

ENVIRONMENTAL SEPARATION

THERMISER MAX[®] INSULATED ROLLING DOORS

MODEL ESD30

Thermiser Max[®] Insulated Rolling Doors meet 2012 IECC[®] Air Infiltration requirements with an independently tested value of less than 1.0 CFM/FT².

The exclusive patent pending sealing system, thermally broken guide construction and insulated curtains (with foamed in place insulation) minimize air infiltration and thermal transference through openings.

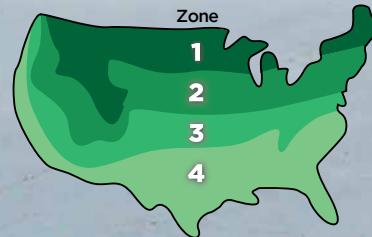
Thermiser Max is intended for use in exterior openings where maintaining environmental separation on each side of the door is necessary and/or desirable.

Post-industrial and pre-consumer recycled content values and LEED[®] credits are available for each door. Thermiser Max components are also easily recyclable.



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

Thermiser Max doors pay for themselves based on model and climatic zone.¹



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

BENEFITS

- + 85% decrease in air infiltration as compared to standard products²
- + IECC 2012 compliant
- + LEED credits available
- + Low life cycle cost
- + Size flexibility: Built to order
- + Substantiated energy savings

APPLICATIONS

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

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
SAFE AND SECURE

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 Cornell gray, tan or white

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 light gray, tan or white
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 Cornell gray, tan or white
Optional Material: Stainless steel or Aluminum angles

Thermiser Max features 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 light gray, tan or white
Optional Materials: Aluminum, Stainless steel

SOUND TRANSMISSION CONTROL

The full perimeter seal of these energy efficient doors reduces sound transmission by 37% compared to non-insulated rolling doors. Hospitals, schools and universities are examples of applications where Thermiser Max can be used for decreasing sound transmission. The Sound Transmission Class (STC) rating for Thermiser Max is 27, as tested per ASTM E90, based on testing a complete, operable door assembly. STC 32 Superimposed/double insulated curtain assemblies (also available) are tested per ASTM E90, based on testing a complete, operable door assembly.

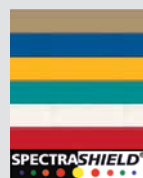
SPECIAL APPLICATIONS

- + **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 Max insulated door is used in conjunction with either a ScreenGard™ 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.

OPTIONAL FINISHES

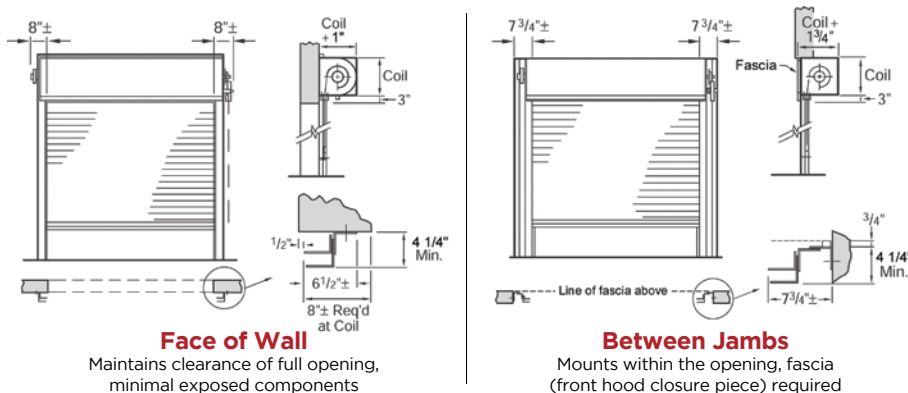
- + Aluminum in mill, clear or color anodized
- + Stainless steel, 300 series #4 finish
- + Hot-dip galvanizing on steel components
- + Powder coat finish in selected color
- + Zinc Rich Gray corrosion resistant powder coating

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



Thermiser doors are available to 30' W x 30' H standard construction. Large openings to 38' W, 40' H, consult factory.

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