10-Year Fit-For-Use Warranty on all hardware and shade cloths except as noted above.

**ElectroShade system includes** Limited 10-Year Fit-For-Use Warranty on all hardware and shade cloths and 5 years on motors and electronic controls.

Contact MechoShade Systems for complete warranty statement.



MechoShade Systems, Inc.  
Corporate Headquarters  
42-03 35th Street  
Long Island City, NY 11101  
T: +1 (718) 729-2020  
F: +1 (718) 729-2941  
marketing@mechoshade.com  
www.mechoshade.com

Copyright ©2008 MechoShade Systems, Inc. MechoShade, ImageShade, ThermoVeil, EuroVeil, and EcoVeil are registered trademarks of MechoShade Systems, Inc. Others, as noted, are the registered trademarks and property of their respective companies. Specifications are subject to change without notice. Reproduction of the text, data or illustrations herein is forbidden. This literature has been printed on 100% post-consumer paper; the ink is soy-based.

