

ENVIRONMENTAL SEPARATION

THERMISER® & THERMISER MAX® INSULATED ROLLING DOORS

MODEL ESD20 & ESD30



Thermiser Insulated Rolling Doors are designed for exterior openings where maintaining different temperatures on each side of the door is desirable. The full perimeter seal of these energy efficient doors also reduces sound transmission compared to non-insulated rolling doors, and most standard Thermiser doors can be manufactured and shipped in one to two weeks.

Thermiser Max Insulated Rolling Doors meet ASHRAE® 90.1, 2012 IECC® and California's Title 24 air infiltration requirements, with an independently tested value of less than .3 CFM/FT². Thermiser Max doors provide a 94% decrease in air infiltration versus standard products.¹ Comprehensive LEED® package is available. Thermiser Max doors can help contribute up to 38 credit points in five LEED categories.



Test results available upon request. 1. Calculated using data from an ASHRAE research report for standard coiling doors. 2. Calculations based on a 12' x 12' door; upgrading from a Standard Service Door to Thermiser Max or upgrading from a Standard Insulated Door to Thermiser Max. 3. Requires Face of Wall mounting configuration.

Thermiser & Thermiser Max doors pay for themselves based on model and climatic zone.²



Zone	Annual Savings	Payback Years
1	\$972	2.0
2	\$775	2.6
3	\$593	3.3
4	\$488	4.1

Thermiser Max compared to a Standard Service Door

Zone	Annual Savings	Payback Years
1	\$413	1.0
2	\$329	1.2
3	\$252	1.6
4	\$207	2.0

Thermiser Max compared to a Standard Insulated Door

BENEFITS

- + California's Title 24 as well as ASHRAE 90.1³ and IECC 2012 Air Infiltration compliance achievable with Thermiser Max
- + Climate control and security
- + Durable and sustainable
- + Little or no maintenance
- + Low life cycle cost

APPLICATIONS

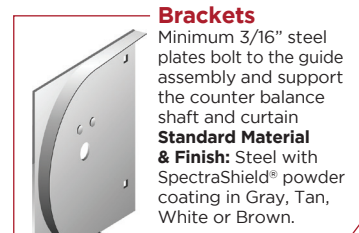
- + Distribution
- + Education
- + Healthcare
- + Hospitality/Public Space
- + Industrial
- + Retail

OPTIONS

- + 1 or 2 way vision windows
- + Custom graphics on door
- + Cylinder or slide bolt locking
- + Entrapment protection
- + Motor operation
- + Powder coat finish
- + Project specific wind load

CORNELL
Innovative door solutions.™

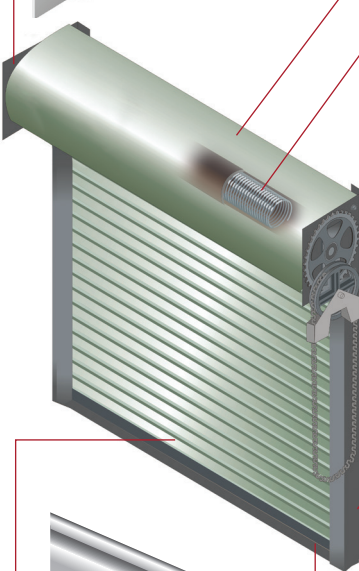
COMPONENTS



Brackets
Minimum 3/16" steel plates bolt to the guide assembly and support the counter balance shaft and curtain
Standard Material & Finish: Steel with SpectraShield® powder coating in Gray, Tan, White or Brown.



Hood
Protective sheet metal enclosure for the curtain that provides weather resistance at the head of the door and keeps the brackets rigid
Standard Material and Finish: Galvanized steel with exclusive GalvaNex™ finish in Gray, Tan, White or Brown.
Optional Material: Aluminum, Stainless steel

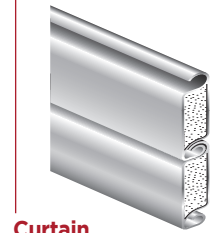


Counterbalance Shaft
4 1/2" minimum diameter outer shaft and 1 1/4" minimum inner shaft. This assembly supports the curtain and contains counterbalance torsion springs for assisting operation.
Standard Material: Steel

Operation
Hand chain, hand crank and motors are available. Doors operate by rotating the shaft gear end. The opposite end of the shaft applies spring tension and is equipped with a spring adjusting wheel.

Guides
Minimum 3/16" angle assemblies bolt to the wall and support the entire weight of the door
Standard Material & Finish: Steel with SpectraShield powder coating in Gray, Tan, White or Brown.
Optional Material: Stainless steel or Aluminum angles

Thermiser Max system includes a thermally broken guide assembly and lintel seal (patent pending).



Bottom Bar
Insulated, extruded aluminum bottom bar profile mates with curtain face slat extending insulation to the floor. Equipped with perimeter weather seal. Lock mechanisms available.
Standard Material & Finish: Mill finish extruded aluminum
Optional Materials: Steel or Stainless steel angles

Curtain
Double skin interlocking roll formed metal slats filled with 7/8" thick closed cell pressure foamed in place urethane insulation. Flame Spread Index of 0 and a Smoke Developed Index of 10 as tested per ASTM E84. Curtain assembly materials meet the foam plastic insulation requirements of the 2012 IBC®, section 2603. Insulating process is CFC-free with an Ozone Depletion Potential (ODP) rating of 0. The slat has an R-value of 8.0 as calculated using the ASHRAE Handbook of Fundamentals. Nylon endlocks are riveted to ends of alternate slats to maintain slat alignment, prevent wear and eliminate metal to metal contact between curtain edge and guides to provide smooth, quiet operation. **Exterior skin available in:** 24, 22, 20 and 18 ga. galvanized steel with exclusive GalvaNex or SpectraShield finish; 22 ga. stainless steel, #4 finish; 18 ga. aluminum in mill, clear or color anodized. **Interior skin available in:** 24 ga. galvanized steel with exclusive GalvaNex or SpectraShield finish, 22 ga. available with 22 ga. exterior skin; 22 ga. stainless steel, #4 finish; 18 ga. aluminum in mill, clear or color anodized. **Standard Material & Finish:** Galvanized steel with exclusive GalvaNex finish in Gray, Tan, White or Brown. **Optional Materials:** Aluminum, Stainless steel

SOUND TRANSMISSION CONTROL

A Thermiser can reduce transmission of sound compared to non-insulated rolling doors. Hospitals, schools and universities are just some examples of applications where Thermisers are used for decreasing sound transmission. The Sound Transmission Class (STC) rating is up to 30 for the curtain and up to 22 for the entire assembly, as tested per ASTM E90, based on testing a complete, operable assembly. STC 32 Superimposed/double insulated curtain assemblies (also available) are tested per ASTM E90, based on testing a complete, operable assembly.

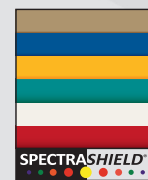
SPECIAL APPLICATIONS

- + **California's Title 24, ASHRAE 90.1 and IECC 2012 Compliance:** Achievable utilizing Thermiser Max/ESD30
- + **Specified Wind Load:** Doors can be configured to withstand the full range of specific wind load requirements. Performance validated through third party testing
- + **High Cycle Construction:** For doors expected to operate more than 20 cycles/day
- + **Combination Doors:** Combine two different curtains on the same opening. Typically a Thermiser insulated door is used in conjunction with either a ScreenGuard™ door or an open design rolling grille to provide ventilation
- + **Sloping or Irregular Sills:** Special bottom bar designs can meet odd floor conditions including slopes, curbs or rails
- + **Pass Doors:** Hollow metal man door and hinged frame available within a Thermiser curtain
- + **Removable Guide Mullions:** For wide openings requiring full access on a limited basis

OPTIONAL FINISHES

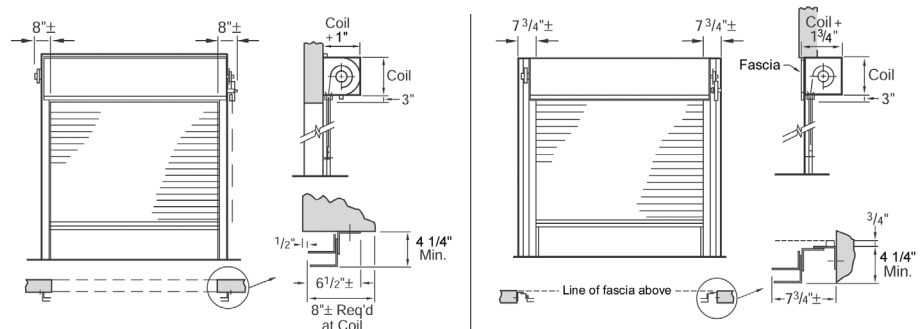
- + Aluminum in mill, clear or color anodized
- + Stainless steel, 300 series #4 finish
- + Hot-dip galvanizing on steel components
- + Powder coat finish in selected color
- + Zinc Rich Gray corrosion resistant powder coating

SPECTRASHIELD® POWDER COAT FINISH



Cornell's SpectraShield Powder Coat Finish in a choice of over 180 colors adds durability and aesthetic value. Surface preparation and coating process produces a smooth, lasting finish at controlled costs.

MOUNTING & CLEARANCES



Face of Wall
Maintains clearance of full opening, minimal exposed components

Between Jamb
Mounts within the opening, fascia (front hood closure piece) required

Thermiser doors are available to 30' W x 30' H standard construction. Large openings, consult factory.

CORNELL

Innovative door solutions.™

CornellCookson, Inc.
24 Elmwood Avenue, Mountain Top, PA 18707
TEL 800.233.8366 • FAX 800.526.0841
Architectural Design Support: Ext. 4551
Website: www.cornelliron.com
Email: ADS@cornelliron.com

An ISO 9001:2008 Registered Company

12718 E Indiana Ave
Spokane, WA 99216
(509) 921-2260 • (509) 921-509 Fax
www.continentaldoorco.com

