Southern™
PATIO ENCLOSURES

The Strongest, Most Economical Patio Enclosures, Nationwide

Southern Patio Enclosures designs and delivers commercial-grade patio enclosure systems that maximize usable space, extend operating seasons, and protect guests from changing weather conditions.

Our systems are engineered to endure demanding environments while allowing patios to transition quickly between open-air and enclosed use. The result is improved customer comfort, increased seating capacity, and greater operational efficiency.

Why Southern Patio Enclosures

Commercial Partner
Technical collaboration with owners, builders, and architects from design through installation.

Nationwide Service
Service and installation support available across the United States.

Superior Product
Custom-engineered, commercial-grade enclosure systems built for demanding environments.

Proven Experience
Over 50 years of combined industry experience delivering reliable patio enclosure solutions.

MOTORIZED INSECT SCREENS

A bug screen is our motorized enclosure carrying insect mesh instead of vinyl: the same housing, the same tracks, the same motor and remote, with a fine PVC-coated polyester mesh that keeps the insects out and the air moving. It is a motorized product only.

Carve American Grille, Barton Creek, Austin TX — motorized insect screens, Perry's Restaurant Group. Photo: Jerreth Morgan, on completion.

Four meshes, one system

The number is the share of sun the mesh blocks. Lower is airier; higher is finer and stops smaller insects.

Mesh	Weave	Weight	Sun blocked	Use it for
Nano 50	17 × 14 / in	5.9 oz/yd²	50%	Most airflow and the clearest view. Mosquitoes.
Nano 55	17 × 17 / in	7.1 oz/yd²	—	Tighter weave, still open.
Nano 60	17 × 20 / in	7.3 oz/yd²	—	Tighter again; more shade with it.
Nano 70	23 × 21 / in	9.8 oz/yd²	70%	No-see-ums. The finest mesh; also cuts glare.

Colors: Black in every mesh; White in Nano 50 and 55.

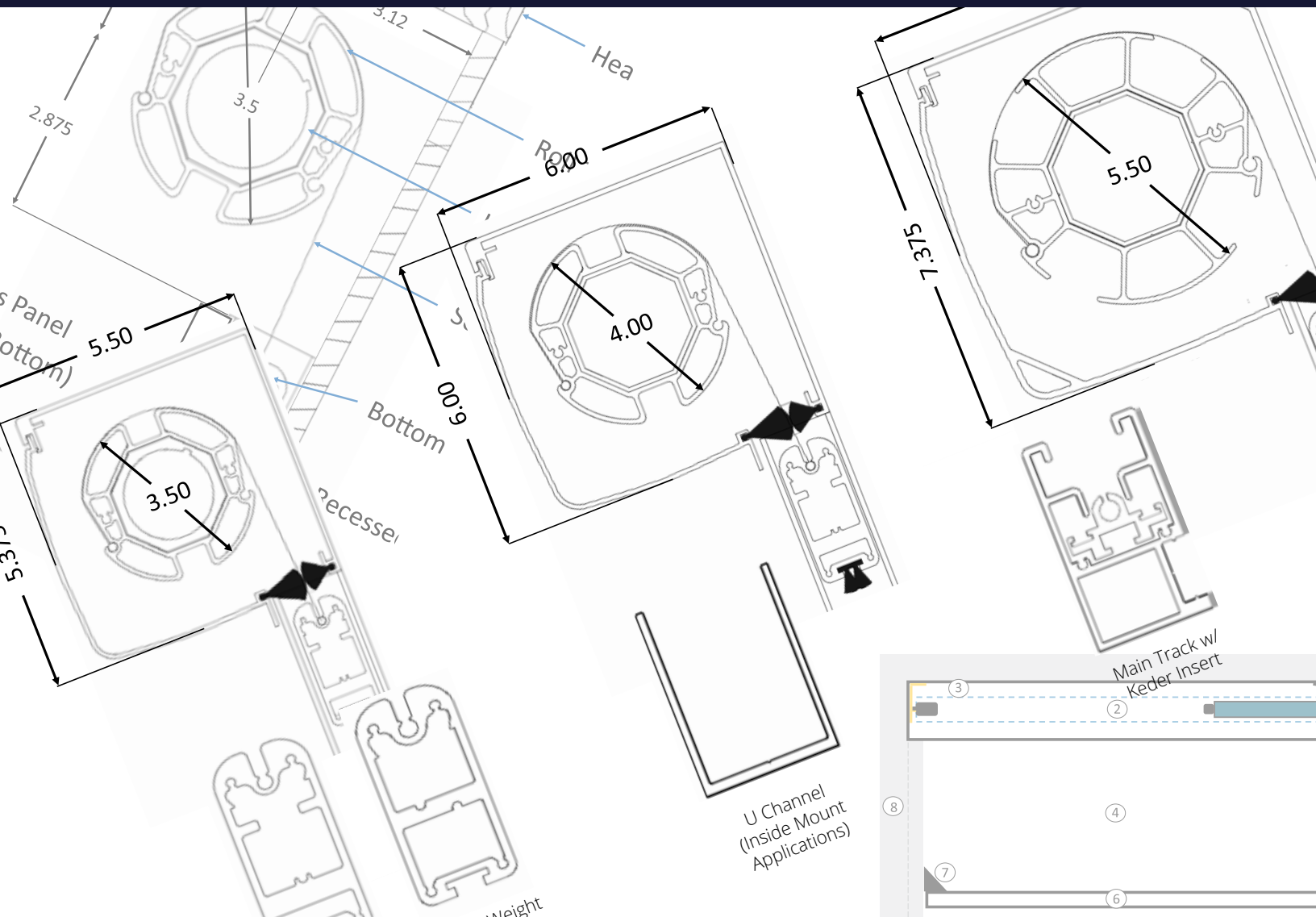
Notes:

- Motorized only. The mesh is too light to roll on a rope-and-pulley system and the ropes wear through it, so we do not offer it that way.
- Any opening the motor unit cannot cover — a triangle over a sloped header, a narrow return — is closed with a fixed mesh panel, priced as a manual panel.
- Bug screen is bug screen only. No clear vinyl window is welded into a mesh panel; an opening that needs a view or a weather seal is its own clear panel.
- Reference: Carve American Grille, Barton Creek, Austin — motorized, above, in service today.
- Same housing series, tracks, motor, remote and electrical as every motorized job. The configuration drawing is the next sheet.
- Same 25′ × 16′ limits as motorized, and the mesh sizes are the larger set: Series 6 240″ × 144″, Series 7 300″ × 192″.
- Borders are solid vinyl and take any of the fifteen vinyl colors.

Southern™ PATIO ENCLOSURES

TECHNICAL APPENDIX

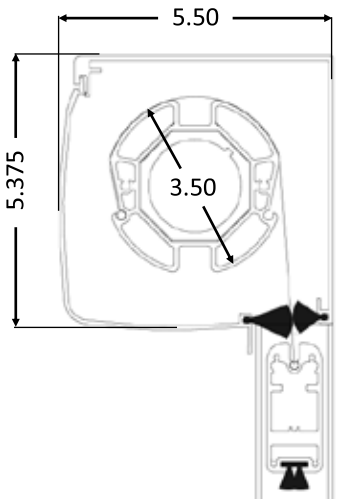
- Manual & Motorized Enclosure Specifications
- Window and Door Specifications
- Color & Sample Charts



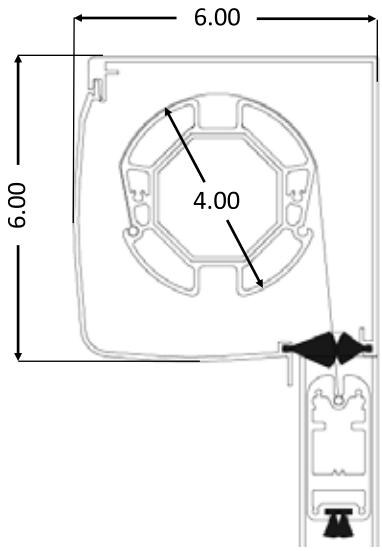
Motorized Enclosures

SYSTEM OVERVIEW

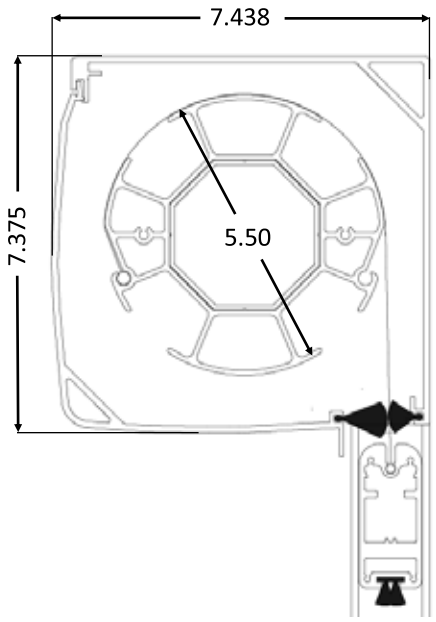
SERIES 5
192″ WIDTH X 120″ HEIGHT

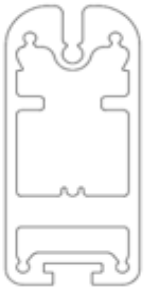


SERIES 6
240″ WIDTH X 144″ HEIGHT

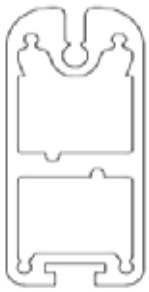


SERIES 7
300″ WIDTH X 192″ HEIGHT

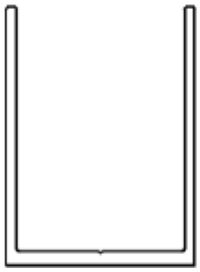




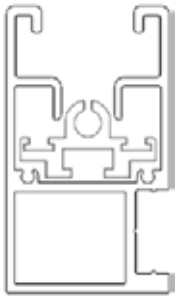
Heavy Duty Bottom Bar



Double Weight Bottom Bar



U Channel (Inside Mount Applications)

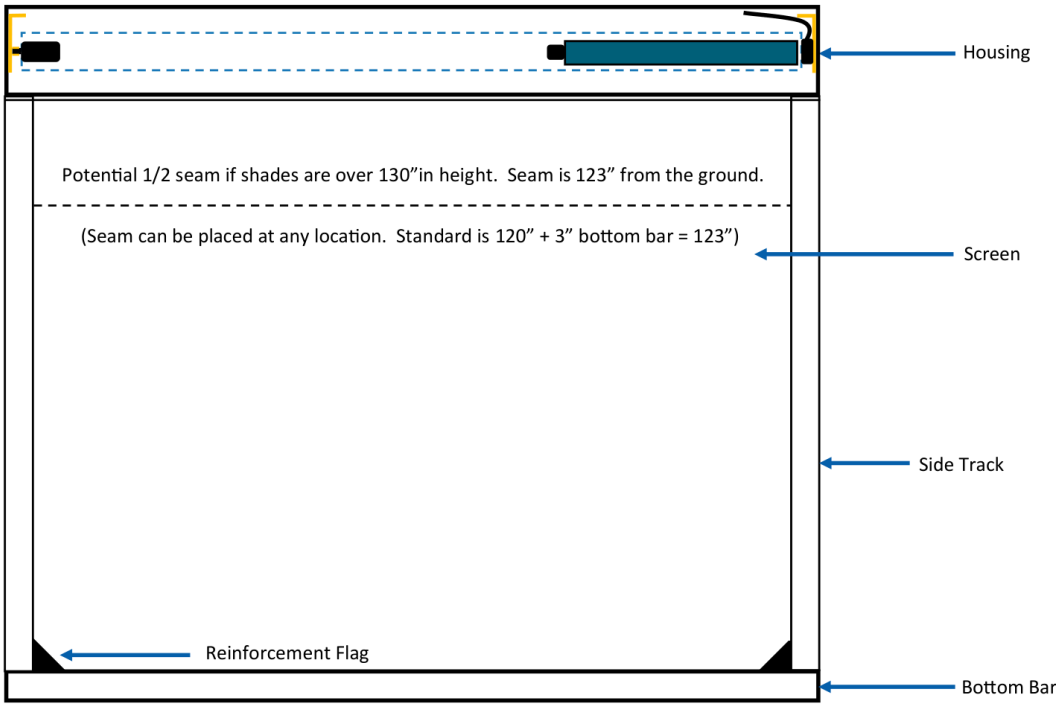


Main Track w/ Keder Insert

Product Features

- ★ Keder retention track system is the strongest on the market.
- ★ All aluminum track insert-no wearing parts.
- ★ Shades were wind tested up to 110 mph.
- ★ Flexible inner track for proper shade deployment.
- ★ Heavy duty weight bar plus a double weight bar for smaller shades.
- ★ 1 1/2″ bottom bar brush.
- ★ Reinforced fabric flag corner for additional strength.
- ★ 3 Housing sizes for shades from 3 ft up to 25 ft in width and up to 16 ft in height.
- ★ Hood and housing brush for self cleaning.
- ★ 8 standard stock colors.
- ★ Stylish hood to match any décor.
- ★ Able to handle sloping patios
- ★ Specializing in clear vinyl windows.

INSECT SCREEN & SUN SHADE CONFIGURATION



Notes:

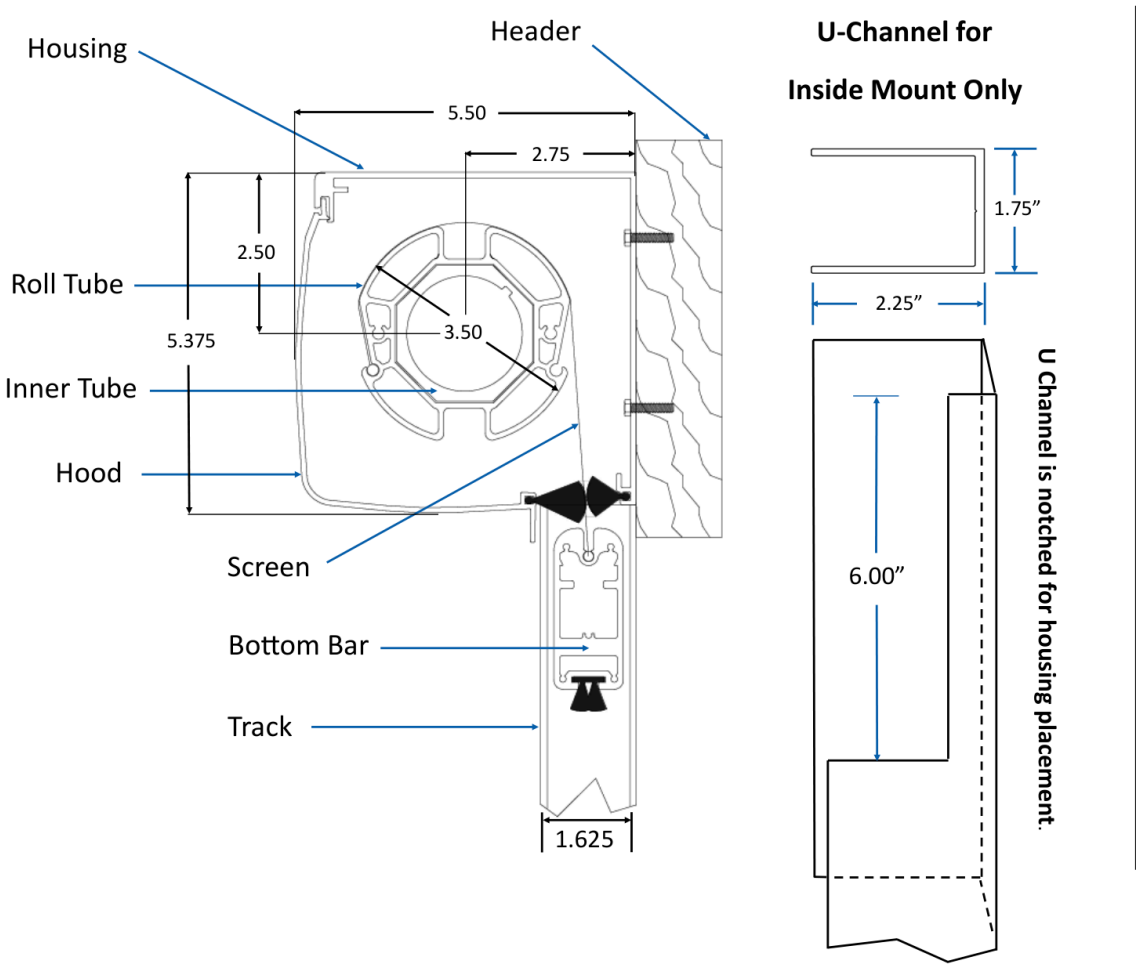
Series	Max Width	Max Height
Series 5	192”	120”
Series 6	240”	144”
Series 7	300”	192”

Seams

- Potential 1/2” seam if the shade is over 130” in height; the seam sits 123” from the ground.
- The seam can be placed at any location. Standard is 120” + 3” bottom bar = 123”.
- Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

SERIES 5 HOUSING

FACE MOUNT (FM)



Notes:

Series 5 – 192” Max Width 120” Max Height

Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

U-Channel – Inside mount

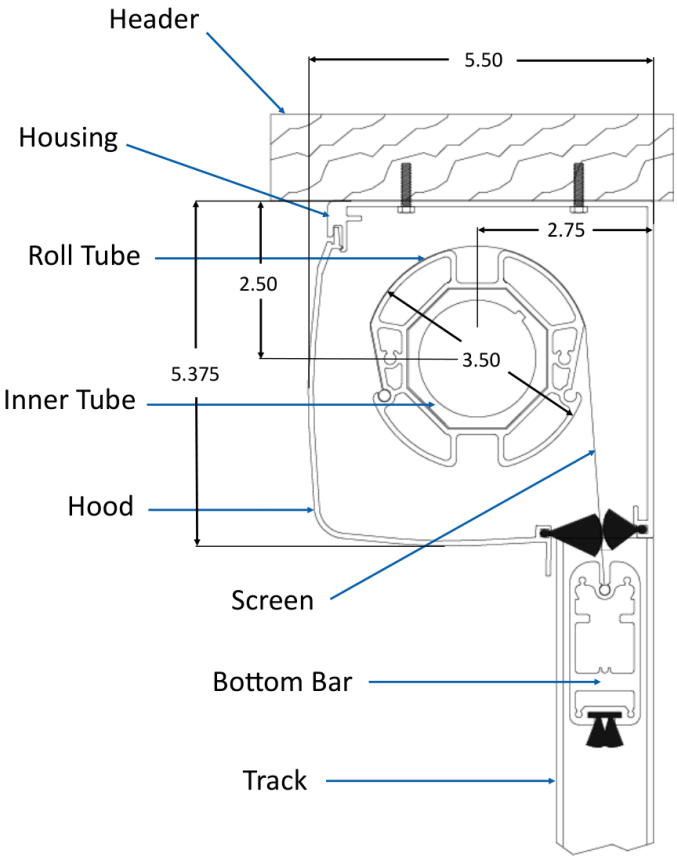
- Each U channel is notched at the factory. The notch is for the housing to sit inside.
- It goes from the bottom of the shade to the top of the housing.
- It allows for uneven surfaces between columns or walls.
- Factory deduction is 1 1/4" from inside mount measurements.
- The U-Channel hides the gap between the housing and wall or column.

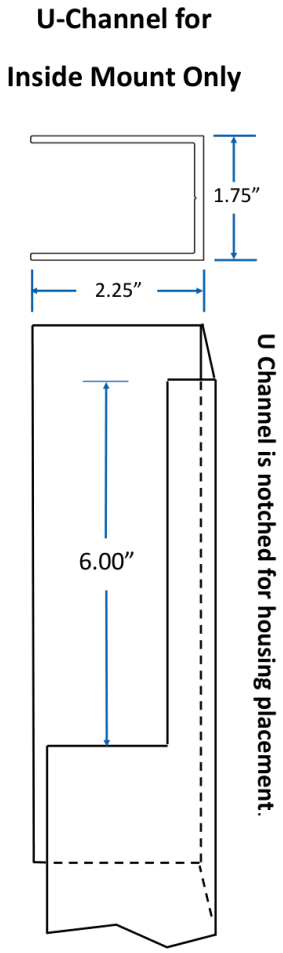
Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

SERIES 5 HOUSING

TOP MOUNT (TM)





Notes:

Series 5 – 192” Max Width 120” Max Height

Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

U-Channel – Inside mount

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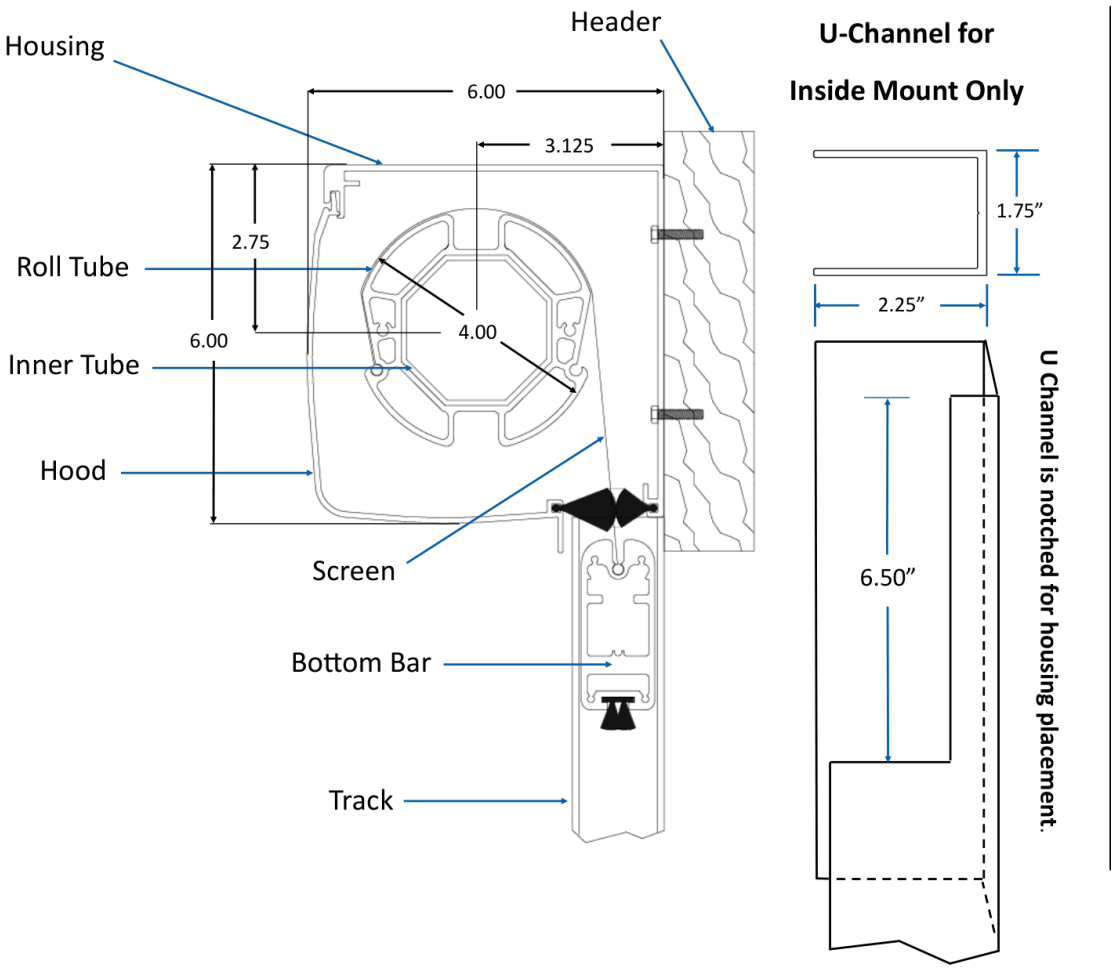
- It goes from the bottom of the shade to the top of the housing.
- It allows for uneven surfaces between columns or walls.
- Factory deduction is 1 1/4" from inside mount measurements.
- The U-Channel hides the gap between the housing and wall or column.

Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

SERIES 6 HOUSING

FACE MOUNT (FM)



Notes:

Series 6 – 240” Max Width 144” Max Height

Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

U-Channel – Inside mount

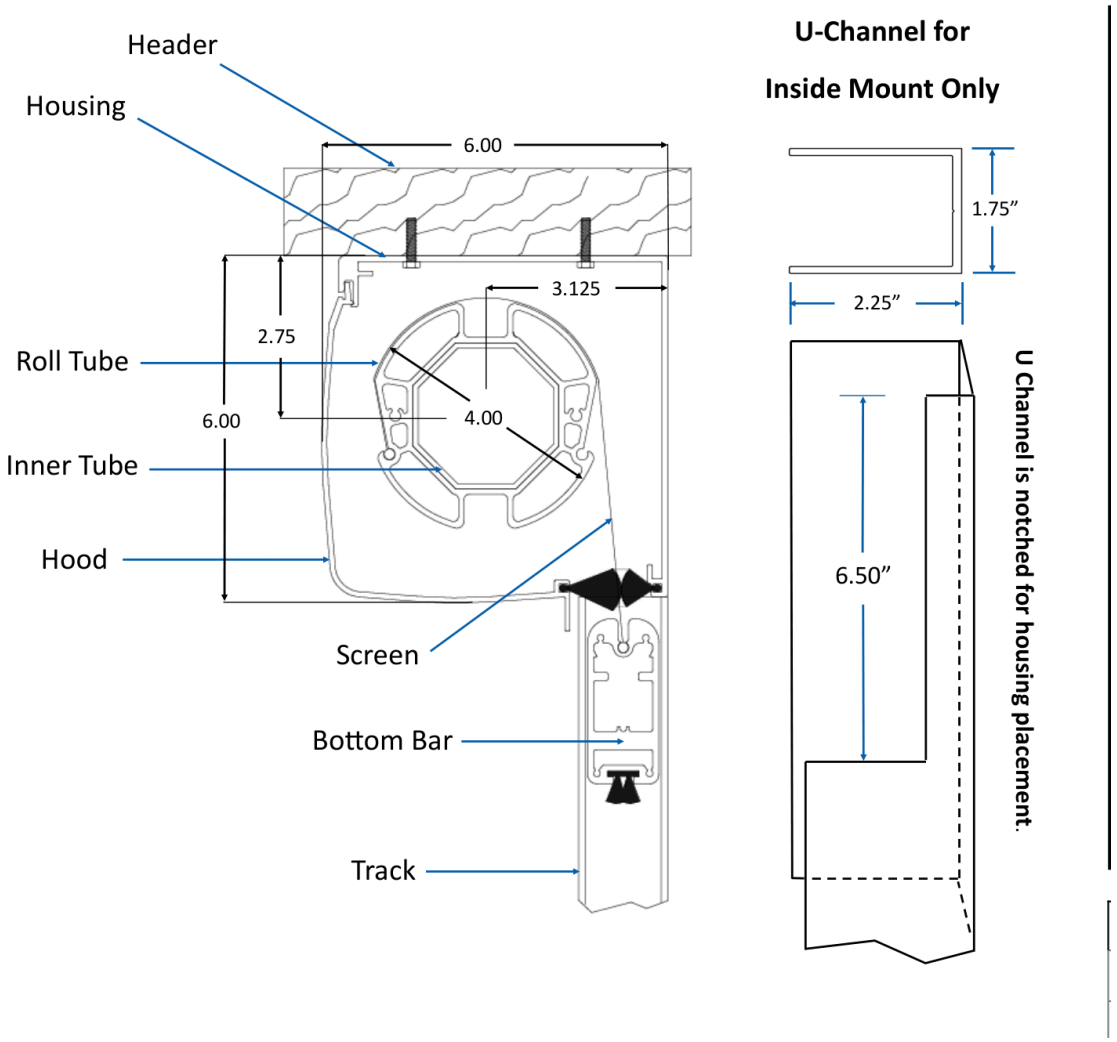
- Each U channel is notched at the factory. The notch is for the housing to sit inside.
- It goes from the bottom of the shade to the top of the housing.
- It allows for uneven surfaces between columns or walls.
- Factory deduction is 1 1/4" from inside mount measurements.
- The U-Channel hides the gap between the housing and wall or column.

Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

SERIES 6 HOUSING

TOP MOUNT (TM)



Notes:

Series 6 – 240” Max Width 144” Max Height

Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

U-Channel – Inside mount

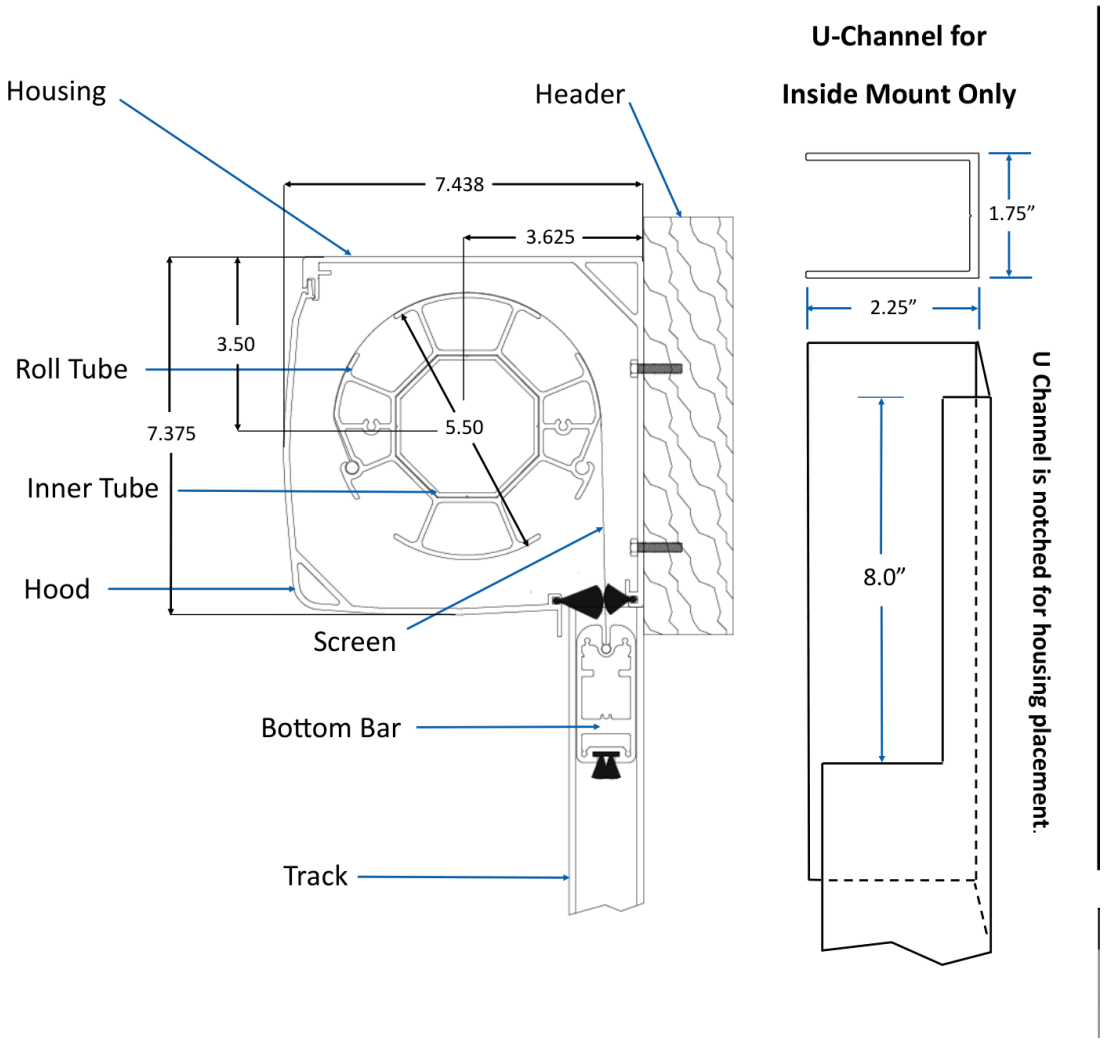
- Each U channel is notched at the factory. The notch is for the housing to sit inside.
- It goes from the bottom of the shade to the top of the housing.
- It allows for uneven surfaces between columns or walls.
- Factory deduction is 1 1/4" from inside mount measurements.
- The U-Channel hides the gap between the housing and wall or column.

Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

SERIES 7 HOUSING

FACE MOUNT (FM)



Notes:

Series 7 – 300” Max Width 192” Max Height

Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

U-Channel – Inside mount

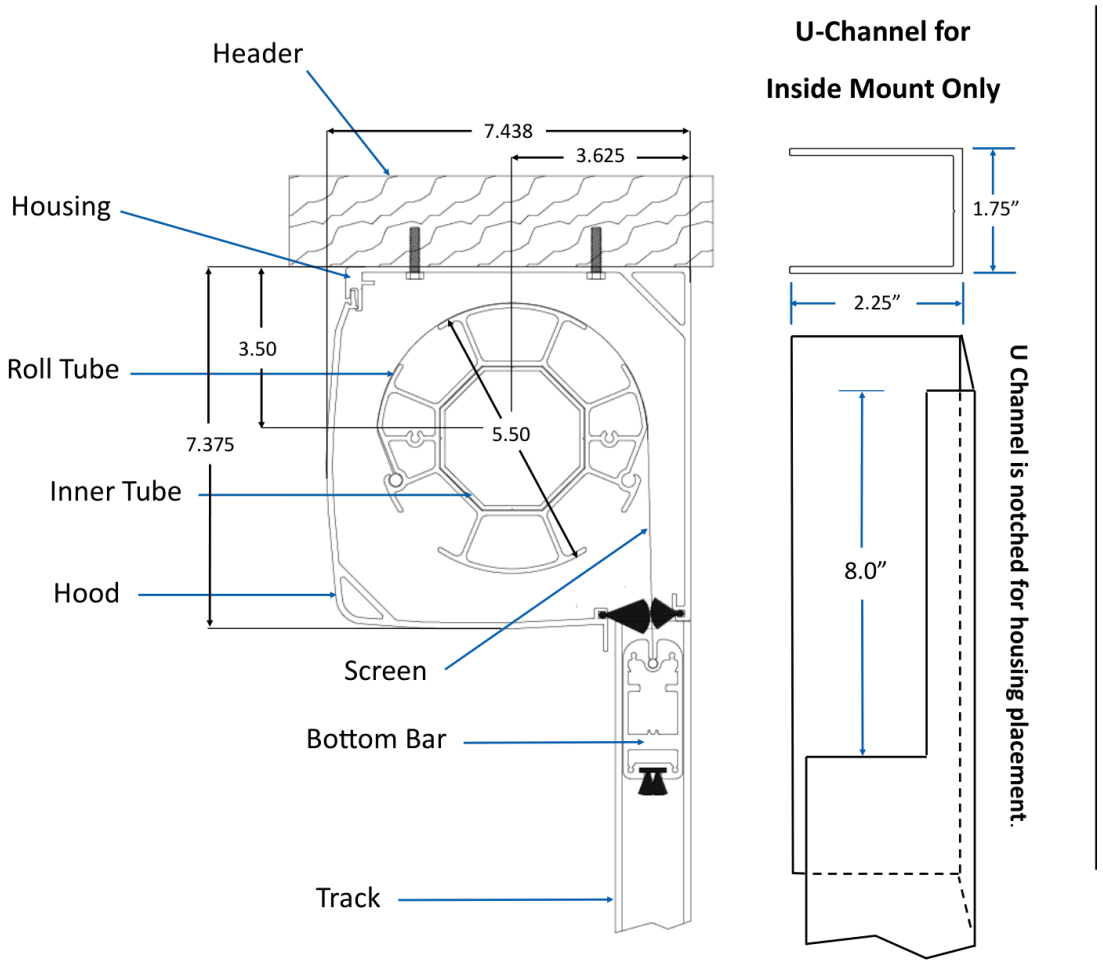
- Each U channel is notched at the factory. The notch is for the housing to sit inside.
- It goes from the bottom of the shade to the top of the housing.
- It allows for uneven surfaces between columns or walls.
- Factory deduction is 1 1/4" from inside mount measurements.
- The U-Channel hides the gap between the housing and wall or column.

Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

SERIES 7 HOUSING

TOP MOUNT (TM)



Notes:

Series 7 – 300” Max Width 192” Max Height

Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

U-Channel – Inside mount

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- It goes from the bottom of the shade to the top of the housing.
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- The U-Channel hides the gap between the housing and wall or column.

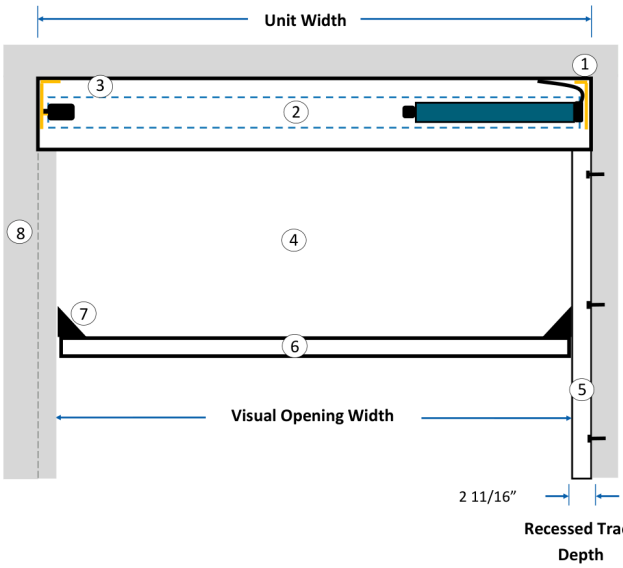
Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

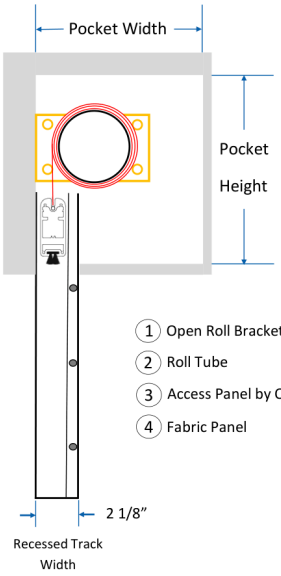
RECESSED TRACK DETAIL

Front View

Unit Width = Visual Opening Width + Recessed Track Depth x 2 (5.375)



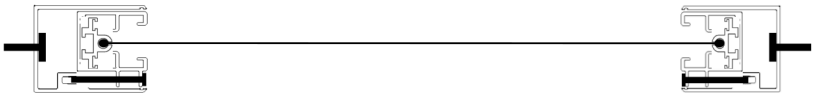
Side View and Pocket Detail



Pocket Size	Width	x	Height
Series 5 (192" x 120")	7"	x	10.5"
Series 6 (240" x 144")	8"	x	11.5"
Series 7 (300" x 192")	10"	x	12.5"

1. Open Roll Bracket
2. Roll Tube
3. Access Panel by Others
4. Fabric Panel
5. Recessed Track
6. Bottom Bar
7. Gusset Flag
8. Column by Others

Side Track Detail



Notes:

Unit width = visual opening width + recessed track depth × 2 (5.375")

Series	Pocket W	Pocket H
Series 5 (192" × 120")	7"	10.5"
Series 6 (240" × 144")	8"	11.5"
Series 7 (300" × 192")	10"	12.5"

Provided by others

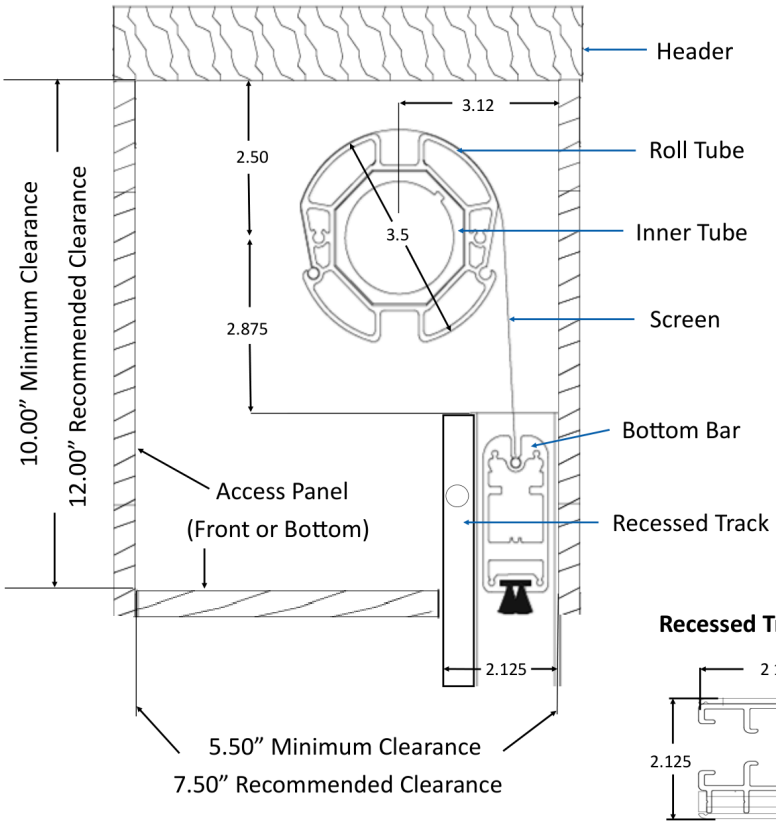
- Pocket, access panel (front or bottom) and columns.
- Recessed track depth 2 11/16", width 2 1/8".
- Minimum clearance 5.50" side and 10.00" height; 7.50" and 12.00" recommended.
- Access panel must remain reachable for service.

Hardware color:

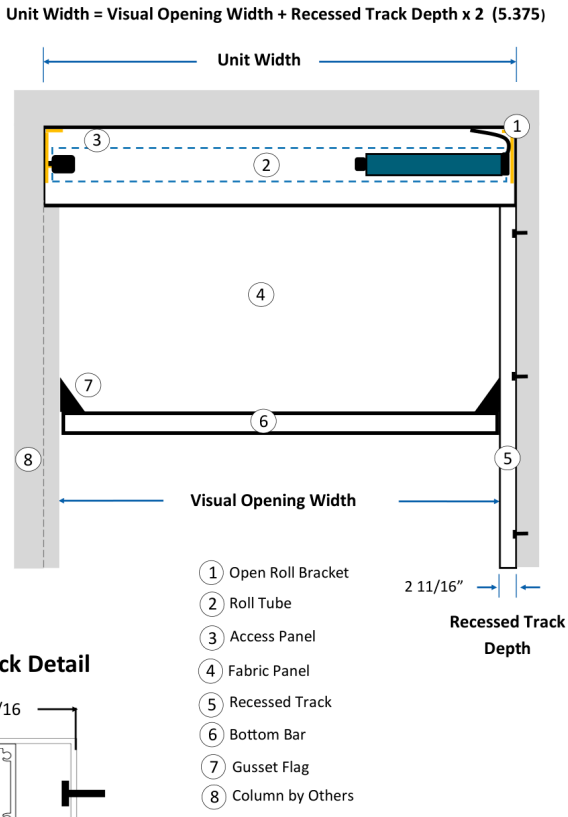
Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

SERIES 5 RECESSED

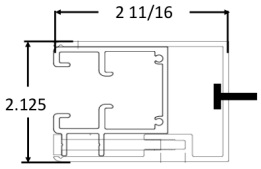
Side View and Pocket Detail



Front View



Recessed Track Detail



Notes:

Series 5 Recessed – 192" Max Width 120" Max Height

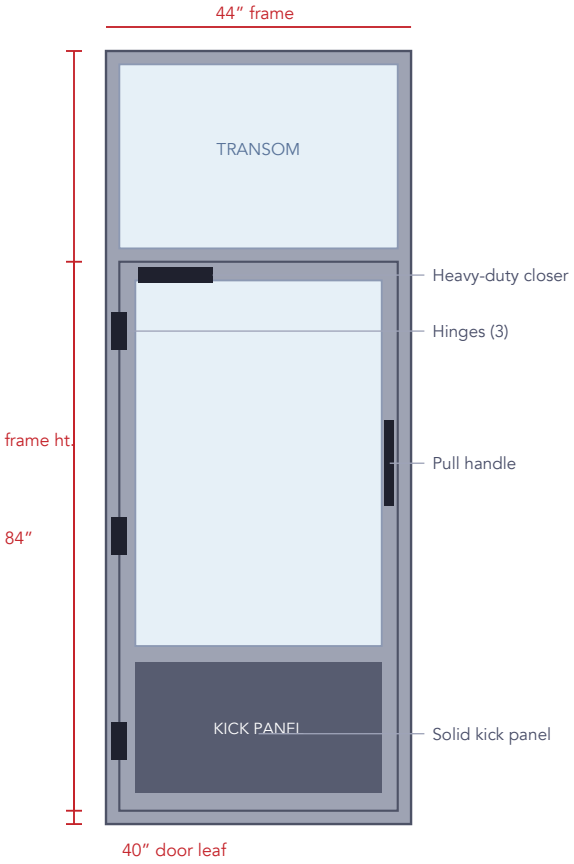
- 10.00" minimum clearance above the opening, 12.00" recommended.
- 5.50" minimum side clearance, 7.50" recommended.
- Access panel may be front or bottom and is provided by others.
- Housing endcaps must be secured properly as they are the load bearing point of the system. On longer units, it is recommended to secure the housing to avoid any rattling noises. When securing the housing, NEVER PLACE FASTENERS IN THE MIDDLE OF THE HOUSING. (TOP OR BACK)

Hardware color:

Housing, tracks and bottom bar are powder-coated aluminum in the hardware color chosen on the quote: White, Black, Bronze, Slate Gray, Sky Gray, Sandstone, Almond, Sierra Tan or Taupe. All three match.

EGRESS DOORS

Welded 2×2 steel frame, powder coated to match the enclosure. Glazed upper, solid kick panel, heavy-duty closer. Sizes below are typical and are confirmed at the design consultation.



Standard specification

- Welded 2×2 steel tube frame, fully welded corners.
- Powder coated (Tiger Drylac) to match the enclosure hardware.
- Glazed upper with a solid kick panel below; full-clear and full-solid are options.
- Heavy-duty commercial door closer, self-closing.
- Three heavy-duty hinges; door stops top and bottom.
- Pull handle outside, push to exit inside. Panic hardware on request.
- Opens outward for egress. Swing and hinge side set at the design consultation.
- Transom above the door is glazed to match, or infilled with enclosure fabric.

Installed

ELECTRICAL SPECIFICATIONS

Simu Type 5 Hz-02 Plus tubular motors, 120V – 60Hz AC. Issued for electrician bidding and installation. Motors are plug-in and are not hardwired.

Motor overview

- Diameter 47 mm (≈ 2.0 in.) — fits standard commercial roller tubes.
- Integrated radio receiver (Simu-Hz, compatible with Somfy RTS).
- Electronic limit setting, set by remote. No hard limit switches required.
- Standard 8 ft motor power cable, 3-conductor, with the antenna in the pigtail.
- SPE installs a standard 3-prong plug on the end of each motor pigtail.
- Built-in electric brake and thermal protection. Continuous run time ≈ 3–5 minutes.
- Approvals: UL Recognized • CSA Approved • FCC Approved • IP44 rated.

The motor we use

Simu Type 5 Hz-02 Plus

Reference 2005137 • 120V – 60Hz AC • 47 mm diameter

440 in-lb	50 Nm	12 rpm	250 W	2.1 A	3–5 min
TORQUE	TORQUE (METRIC)	SPEED	POWER	CURRENT DRAW	CONTINUOUS RUN

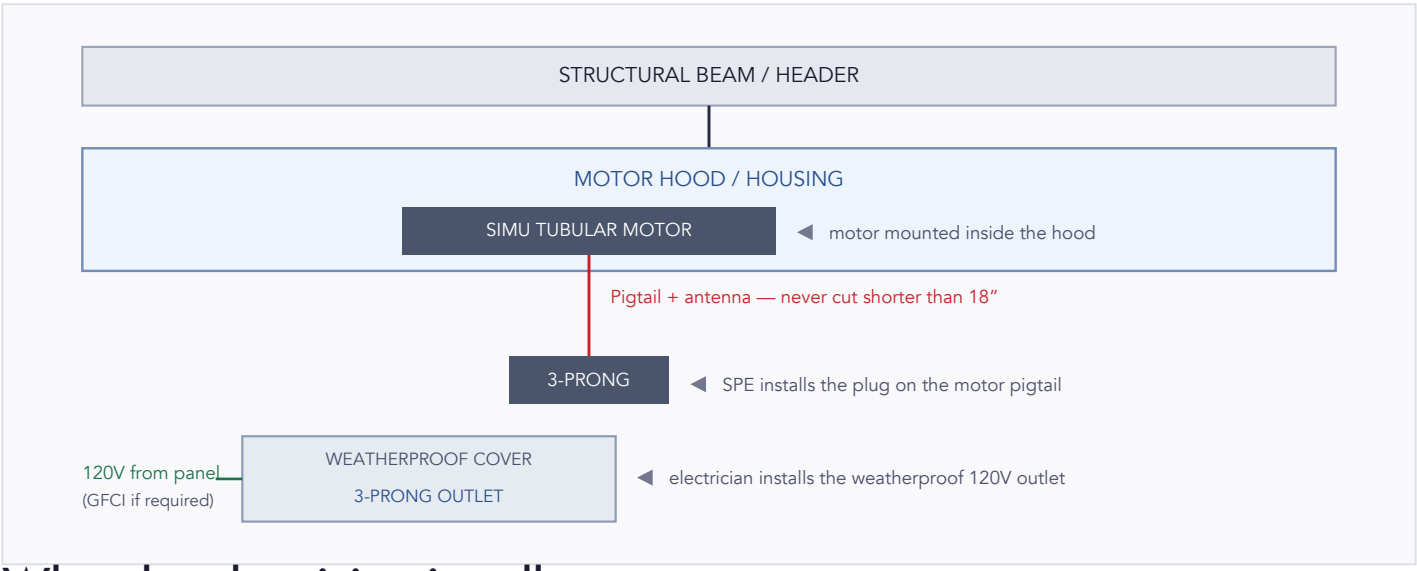
Electronic limit setting, integrated radio receiver, built-in brake and thermal protection. Other torque ratings in the same Simu family are available where a panel calls for it; the final selection is confirmed at engineering.

Typical electrical requirements (for bidding)

Item	Requirement
Power supply	120V AC, 60 Hz, single phase
Outlet	Weatherproof 3-prong receptacle with flip cover near each motor location
Circuit	Dedicated 15A or 20A circuit recommended. GFCI if outdoor or exposed.
Wire	Standard branch circuit wiring to the weatherproof outlet
Per motor load	Up to ≈ 2.1 A / 250 W on the largest models. Most panels draw 1.0–1.6 A.
Control	Wireless radio. No low-voltage control wiring required.
Motor cord	Do not shorten below 18". The antenna is in the pigtail.
Connection	Motor plugs into the weatherproof outlet. No hardwiring required.

ELECTRICAL LOCATION & CONNECTION

The electrician provides a weatherproof 120V outlet near each motor. Southern Patio Enclosures arrives with a 3-prong plug already installed on the motor pigtail and plugs in.



What the electrician installs

In-use cover, cord plugged in

Duplex, individual flip covers

Box with clear bubble cover

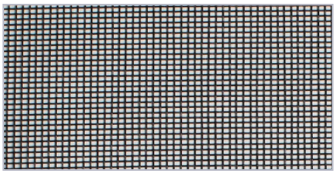
Single outlet, flip cover

Key points

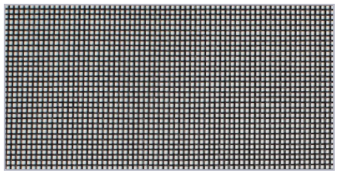
- Motors are NOT hardwired. SPE terminates the pigtail with a standard 3-prong plug.
- The electrician provides a weatherproof 120V 3-prong outlet near each motor location.
- Electric should be mounted above the housing mount location, within 18”.
- The antenna is built into the pigtail. If the cord must be shortened, keep at least 18” of the original pigtail, then add the plug.
- Outdoor and damp locations require GFCI protection per NEC.
- No low-voltage or control wiring is needed. The motors are radio controlled.

MESH SPECIFICATIONS

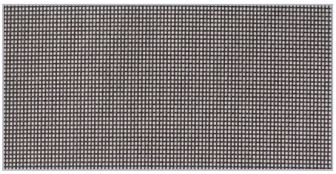
Textilene Nano insect screening by Twitchell. PVC-coated 0.014" polyester core yarn, engineered with antimicrobial agents, UV stable, and rated to last three times longer than fibreglass screen. Values below are Twitchell's published test data.



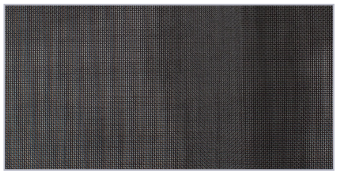
Nano 50
Black or White



Nano 55
Black or White



Nano 60
Black



Nano 70
Black

Published test data

Property (ASTM)	Nano 50	Nano 55	Nano 60	Nano 70
Construction, ends/in (D3775)	17 × 14	17 × 17	17 × 20	23 × 21
Weight, oz/yd² (D3776)	5.9	7.1	7.3	9.8
Thickness, in (D1777)	0.021	0.022	0.022	0.0219
Grab tensile, lbf warp/fill (D5034)	229 / 231	273 / 339	274 / 233	316 / 322
Trapezoidal tear, lbf (D5733)	25 / 43	28 / 26	36 / 33	35 / 30
Sun blocked	50%	—	—	70%
Widths	36–144"	120, 126"	36–126"	36–126"

Shared by all four

Property	Value
Yarn	0.014" vinyl-coated 420 denier polyester core, woven warp and fill
Flammability	California TB 117-2013; Nano 70 also CS 191-53. NFPA 701 on request from Twitchell per job.
Weathering, 1,200 h (G154)	Trace discolouration only
Mildew (G21)	No growth
Abrasion (D3884)	No exposure of core yarn
Compliance	Lead free · REACH · RoHS · Greenguard Gold · Made in USA
Warranty	15-year limited (Twitchell, 2022 sheets)

Hardware color

Housing, tracks and bottom bar are powder-coated aluminum in one of nine colors.