SECTIONAL STEEL DOOR SYSTEMS

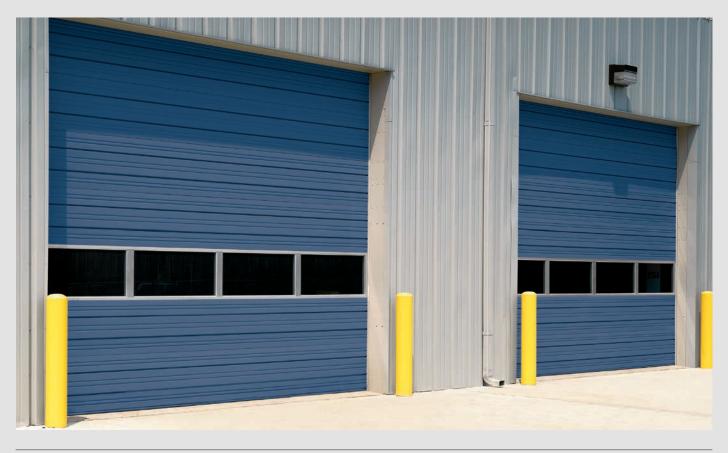
MODELS 416/420/424/430 NON-INSULATED DOORS PRODUCT LINE 418/422/426/432 **INSULATED DOORS** 3

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INDUSTRY LEADING COMMERCIAL & INDUSTRIAL SOLUTIONS



General features and benefits

Solidly constructed for reliable performance

- 16, 20, or 24-gauge steel door panels result in a solidly constructed door for years of dependable service
- Standard steel doors available in sizes up to 32'2" (9804 mm) in width and 24'1" (7341 mm) in height
- Insulated steel doors available in up to 32'2" (9804 mm) in width and 24'1" (7341 mm) in height
- Heavy-duty track and hardware are fabricated of high-quality galvanized steel and engineered for precise, trouble-free performance
- Flexible PVC bottom weatherseal with retainer lessens conductivity of heat and cold, minimizes air and water penetration and accommodates irregular floor conditions
- Option of insulated steel doors provides enhanced thermal efficiency and R-values* of 7.35 (1.29 K m²/W)
- Baked-on, polyester paint finish eliminates field painting and provides long-lasting protection against the elements
- Superior panel strength and well-engineered track design meets wind load requirements and codes

Specialized options for customized solutions

- Full-section or individual-panel glazing satisfies requirements for external light and visitor identification
- Higher-cycle springs in optional 25k, 50k, 75k or 100k-cycles promote long-life in high-usage applications
- Optional steel strutting provides reinforcement for structural integrity on wider doors
- Other options include: electric and chain hoist operation, aluminum sash sections with choice of DSB, acrylic, polycarbonate, tempered, or wire glazing, as well as movable center posts, 3" (76 mm) track, jamb seals
- Impact bottom section available for doors exposed to damage from fork lifts and other warehouse traffic

^{*} R-value is a measure of thermal efficiency. The higher the R-value the greater the insulating properties of the door. Overhead Door Corporation uses a calculated door curtain R-value for our insulated doors.

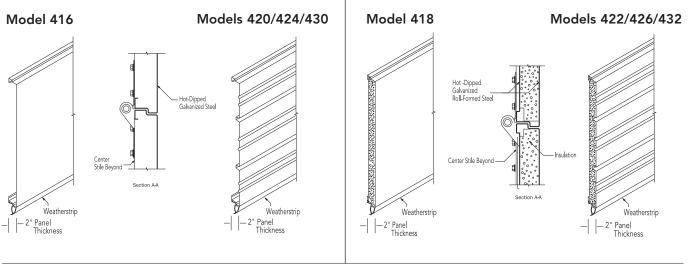
MODELS 416/420/424/430/418/422/426/432

Panel options

| Ribbed panel | | Flush panel |
|--------------|----|-------------|
| | L] | |

Steel door panel detail

Insulated steel door panel detail



Glazing options

All models:



Aluminum Sash Section with DSB glazing

Available only on 418, 422, 430, 432:

Available only on 424, 426, 430, 432:



Insulated DSB (24"x 7")

Color options

All models:



White

Industrial Brown

Actual colors may vary from these shown due to fluctuations in the printing process. Ask your Overhead Door™ Distributor for color samples.

MODELS 418/422/426/432

| General specifications for INSULATED SECTIONAL STEEL | | | | | | |
|--|-----------------------------|---|--|--|--|--|
| | Extra heavy duty | Heavy | Heavy duty | | | |
| Model | 418 | 422 | 422 426 | | | |
| Nominal thickness | 2" (51 mm) | 2" (51 mm) | 2" (51 mm) | 2" (51 mm) | | |
| Maximum standard width | 30'2" (9195 mm) | 29'2" (8890 mm) | 28'2" (8585 mm) | 20'2" (6147 mm) | | |
| Maximum standard height | 21'1" (6426 mm) | 24'1" (7341 mm) | 24'1" (7341 mm) | 16'1" (4902 mm) | | |
| Exterior steel | 16-gauge galvanized steel | d steel 20-gauge galvanized steel 24-gauge galvani | | Nominal24-gauge galvanized steel | | |
| Back cover | 26-gauge galvanized steel | 26-gauge galvanized steel | 26-gauge galvanized steel | Polybonded laminate | | |
| Exterior surface | Flush | Ribbed | Ribbed | Ribbed | | |
| Exterior finish color | White baked-on polyester | White baked-on polyester | Industrial Brown and White baked-on polyester | Industrial Brown and White baked-on polyester | | |
| R-value* | 7.35 (1.29 K m²/W) | 7.35 (1.29 K m²/W) | 7.35 (1.29 K m²/W) | 7.35 (1.29 K m²/W) | | |
| End stiles | 16-gauge galvanized steel | 16-gauge galvanized steel | 16-gauge galvanized steel | 16-gauge galvanized steel | | |
| Intermediate stiles | 16-gauge galvanized steel | 16-gauge galvanized steel | 16-gauge galvanized steel | 16-gauge galvanized steel | | |
| Lock | Interior-mounted slide lock | Interior-mounted slide lock Interior-mounted slide lock | | Interior-mounted slide lock | | |
| Available options for INSULATED SECTIONAL STEEL | | | | | | |

| Electric operator | • | ٠ | • | • |
|--|---|---|---|---|
| Bottom sensing edge | • | • | • | • |
| Chain hoist | • | • | • | • |
| Pull-rope auto release | • | • | • | • |
| Full sash section (glazing options) 1/8" (3mm) DSB | • | ٠ | • | • |
| 1/8" (3mm) insulated | • | • | • | • |
| 1/8" (3mm) & 1/4" (6mm) acrylic | • | • | • | • |
| Individual lites (glazing options) 1/2" (13mm) insulated DSB | • | • | • | • |
| 3" (76 mm) track | • | ٠ | • | • |
| Bracket mounting | • | • | • | • |
| Higher-cycle springs 25K, 50K, 75K and 100K | • | ٠ | • | • |
| Exhaust ports | • | • | • | • |
| Industrial Brown paint finish | | | • | • |
| 5-pin tumbler keyed lock | • | • | • | • |

*R-value is a measure of thermal efficiency. The higher the R-value the greater the insulating properties of the door. Overhead Door Corporation uses a calculated door section R-value for our insulated doors.



| Door width Numb | | Number of panels | Door height | Number of sections |
|---|-----------------------------------|------------------|-------------------------------------|--------------------|
| to 10'2" | (3099 mm) | 2 | to 8'6" (2464 mm) | 4 |
| 10'3" to 12'2" | (3124 mm to 3708 mm) | 3 | 8'2" to 10'1" (2489 mm to 3073 mm) | 5 |
| 12'3" to 16'2" | (3734 mm to 4928 mm) | 4 | 10'2" to 12'1" (3099 mm to 3683 mm) | 6 |
| 16'3" to 19'2" | (4953 mm to 5842 mm) | 5 | 12'2" to 14'1" (3708 mm to 4293 mm) | 7 |
| 19'3" to 22'2" | (5867 mm to 6756 mm) | 6 | 14'2" to 16'1" (4318 mm to 4902 mm) | 8 |
| 22'3" to 26'2" | (6782 mm to 7976 mm) | 8 | 16'2" to 18'1" (4928 mm to 5512 mm) | 9 |
| 26'3" to 29'2" [†] | (8001 mm to 8890 mm) | 10 | 18'2" to 20'1" (5537 mm to 6121 mm) | 10 |
| 26'3" to 28'2" ⁺ | [†] (8001 mm to 8534 mm) | 10 | 20'2" to 22'1" (6147 mm to 6731 mm) | 11 |
| [†] Model 422 ^{††} Mo | del 426 | | 22'2" to 24'1" (6756 mm to 7341 mm) | 12 |

Standard features at a glance

| Nominal thickness | 2" (51 mm) |
|--|--|
| Maximum standard width | 29'2" (8890 mm) (422 Series) 28'2" (8585 mm) (426 Series) |
| Maximum standard height | 24'1" (7341 mm) |
| Exterior steel | 20-gauge galvanized steel (422 Series) 24-gauge galvanized steel (426 Series) |
| Back cover | 26-gauge galvanized steel (poly-bonded laminate, high impact polystyrene (HIPS)-backed optional) |
| Insulation | Expanded polystyrene (standard) |
| R-value* | |
| Polystyrene | 7.35 (1.29 K m²/W) |
| Exterior surface | Ribbed |
| End stiles | 16-gauge steel |
| Center stiles | 16-gauge steel |
| Standard mounting | A] |
| etaniaana meanting | Angle mount |
| Standard track | Angle mount 2" (51 mm) |
| 0 | C C |
| Standard track | 2" (51 mm) |
| Standard track Standard springs | 2" (51 mm) 10,000 cycle |
| Standard track Standard springs Weatherstripping | 2" (51 mm) 10,000 cycle 2" (51 mm) |

Options

| Electric operator or chain hoist |
|---|
| Bottom sensing edge |
| Full sash section with 1/8" (3 mm) DSB; 1/8" (3 mm) insulated; 1/8" (3 mm) and 1/4" (6 mm) acrylic |
| Individual lites with 1/2" insulated DSB |
| Industrial Brown polyester (Model 426 only) |
| Bracket mounting (not available on full vertical) |
| Higher-cycle springs in 25k, 50k, 75k, 100k cycles |
| Exhaust ports |
| Jamb weatherseals |
| Bottom strips, including looped PVC weatherstrips, flexible PVC astragal weatherstrips and double-contact weatherstrips |
| Reinforcing struts of roll-formed, galvanized steel |
| Movable center posts for 2" (51 mm) or 3" (76 mm) tracks that roll away, with automatic safety catches that prevent door closure when posts are removed |
| Tumbler keyed lock |
| *Duralization of the second officiants. The bight states Duralization states the insulation |

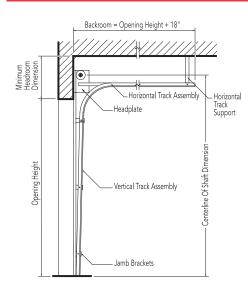
*R-value is a measure of thermal efficiency. The higher the R-value the greater the insulating properties of the door. Overhead Door Corporation uses a calculated door section R-value for our insulated doors.

Track detail

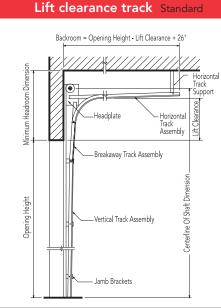
Any of the following track configurations can be selected for sectional steel door models.

O.H.=Opening height L.C.=Lift clearance D.H.=Door height

Standard lift track



| 2" (51 mm) Track [15" (381 mm) radius] | | | | | | | |
|--|--|------------------|--|--|--|--|--|
| Door height | Minimum headroom | | | | | | |
| Thru 12'0" (3658 mm) | O.H. + 11 5/8" (295 mm) | 14 1/4" (362 mm) | | | | | |
| Thru 16'0" (4877 mm) | O.H. + 12 5/8" (321 mm) | 20 1/2" (521 mm) | | | | | |
| 3" (76 mm) Tr | 3" (76 mm) Track [15" (381 mm) radius] | | | | | | |
| Thru 18'0" (5486 mm) | O.H. + 14 5/8" (372 mm) | 18" (457 mm) | | | | | |
| Thru 32'0" (9754 mm) | O.H. + 16 7/8" (429 mm) | 21 1/2" (546 mm) | | | | | |



 2" (51 mm)
 Track [15" (381 mm) radius]

 Door height
 Centerline of shaft
 Minimum headroom

 Thru 12'0" (3658 mm)
 O.H. + LC. + 5 5/8" (143 mm)
 LC. + 8 3/4" (222 mm)

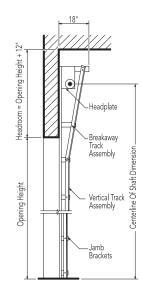
 Thru 16'0" (4877 mm)
 O.H. + LC. + 5 5/8" (143 mm)
 LC. + 8 3/4" (222 mm)

 Thru 16'0" (4877 mm)
 O.H. + LC. + 5 5/8" (143 mm)
 LC. + 11 1/4" (286 mm)

 3" (76 mm)
 Track [15" (381 mm) radius]
 LC. + 11 1/4" (286 mm)

 Thru 22'0" (6706 mm)
 O.H. + L.C. + 6 5/8" (168 mm)
 L.C. + 11 1/2" (292 mm)

 Thru 32'0" (9754 mm)
 O.H. + L.C. + 6 5/8" (168 mm)
 L.C. + 12 1/4" (311 mm)



Full vertical track

| " | (51 | mm) | Track | |
|---|-----|-----|-------|--|
| | | | | |

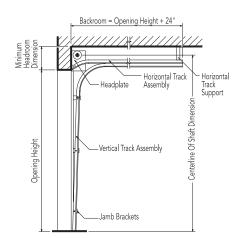
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| | Minimum headroom | | | | | |
|----------------------------|--|--|--|--|--|--|
| | | | | | | |
| O.H. + O.H. + 3/8" (10 mm) | O.H. + 10 1/4" (260 mm) | | | | | |
| 3" (76 mm) Track | | | | | | |
| | O.H. + O.H. + 3/8" (10 mm) O.H. + O.H. + 3/8" (10 mm) | | | | | |

Thru 18'0" (5486 mm) O.H. + O.H. + 3/8" (10 mm) O.H. + 10 1/4" (260 mm)

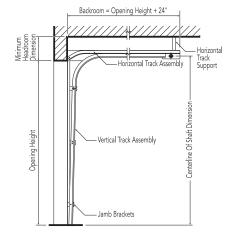
Low headroom track Springs to front

Low headroom track Springs to rear



| 2" (51 mm) Track [15" (381 mm) radius] | | | | | | |
|--|---------------------|------------------|--|--|--|--|
| Door height | Centerline of shaft | Minimum headroom | | | | |
| Thru 12'0" (3658 mm) | D.H. + 8" (203 mm) | 11 3/4" (299 mm) | | | | |
| Thru 16'0" (4877 mm) | D.H. + 8" (203 mm) | 12 1/2" (318 mm) | | | | |
| 3" (76 mm) Track [15" (381 mm) radius] | | | | | | |
| Thru 12'0" (3658 mm) | D.H. + 9" (229 mm) | 13" (330 mm) | | | | |

Thru 32'0" (5486 mm) D.H. + 9" (229 mm) 13 3/4" (349 mm)



| 2" (51 mm) Track [15" (381 mm) radius] | | | | | | |
|--|----------------------|-----------------|--|--|--|--|
| Door height Centerline of shaft Minimum headroom | | | | | | |
| Thru 12'0" (3658 mm) | O.H. + 2" (51 mm) | 7 1/2" (191 mm) | | | | |
| Thru 16'0" (4866 mm) | O.H. 2" (51 mm) | 8" (203 mm) | | | | |
| 3" (76 mm) Track [15" (381 mm) radius] | | | | | | |
| Thru 18'0" (5486 mm) | O.H. 6 3/4" (171 mm) | 9 3/4" (248 mm) | | | | |



Framing and pad detail

Lift clearance

Full vertical

3 1/2" (89 mm)

5 1/2" (140 mm)

Full vertical

4 1/2" (114 mm)

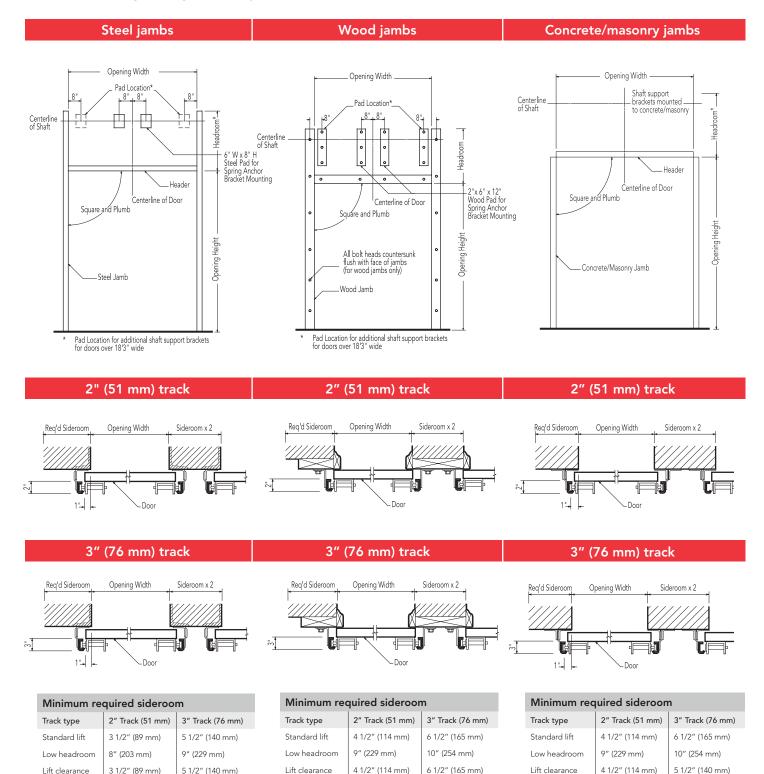
6 1/2" (165 mm)

Full vertical

4 1/2" (114 mm)

5 1/2" (140 mm)

Framing and pad details for common installation of Sectional Steel and Insulated Steel Doors in steel, wood, concrete and masonry jambs are provided here. If you require additional information or have special project requirements, refer to the Architectural Design Manual, (www.overheaddoor.com/ADM/base.html) or consult with the Applications Engineering Group or your local Overhead Door™ Distributor.



STEEL AND INSULATED STEEL DOORS

Electric operators

We offer a broad line of electric operators to suit new construction and retrofit applications, as well as unusual or special requirements. In order to improve safety and enhance door and motor life, industry quality assurance guidelines recommend the choice of a single manufacturer for both door and operator applications. We are one of the only national manufacturers to offer a full line of commercial and industrial doors and operators specifically designed for integral applications.

Model RHX®

Model RHX[®] is a heavy duty commercial operator designed to operate doors up to 24' (7315 mm) in height and 3696 pounds (1676 kg). Available as either a trolley, sidemount or centermount.

Model RSX®

Model RSX[®] is a standard duty commercial operator designed to operate doors up to 24' (7315 mm) in height and 1620 pounds (735 kg). It offers unique features like LimitLock[®], SuperBelt[™] and 16 digit menu setup.

Model RMX®

Model RMX[®] is our most advanced medium-duty operator. It is designed for quicker installation and hassle-free operation and operates doors up to 14' (4267 mm) in height and 620 pounds (282 kg). It is available as a trolley-type or side-mounted unit.

Operator control options

- Push-button, key or combination stations; surface or flush-mounted for interior and/or exterior locations
- Vehicle detectors, photocell and door timer controls
- Treadle or pull switch stations
- Wireless keypad entry and coded keyboard stations
- Universal programmable door timer
- Radio control systems (24 VAC or 120 VAC)
- Explosion and dust ignition-proof systems

Safety recommendations

We strongly recommend the use of interlock switches and monitored safety edge for all electrically operated rolling service doors. If a monitored safety edge or other reversing device is not installed, a constant-contact control switch must be used to close the door. Contact your Overhead Door™ Distributor for more information.







| | Electric operator selection guide | | | | | | | | | |
|------------------|------------------------------------|------------------------|-----------------------------|---------------------------------------|-----------|----------------------|------------------|-----------------|-----------------|---------------|
| | Horsepower/ Newtons | Max. height of door | Max. weight of door | Super Belt [™] / Polybelt | Worm gear | Adjustable clutch | Totally enclosed | Continuous duty | Explosion proof | Mounting type |
| RHX® | 1/2 HP, 3/4 HP 1 HP, 3 HP | 24' (7315 mm) | 3696 Ibs (1676 kg) | | • | • | | • | • | T, S, C |
| RSX® | 1/2 HP, 3/4 HP 1 HP | 24′ (7315 mm) | 1620 (735 kg) | • | | • | • | • | | T, S, C |
| RMX [®] | 1/2 HP | 14' (4267 mm) | 620 (281 kg) | • | | | | | | T, S |

Mounting options: T=Trolley S=Side mount C= Center mount

Mounting details

Trolley-type (Drawbar) RMX[®], RSX[®],RHX[®]

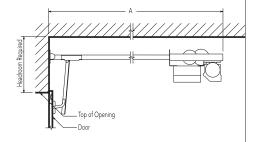
Trolley-type (Drawbar) operators feature a power unit mounted between, above and to the rear of the horizontal tracks. The drawbar drive provides positive control of the door at all times, making this operator the preferred choice whenever possible. Maximum door width is 20' per drawbar. Door width over 20' requires dual drawbar installation. Available on Models RMX[®], RSX[®] and RHX[®].

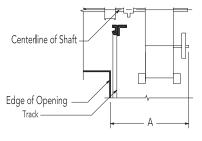
Side mount type (Jackshaft) RMX[®], RSX[®], RHX[®]

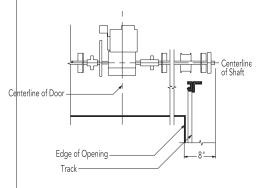
Side-mounted (Jackshaft) RMX[®], RSX[®], and RHX[®] operators feature a power unit mounted on the inside front wall and connected to the crosshead shaft, with an adjustable coupling or drive chain and sprockets.

Center mount type/Jackshaft $RSX^{\$}$, $RHX^{\$}$

Center-mounted (Jackshaft) operators feature a power unit on the front wall above the door opening. No additional backroom is required. Available on models RSX® and RHX®.







| Minimum headroom requirements | | "A" dimension - minimum (sideroom) | | | Minimum headroom requirements | |
|---|-------------------------------------|------------------------------------|------------------|------------------|-------------------------------|--------------------------------------|
| RMX® | Track requirements +4 1/2" (114 mm) | | 2" track (51 mm) | 3" track (76 mm) | RSX® | Track requirements +14" (356 mm) |
| RSX [®] | Track requirements +5" (127 mm) | RMX® | 18 1/2" (470 mm) | 19 1/2" (495 mm) | RHX® | Track requirements +23 5/8" (600 mm) |
| RHX [®] | Track requirements +5" (127 mm) | RSX ® | 21" (533 mm) | 22" (559 mm) | | |
| | | RHX® | 21" (533 mm) | 22" (559 mm) | | |
| Depth requirements - "A" dimension (backroom) | | | | | | |
| RMX [®] | Door height +4′ 0″ (1219 mm) | | | | | |
| RSX® | Door height +4′ 0″ (1219 mm) | | | | | |



Door height +4' 10" (1473 mm)

RHX®

Tel: (55) 4440 0360 WhatsApp: (81) 8363 8981 EMAIL: ventas@bering.com.mx