Product Data Sheet

Steel Ranger™ 9000 LH

Coiling Low-Headroom High-Performance Door with Insulated Curtain Slats





Features



The Steel Ranger™ High speed, low headroom doors save clearance space while offering the same quality and speed of our conventionally sized products.

- Space saving headroom design for low clearance applications. Springless operation, standard.
- Decotherm® Polyurethane insulated slats for reduced energy transfer.
- Fast operation, with speeds up to 45"/sec. open, 30"/sec. close.
- Exclusive foamed anti-abrasion technology considerably reduces wear and noise.
- Compact and durable extruded aluminum guide tracks.

- Integral non-contact light grid entrapment protection feature.
- Emergency operation via chain hoist.
- 4-1/4" x 5/8" insulated slats with R-8.0 U-4.1 thermal performance.
- Optional slats with double-pane Duratec® synthetic window elements.
- 5 & 2 year warranty protection plan. 5 yrs. motor/gearbox and slats. 2 yrs. other mech./elec., 500,000 cycles.

Technical Data				Remark
Steel Ranger™ 9000 LH Rigid, high performance rolling shutter-type door. Ideal for low headroom clearance applications.		Specify High Performance Doors in Section 08 33 30.13 'Overhead Rapid Coiling Doors' Find CSI format documents available at MasterSpec®, SpecLink, and Hormann.us®		
Application		Exterior or Interior		
Speed		Opening	Closing	Variable speed based on opening height
		up to 45"/sec.	Up to 30"/sec.	
Control Box		Smart Start™ NXT (11-%"W x 15-¾"H x 8-½"D)		Standard, NEMA Type 4X rated
Roll-up Technology		Hollow-core steel roll tube with precision-welded axles		Standard
Door Construction	Size Range	21'-4" Wide up-to 9'-1" High		Min. Width = $3'-5$ " Min. Height = $5'-0$ "
	Guide Track Profile	3-5/8"+ (3/4" light grid) x 2-3/4"		C-T Profile Shape (W x D)
	Roll Tube Diameter	6-1/4"		Hollow core
	Solid Slat Profile	4-¼" Tall x 5%" Thick		Concentrical shape
	Vision Slat Profile	4-¼" Tall x %" Thick		Concentrical shape
High Speed - Rolling Shutter	Overall Width of Vision Area on Slat	Either 7 portals, spaced or varying number of portals up-to within 2" of t	spaced at 16-½" on center	Portal size 6-1/4" x 2-1/6" Grouping is centered on width of the slat
Required Headroom		HR = 19" minimum		With Hood Enclosure HR = 21-1/4"
Drive Mechanism		Direct-drive operator		
Counterbalance System		Not required		
Braking		Control box activated 24V DC brake		Anti-fall back
Cycleability / Maintenance		High / inspect per ea. 50,000 cycles or 6 mo. Windows replacable independent of solid slats		Consult factory for details
Safety Features		Built-in light grid, chain hoist open/close		
Maximum Wind Load per Door Width		Up-to 21'-4", Wind Load Class 4 (9.4 psf or 60 mph) Up-to 18'-1", Wind Load Class 3 (14.5 psf or 75 mph) Up-to 15'-7", Wind Load Class 2 (21 psf or 91 mph)		Per standard EN 12424, DASMA 108 Exposure B (Window profiles reduce the resistance to wind loads)
Fire Behavior		Class E		Per EN 13501-1
Manufacturer Warranty		5 & 2 years. Motor/gearbox and Panels (5), all other mech./elec. (2)		Standard

Hörmann Flexon, LLC Ver. 6.1 1-2

Product Data Sheet (Continued)

Steel Ranger™ 9000 LH

Coiling Low-Headroom High-Performance Door with Insulated Curtain Slats

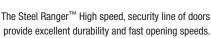


Materials and Finishes		
Guide Tracks (light grid mounted externally)	2 mm (avg) extruded aluminum	-1
Door Header, Roll Tube, Bearing Brackets	10-ga. Hot-dipped galvanized steel	Zinc, Class G90
Weather Seals	Vinyl brush lintel	Optional vinyl brush at side frames
Door Slats with Window Elements	Decotherm® 0.34 mm Hot-dipped galvanized steel, with foamed-in-place polyurethane insulation core. MicroGrain™ texture. Color RAL 9006. Window Polycarbonate, Clear w. Duratec® coating	Zinc, Class G40 (0.4 oz. per SF) Polyurethane foam density 2.0 pcf (33 kg/m³)
Solid Door Slats	Decotherm® 0.34 mm Hot-dipped galvanized steel, with foamed-in-place polyurethane insulation core. MicroGrain™ texture. Color RAL 9006	Zinc, Class G40 (0.4 oz. per SF) Polyurethane foam density 2.0 pcf (33 kg/m³)
Door Slats with Ventilation Elements	Decotherm® 0.34 mm Hot-dipped galvanized steel, with foamed-in-place polyurethane insulation core. MicroGrain™ texture. Color RAL 9006. Slotted Portal Black ABS	Open area per Portal = 4.18 Square Inches Zinc, Class G40 (0.4 oz. per SF) Polyurethane foam density 2.0 pcf (33 kg/m³)
Electric Door Operator	Cast aluminum	
Control Panel	Stainless steel, or baked-on polyester powder coat painted. Color RAL 7035 Light Gray	
Hood and Motor Cover	20-ga. Hot-dipped galvanized steel	Zinc, Class G90 (0.9 oz. per SF)
Energy Analysis		
Air Permeability	Class 0	Per EN 12426, ASTM E283 (Without Visions)
Water Tightness	Class 0	Per EN 12425 (Without Visions)
Visible Transmittance (Tvis)	0.86%	Window elements only
Solar Heat Gain Coefficient (SHGC)	0.83%	Window elements only
Thermal Resistance (R-value) Slat only	8.0 (ft² x°F x hr)/BTU or 1.41 (m² x K)/W	Calc. per DASMA TDS 163 (Without Visions)
Heat Transfer Coefficient (U-value) Assembly	4.1 W/(m ² x K) or 0.72 BTU/(hr x ft ² x°F)	Test per EN 12428 (Without Visions)
Acoustic Insulation	R _w 18 dB (STC 21 dB)	Per EN ISO 717-7 (Without Visions)
LEED Credit	MRc2, MRc4, EQc5	USGBC® LEED v4
Electrical		
Electric Door Operator (Motor)	2.0 HP GfA Elektromaten F18	NEMA Type 3 / IP54
Operating Voltage (Motor)	3 PH, 132v or 230v	From Control Box to Motor
Control Box	5 KW variable frequency drive rated for operating voltage	Enclosure: NEMA Type 4X / IP66, UL/CUL Listed
Standard Power Requirement (to Control Box)	230 vAC, 1 PH or 208vAC*- 480 vAC - 600vAC*, 3 PH, 60 Hz	*Transformer may be req'd. Consult Factory
Full Load Amps	13.3 A	Operator
Disconnect	Fuse: 20 Amp, Class K	Supplied by Others

The Steel Ranger™ 9000 LH is a class above traditional rolling steel doors. With a windload rating up to 91 mph, a direct-drive motor/operator, and springless compact tracks, extremely strong panel and fast operating speeds, this revolutionary high performance coiling steel door is the model to choose as an upgrade to traditional steel doors in low headroom clearance, high cycle applications. Our springless design has few moving parts, which translates into maintenance free operation. Decotherm® steel panels are strong and durable, with a special layered finish that can perform in tough environments and resist damage. The inline light grid is a standard feature for our low profile tracks.









DASMA. SILDA USGBC



Hörmann Flexon, LLC | Starpointe Business Park | 117 Starpointe Boulevard | Burgettstown, PA 15021-9506 1-800-365-3667 | 724-385-9150 | Fax: 724-385-9151 | www.hormann.us | Email: sales2@hormann.us

