

511/521

ALUMINUM DOOR SYSTEMS



ALUMINUM SECTIONAL DOORS



**VISUAL ACCESS.
LIGHT INFILTRATION.
CONTEMPORARY LOOK.**



INDUSTRY LEADING
COMMERCIAL & INDUSTRIAL SOLUTIONS

**Cover image:**

Model 521, clear anodized finish with clear glass.

Image above:

Model 521, powder coat green finish.

Standard features at a glance

Overhead Door aluminum sectional doors offer an attractive solution for commercial and industrial applications where visual access, light infiltration and aesthetics are key design considerations.

Durable construction for years of reliable operation

- 1 3/4" (45 mm) thick, corrosion-resistant 6063-T6 aluminum sections with galvanized fixtures and hinges promotes durability and trouble-free operation
- 1/4" (6 mm) diameter through-rods on all stiles and rails enhances strength and sturdiness
- Top-quality materials, excellent field service and optional maintenance program contribute to extended door life, low maintenance costs and maximum productivity

A variety of standard features and options

- Doors up to 26'2" (7976 mm) wide and 20'1" (6121 mm) high (Model 521)
- Glazing choices include DSB glass, acrylic, tempered glass, clear polycarbonate, multi-wall polycarbonate, wire glass, Low E, Lexan and laminate
- Standard clear anodized finish for low-maintenance and corrosion-resistance
- Optional finishes include a wide range of powder coat colors offering an attractive and durable finish
- Manual pull rope operation with optional chain hoist or electric motor operator

Available In 197 powder coat colors

Choose from a selection of 197 powder coat colors to match the aesthetic and design of your project. This color optional upgrade includes a hardening additive that provides an attractive and durable finish and easy-to-clean surface.



Model 521, powder coat green finish with clear glass.

General specifications	Model 511	Model 521
Panel thickness	1 3/4" (45 mm)	1 3/4" (45 mm)
Max. width	16'2" (4928 mm)	26'2" (4928 mm)
Max. height	16'1" (4902 mm)	20'1" (6121 mm)
Rails standard material	6063-T6 aluminum	6063-T6 aluminum
Rails standard finish	204R-1 clear anodized	204R-1 clear anodized
Center stile widths	21/32" (17 mm)	2 11/16" (68 mm)
End stile widths	2 3/4" 2 3/4"	3 5/16" (85 mm)
Top rail widths	2 3/8", 3 3/4" (60 mm, 95 mm)	2 3/8", 3 3/4" (60 mm, 95 mm)
Intermediate rail pair widths	1 3/8" (40 mm)	3 11/16" (94 mm)
Bottom rail widths	2 3/8", 3 3/4", 4 1/2" (60 mm/95 mm/114 mm)	3 3/4", 4 1/2" (95 mm/114 mm)


Available options	Model 511	Model 521
1/8" (3 mm) DSB	•	•
1/8" (3 mm) or 1/4" (6 mm) acrylic	•	•
1/8" (3 mm) or 1/4" (6 mm) tempered	•	•
1/8" (3 mm) or 1/4" (6mm) clear polycarbonate	•	•
1/4" (6 mm) wire glass	•	•
1/2"(12mm) insulated glass	•	•
Electric operator	•	•
Bottom sensing edge	•	•
Chain hoist	•	•
3" track	•	•
Bracket mounting	•	•
High-cycle springs	•	•
Posi-tension drums	•	•
Pass door		•
Exhaust ports	•	•
Bronze anodization	•	•
Powder coat paint finish	•	•

ALUMINUM DOOR SYSTEMS MODEL 511

doors are designed in sizes up to 16'2" wide and 16'1" high (4928 mm and 4902 mm). Featuring a narrow center stile width of 21/32" (17 mm), these doors are sleek, attractive and permit maximum visibility. An array of glazing choices, top-and bottom-rail widths, finishes and special options customizes the 511 Model to satisfy nearly any project requirement.



Standard features at a glance

Panel thickness	1 3/4" (45 mm)
Maximum standard width	16'2" (6147 mm)
Maximum standard height	16'1" (4902 mm)
Material	6063-T6 aluminum
Standard finish	204R-1 clear anodized
Center stile width	21/32" (17 mm)
End stile width	2 3/4" (70 mm)
Top rail width	2 3/8" (60 mm) or 3 3/4" (95 mm)
Top intermediate rail width	3/4" (19 mm)
Bottom intermediate rail width	5/8" (16 mm)
Bottom rail width	2 3/8" (60 mm) or 3 3/4" (95 mm) or 4 1/2" (114 mm)
Weatherseals	Bottom, flexible PVC
Standard springs	10,000 cycle
Track	2" (51 mm)
Mounting	Angle
Operation	Manual pull rope
Hinges and fixtures	Galvanized steel
Lock	Galvanized, interior-mounted single unit
Color palette	197 powder coat finishes are available from your Overhead Door distributor 
Warranty	12-month limited; 3-year powder coat finish

Options

Glazing options*: 1/8" (3 mm) DSB; 1/8" (3 mm) or 1/4" (6 mm) acrylic; 1/8" (3 mm) or 1/4" (6 mm) tempered; 1/8" (3 mm) or 1/4" (6 mm) clear polycarbonate; 1/4" (6mm) and 3/8" twin-wall polycarbonate, 5/8" triple-wall polycarbonate; 1/4" (6 mm) 3/8" (10 mm) and 5/8" (16 mm) twin-wall polycarbonate, triple-wall polycarbonate 1/4" (6 mm) wire glass; 1/2" (12 mm) insulated glass

Electric operator or chain hoist

Bottom sensing edge

3" track

Bracket mounting (not available on full vertical door tracks)

Higher-cycle springs in 25k, 50k, 75k, 100k cycles

Panel schedule		Section schedule	
Door width	Number of panels	Door height	Number of sections
to 9'2" (2794 mm)	2 or 3	to 8'6" (2591 mm)	4
9'3" to 11'11" (2819 mm to 3632 mm)	3	8'7" to 10'1" (2616 mm to 3073 mm)	5
12'0" to 14'11" (3658 mm to 4547 mm)	4	10'2" to 12'1" (3099 mm to 3683 mm)	6
15'0" to 16'2" (4572 mm to 4928 mm)	5	12'2" to 14'1" (3708 mm to 4293 mm)	7
		14'2" to 16'1" (4318 mm to 4902 mm)	8

ALUMINUM DOOR SYSTEMS MODEL 521

is appropriate for environments where maximum light infiltration and/or visual access is required. Designed to fit openings up to 26'2" (7976 mm) wide and 20'1" (6121 mm) high, the 521 Model features a wide, 2 11/16" (68 mm) center stile, a 2 3/8" (60 mm) or 3 3/4" (95 mm) top rail, and 3 3/4" (95 mm) or 4 1/2" (114 mm) bottom rail. A variety of glazing choices, finishes and special options are available.

Model 521, white powder coat finish and clear glass.

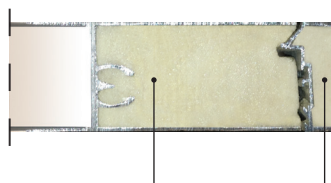


Standard features at a glance

Section thickness	1 3/4" (45 mm)
Maximum standard width	26'2" (7976 mm)
Maximum standard height	20'1" (6121 mm)
Material	Extruded 6061-T6 aluminum
Standard finish	204R-1 clear anodized (painted white at no charge)
Center stile width	2 11/16" (68 mm)
End stile width	3 5/16" (85 mm)
Top rail width	2 3/8" (60 mm) or 3 3/4" (95 mm)
Top intermediate rail width	2 1/8" (54 mm)
Bottom intermediate rail width	1 19/32" (40 mm)
Bottom rail width	3 3/4" (95 mm) or 4 1/2" (114 mm)
Weatherseals	Bottom, flexible PVC
Standard springs	10,000 cycle
Track	2" (51 mm)
Mounting	Angle
Operation	Manual pull rope
Hinges and fixtures	Galvanized steel
Lock	Galvanized, interior-mounted single unit
Color palette	197 powder coat finishes
Warranty	12-month limited; 3-year powder coat finish

Optional polyurethane insulation for stiles and rails up to 18'2" wide

1/2" insulated glazing unit	Door R-value (K m ² /W)
DSB- clear, tempered, obscure	2.87
Clear polycarbonate	2.93
DSB - Solar Bronze	3.17
DSB - Low E coating	3.43
SolarBan 70XL argon filled	4.09
Multi-wall polycarbonate	Door R-value (K m ² /W)
1/4" tick unit	2.75
3/8" tick unit	3.21
5/8" tick unit	3.48
Insulated panels	Door R-value (K m ² /W)
3/8" EPS solid panels	2.60



Polyurethane filled rails and stiles

*R-value: Overhead Door Corporation uses a calculated door section R-value for our insulated doors.

Options

Glazing options†: 1/8" (3 mm) DSB; 1/8" (3 mm) or 1/4" (6 mm) acrylic; 1/8" (3 mm) or 1/4" (6 mm) tempered; 1/8" (3 mm) or 1/4" (6 mm) clear polycarbonate; 1/4" (6mm) and 3/8" twin-wall polycarbonate, 5/8" triple-wall polycarbonate; 1/4" (6 mm) 3/8" (10 mm) and 5/8" (16 mm) twin-wall polycarbonate, triple-wall polycarbonate 1/4" (6 mm) wire glass; 1/2" (12 mm) insulated glass

Electric operator or chain hoist

Bottom sensing edge

3" track

Bracket mounting (not available on full vertical door tracks)

Higher-cycle springs in 25k, 50k, 75k, 100k cycles

Exhaust ports

Four-section pass door

Wind load and impact rated door available

†Contact your local Overhead Door Distributor for special glazing requirements. Verify 1/4" (6 mm) glass applications with factory.

Panel schedule		Section schedule	
Door width	Number of panels	Door height	Number of sections
to 8'2" (to 2489 mm)	2	to 8'6" (2591 mm)	4
8'3" to 12'2" (2515 mm to 3708 mm)	3	8'7" to 10'1" (2616 mm to 3073 mm)	5
12'3" to 16'2" (3734 mm to 4953 mm)	4	10'2" to 12'1" (3099 mm to 3683 mm)	6
16'3" to 19'2" (4978 mm to 5842 mm)	5	12'2" to 14'1" (3708 mm to 4293 mm)	7
19'3" to 20'11" (5867 mm to 6375 mm)	6**	14'2" to 16'1" (4318 mm to 4902 mm)	8
21'0" to 23'11" (6401 mm to 7290 mm)	8**	16'2" to 18'1" (4928 mm to 5512 mm)	9
24'0" to 26'2" (7315 mm to 7976 mm)	10**	18'2" to 20'1" (5537 mm to 6121 mm)	10

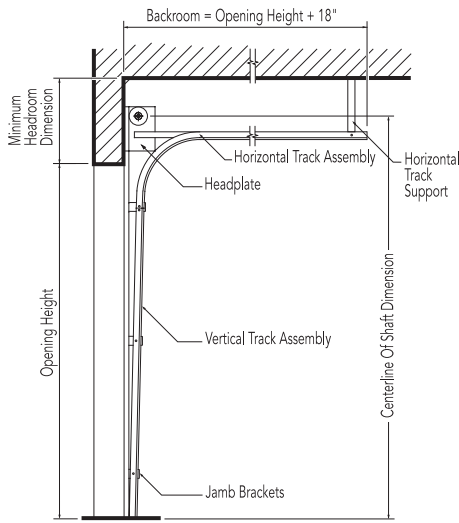
**Special construction. Consult your local Overhead Door Distributor for additional information.

Track detail

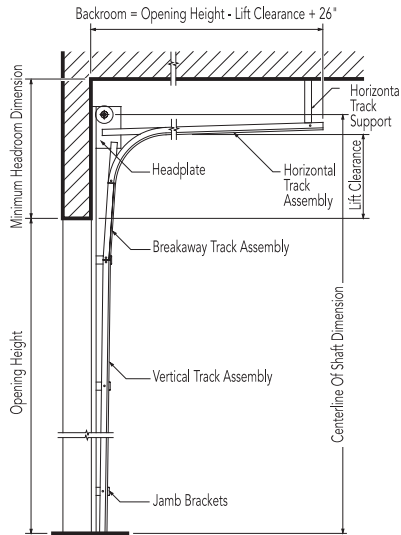
Any of the following track configurations can be selected for 511 and 521 Aluminum door models.

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

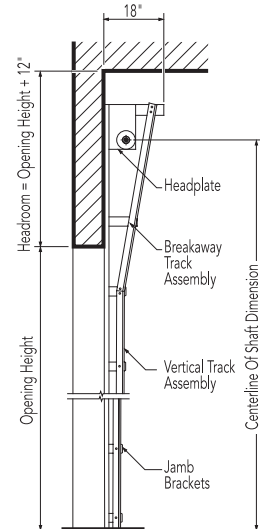
Standard lift track



Lift clearance track Standard



Full vertical track



2" (51 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	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)

2" (51 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	Minimum headroom
Thru 12'0" (3658 mm)	O.H. + L.C. + 5 5/8" (143 mm)	L.C. + 8 3/4" (222 mm)
Thru 16'0" (4877 mm)	O.H. + L.C. + 5 5/8" (143 mm)	L.C. + 11 1/4" (286 mm)

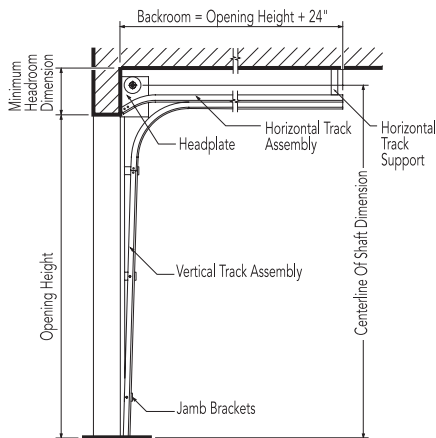
2" (51 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	Minimum headroom
Thru 11'0" (3353 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)
Thru 16'0" (4877 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)

3" (76 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	Minimum headroom
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)

3" (76 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	Minimum headroom
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)

3" (76 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	Minimum headroom
Thru 18'0" (5486 mm)	O.H. + O.H. + 3/8" (10 mm)	O.H. + 10 1/4" (260 mm)

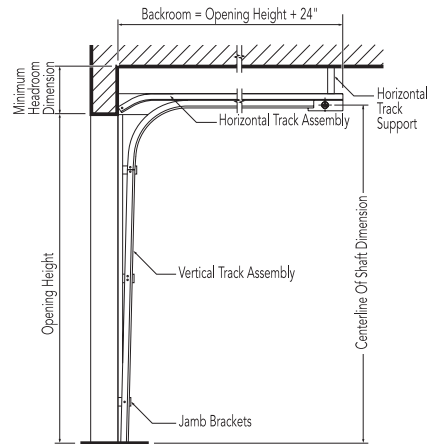
Low headroom track Springs to front



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]		
Door height	Centerline of shaft	Minimum headroom
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)

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)	O.H. + 2" (51 mm)	7 1/2" (191 mm)
Thru 16'0" (4866 mm)	O.H. 2" (51 mm)	8" (203 mm)

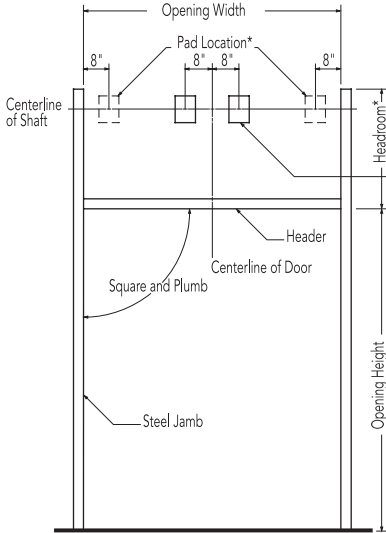
3" (76 mm) Track [15" (381 mm) radius]		
Door height	Centerline of shaft	Minimum headroom
Thru 18'0" (5486 mm)	O.H. 6 3/4" (171 mm)	9 3/4" (248 mm)



Framing and pad detail

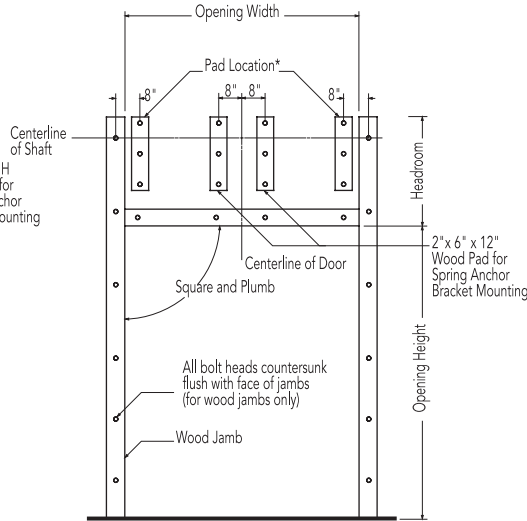
Framing and pad details for common installation of Aluminum doors in steel, wood, concrete and masonry jambs are provided here. If you require additional information or have special project requirements, refer to the Overhead Door Architectural Design Manual, (www.OverheadDoor.com/ADM/base.html) or consult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

Steel jambs



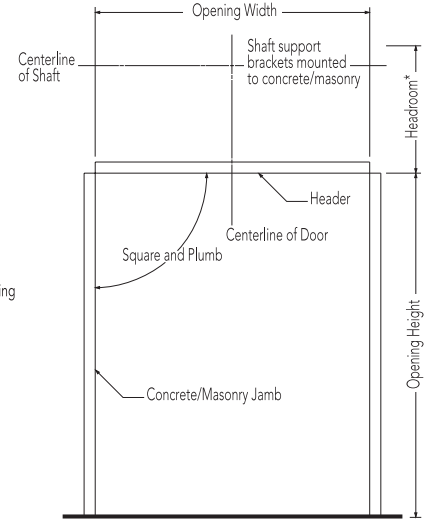
* Pad Location for additional shaft support brackets for doors over 18'3" wide

Wood jambs

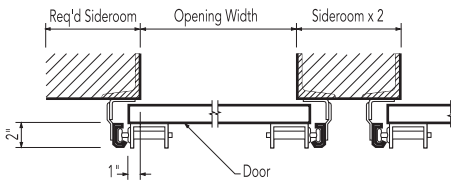


* Pad Location for additional shaft support brackets for doors over 18'3" wide

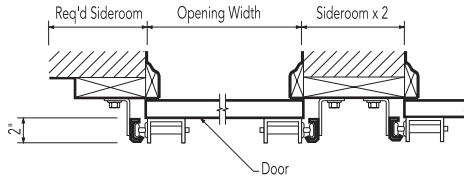
Concrete/masonry jambs



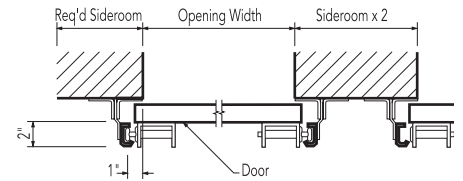
2" (51 mm) track



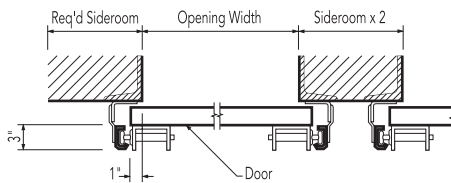
2" (51 mm) track



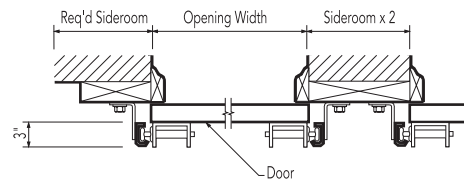
2" (51 mm) track



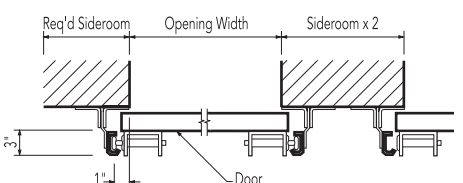
3" (76 mm) track



3" (76 mm) track



3" (76 mm) track



Minimum required sideroom

Track type	2" Track (51 mm)	3" Track (76 mm)
Standard lift	4 1/2" (114 mm)	6 1/2" (165 mm)
Low headroom	9" (229 mm)	10" (254 mm)
Lift clearance	4 1/2" (114 mm)	6 1/2" (165 mm)
Full vertical	4 1/2" (114 mm)	6 1/2" (165 mm)

Minimum required sideroom

Track type	2" Track (51 mm)	3" Track (76 mm)
Standard lift	3 1/2" (89 mm)	5 1/2" (140 mm)
Low headroom	8" (203 mm)	9" (229 mm)
Lift clearance	3 1/2" (89 mm)	5 1/2" (140 mm)
Full vertical	3 1/2" (89 mm)	5 1/2" (140 mm)

Minimum required sideroom

Track type	2" Track (51 mm)	3" Track (76 mm)
Standard lift	4 1/2" (114 mm)	6 1/2" (165 mm)
Low headroom	9" (229 mm)	10" (254 mm)
Lift clearance	4 1/2" (114 mm)	5 1/2" (140 mm)
Full vertical	4 1/2" (114 mm)	5 1/2" (140 mm)

Electric operators

Overhead Door offers the broadest 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.

Overhead Door is 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 RMX®

Model RMX® is our newest, 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.



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.



Operator control options

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

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 lbs (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

Safety recommendations

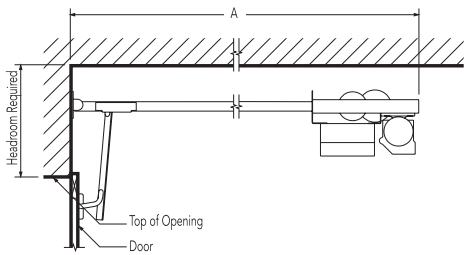
Overhead Door strongly recommends the use of a primary safety device as defined by UL325 2010. A primary safety device can be approved monitored photo-eyes or an approved monitored sensing edge. If a primary safety device is not installed, a constant contact control switch must be used to close the door. Contact Overhead Door for more information.



Mounting details

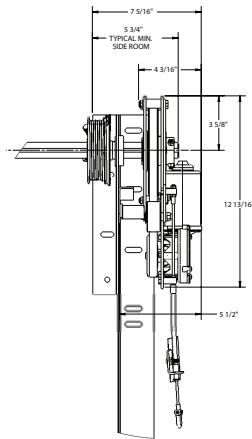
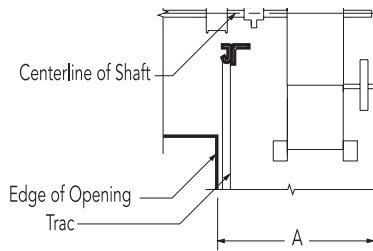
**Trolley-type (Drawbar)
RMX®, RSX®, RHX®**

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®.



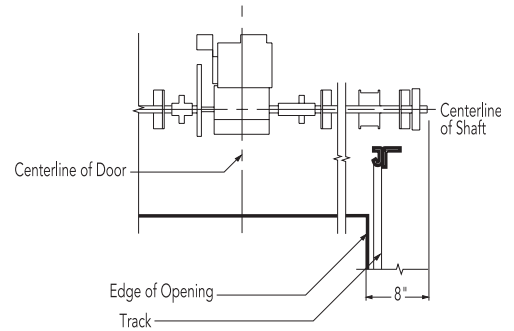
**Side mount type (Jackshaft)
RMX®, RSX®, RHX®**

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	
RMX®	Track requirements +4 1/2" (114 mm)
RSX®	Track requirements +5" (127 mm)
RHX®	Track requirements +5" (127 mm)

Depth requirements - "A" dimension (backroom)	
RMX®	Door height +4' 0" (1219 mm)
RSX®	Door height +4' 0" (1219 mm)
RHX®	Door height +4' 10" (1219 mm)

"A" dimension - minimum (sideroom)		
	2" track (51 mm)	3" track (76 mm)
RMX®	18 1/2" (470 mm)	19 1/2" (495 mm)
RSX®	21" (533 mm)	22" (559 mm)
RHX®	21" (533 mm)	22" (559 mm)

Minimum headroom requirements	
RSX®	Track requirements +14" (356 mm)
RHX®	Track requirements +23 5/8" (600 mm)



Model 521, white powder coat finish, clear and tempered glass.



**Tools to help you
get the job done.**

Architect's Corner

A resource for architects, containing comprehensive technical and resource materials to support your project, including drawings and specifications for commercial doors.

www.overheaddoor.com

The original, innovative choice for unequalled quality and service.

Overhead Door Corporation pioneered the upward-acting door industry, inventing the first upward-acting door in 1921 and the first electric door operator in 1926. Today, we continue to be the industry leader through the strength of our product innovation, superior craftsmanship and outstanding customer support, underscoring a legacy of quality, expertise and integrity. That's why design and construction professionals specify Overhead Door Corporation products more often than any other brand. Our family of over 400 Overhead Door Distributors across the United States and Canada not only share our name and logo, but also our commitment to excellence.



INDUSTRY LEADING
COMMERCIAL & INDUSTRIAL SOLUTIONS



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