

Hardware Specifications

Industry Standard 2" (51mm) Hardware

Finish

All door face hardware, tracks, track mounting hardware and torsion assembly mounting brackets to be fabricated from commercial galvanized steel.

Track

Roll formed from 0.078" (2mm) thick commercial galvanized steel, 2 1/8" (24mm) overall outside dimension. Vertical tracks sloped to ensure weather tight seal. Horizontal track curve available in 12" (305 mm) or normally provided 16" (406mm) radius.

Lift Type

Standard-Lift, High-Lift, Vertical-Lift, Low-Headroom, Front and Rear mount springs. For inclined tracks, consult customer service.

Vertical Track Mounting

Track Brackets (standard)

Boiled type, field adjustable, rib reinforced, stamped from 0.123" (3.1mm) thick commercial galvanized steel.

Clip Angle Mount (optional)

Pre-punched angle and clips, field adjustable to ensure weather tight seal and serviceability. The angles are fabricated from 0.093" (2.4mm) commercial galvanized steel.

Adjustable Continuous Angle ADCA (optional)

Boiled type, field adjustable to ensure weather tight seal and serviceability, fabricated from 0.093" (2.4mm) commercial galvanized steel, designed to provide continuous support to the vertical tracks.

Track Hangers (optional)

Perforated type 1 1/4" x 1 1/4" (32mm x 32mm) angles roll formed from 0.078" (2mm) thick commercial galvanized steel.

Rollers

1 13/16" (46mm) diameter with 5/8" (16.3mm) diameter ball bearings, hardened steel race, 7/16" (11mm) diameter standard stem, long stem on doors over 16'-2" (4929mm) wide.

Hinges

Linear type, fabricated from 0.078" or 0.106" (2 or 2.7mm) thick zinc plated steel with embossments designed to resist higher load and to provide greater stability that results in improved performance.

Top Roller Carrier

Fabricated from zinc plated steel designed to provide greater stability, field adjustable to ensure weather tight seal.

Roller Brackets

Linear type fabricated from 0.078" or 0.106" (2 or 2.7mm) zinc plated steel. Graduated type design to ensure weather tight seal.

Counter Balance

Helically wound torsion springs manufactured from oil tempered spring wire, stress relieved, minimum 10,000 cycles. Aluminum die-cast grooved drums. Flexible 7 x 19 construction aircraft type galvanized cables with 5:1 safety factor.

Shafts

1" (25mm) diameter 0.078" (2mm) tube or 1/8" (3mm) wall keyed full length or 1" (25mm) diameter cold rolled galvanized steel keyed full length.

Head Plates

Full height fabricated from 0.093" (2.4mm) galvanized steel, complete with bolt-on type bearings.

Locking

Interior slide bolt type.

Horizontal Angle

72" (1829mm) long.

Mounting Fasteners

Zinc plated.

Warranty

One (1) year.

Industry Standard 3" (76mm) Hardware

Finish

All door face hardware, tracks, track mounting hardware and torsion assembly mounting brackets to be fabricated from commercial galvanized steel.

Track

Roll formed from 0.106" (2.7mm) thick commercial galvanized steel, 3 1/5" (80mm) overall outside dimension. Vertical tracks sloped to ensure weather tight seal. Horizontal track curve radius 16" (406mm).

Lift Type

Standard-Lift, High-Lift, Vertical-Lift, Low-Headroom, Front and Rear mount springs. For inclined tracks, consult customer service.

Vertical Track Mounting

Track Brackets (standard)

Boiled type, field adjustable, rib reinforced, stamped from 0.123" (3.1mm) thick commercial galvanized steel.

Clip Angle Mount (optional)

Pre-punched angle and clips, field adjustable to ensure weather tight seal and serviceability. The angles are fabricated from 0.093" (2.4mm) commercial galvanized steel.

Adjustable Continuous Angle ADCA (optional)

Boiled type, field adjustable to ensure weather tight seal and serviceability, fabricated from 0.093" (2.4mm) commercial galvanized steel, designed to provide continuous support to the vertical tracks.

Track Hangers (optional)

Perforated type 1 1/4" x 1 1/4" (32mm x 32mm) angles roll formed from 0.078" (2mm) thick commercial galvanized steel.

Rollers

2 7/8" (73mm) diameter with 5/8" (16.3mm) diameter ball bearings, hardened steel race, 7/16" (11mm) diameter standard stem, long stem on doors over 16'-2" (4929mm) wide.

Hinges

Linear type, fabricated from 0.093" or 0.106" (2.5 or 2.7 mm) thick zinc plated steel with embossments designed to resist higher load and to provide greater stability that results in improved performance.

Top Roller Carrier

Fabricated from zinc plated steel designed to provide greater stability, field adjustable to ensure weather tight seal.

Roller Brackets

Linear type fabricated from 0.078" or 0.106" (2 or 2.7mm) zinc plated steel. Graduated type design to ensure weather tight seal.

Counter Balance

Helically wound torsion springs manufactured from oil tempered spring wire, stress relieved, minimum 10,000 cycles. Aluminum die-cast grooved drums. Flexible 7 x 19 construction aircraft type galvanized cables with 5:1 safety factor.

Shafts

1" (25mm) diameter 0.078" (2mm) tube or 1/8" (3mm) wall keyed full length or 1" (25mm) diameter cold rolled galvanized steel keyed full length or 1 1/4" (32mm) cold rolled steel keyed full length.

Head Plates

Full height fabricated from 0.093" or 0.123" (2.4 or 3.1mm) galvanized steel, complete with bolt-on type bearings.

Locking

Interior slide bolt type.

Horizontal Angle

90" (2286mm) long.

Mounting Fasteners

Zinc plated.

Warranty

One (1) year.

Hardware Options: 2" (51mm) AND 3" (76mm)

Pusher spring

Recommended for medium and large size standard lift doors with manual chain hoist and for all doors with Jackshaft type electric operators.

Bumper spring

Recommended for small standard lift doors with manual chain hoist or Jackshaft type electric operators.

Bumper leaf springs

Recommended for high lift and vertical lift door applications.

Across the door bar latch

Complete with right lock with an outside cylinder and handle (recommended for manually operated doors only).

Across-the-door bar latch inside only

Complete with right lock and interior handle. Electric interlock is required on electrically operated doors.

Double end roller brackets and long stem rollers

Standard on doors wider than 16'-2" (4929mm).

Rollers

2" (51mm): white nylon tire, 11 ball bearings, zinc plated stem available in standard and long stem.

3" (76mm): LH-BMW tire, precision sealed bearing, zinc plated stem available in long stem.

Chain hoist

Chain and sprocket type design, recommended on doors over 144 sq. ft (13.4 sq. m).

2000R

Wall mountable, 4:1 reduction, available for 1" (25mm) or 1 1/4" (32mm) keyed shaft.

JR

Shaft mountable, 4:1 reduction, available for 1" (25mm) and 1 1/4" (32mm) keyed shaft.

JRG

Shaft mountable, 4.5:1 reduction, available for 1" (25mm) and 1 1/4" (32mm) keyed shaft.

Follow the roof pitch

Track to follow roof pitch for standard lift and high lift.

Higher cycle torsion spring assemblies

25,000, 50,000, 75,000 or 100,000 cycle torsion springs assemblies, recommended with 1" (25mm) or 1 1/4" (32mm) solid steel shaft with full key-way, shaft mounted in self-aligning flange bearings, flexible 7 x 19 construction aircraft type galvanized cables.

Track guards

Formed from 3/16" (4.8mm) thick steel, 5'-0" (1524mm) high, chamfered top edge at 45 degree, grey finish. Optional: Baked yellow finish.

Pull chain with spring

Recommended for manually operated doors only.

Perimeter weather-strip

Double fin white, black, brown, taupe or almond vinyl with steel retainer for jamb and lintel. Double fin black vinyl with aluminum retainer for jamb and lintel.

ADCA bolt-on dual diameter black vinyl jamb seal recommended with section mounted top seal.

Cable Fail Safety Bracket

Designed to stop the door from free fall in case of cable failure.

Spring Fail Safety Device

Designed to stop the door shaft, thus the free fall of the door in case of spring failure, available without or with interlock switch to disconnect power to the electric operator.

Exhaust port

Aluminum die cast available in 3" (76mm), 4" (102mm) and 6" (152mm) diameter.

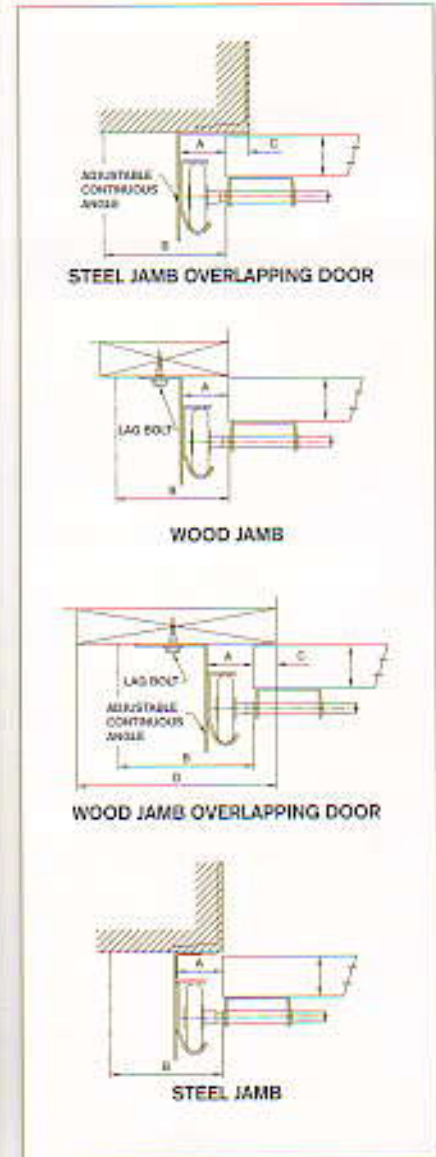
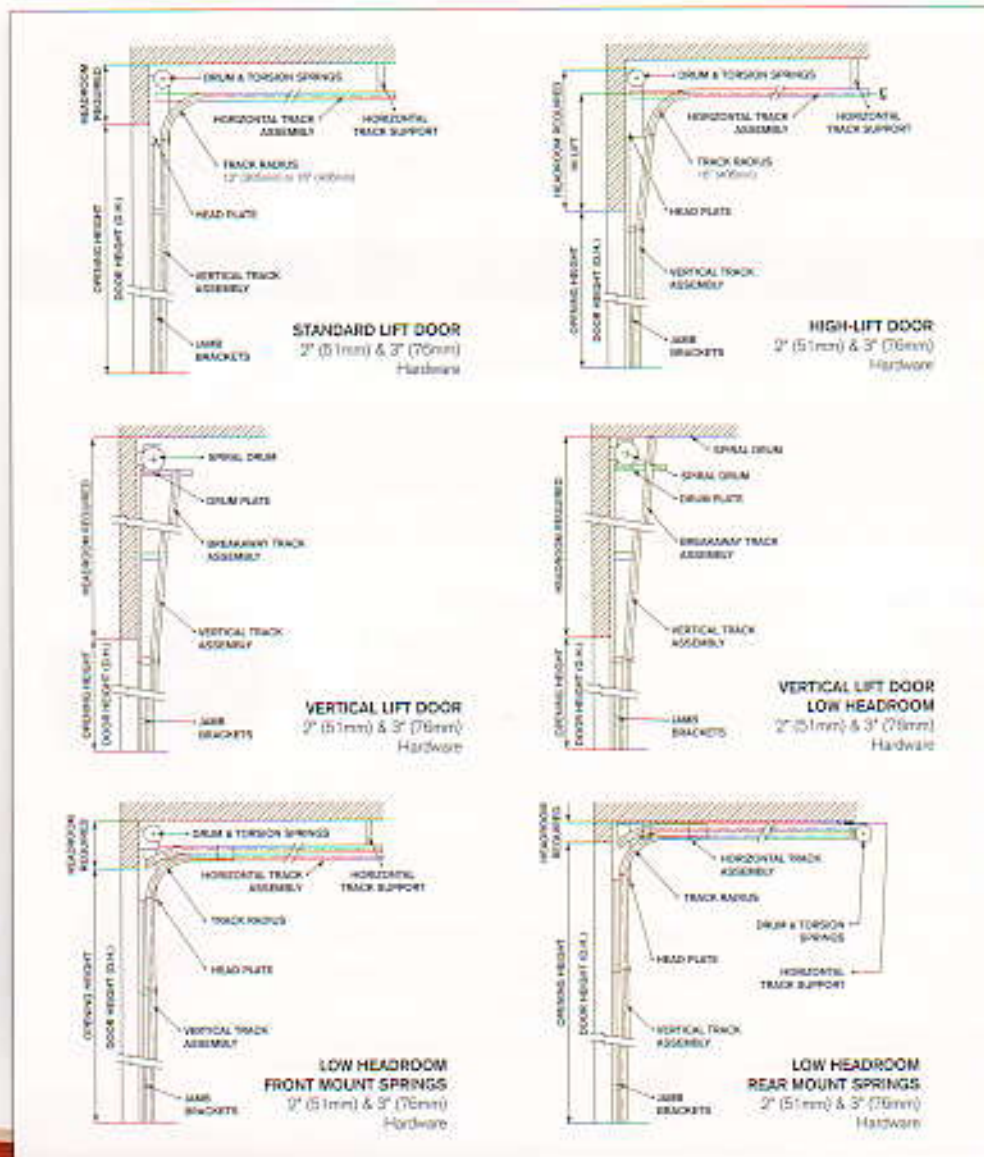
Full Length Horizontal Angle

Designed to support full length of the track.

Consistent with our policy of continuing product improvement, we reserve the right to make appropriate modifications without notice.

Clearance & Mounting Requirements

Door Style	Hardware size	Headroom Required	Track curve radius	Jamb Details			
				A	B	C	D
Standard Lift	2" (51)	13" (330) to 19-1/2" (495)	12" (305) or 16" (406)	1-1/2" (38)	3-1/2" (89)	1" (25)	6" (127)
	3" (76)	18" (457), 19" (482) or 21" (533)	16" (406)	2" (51)	4" (102)	1" (25)	6" (152)
Hi-Lift	2" (51)	H.L. + 7-1/2" (191) to H.L. + 10" (254)	16" (406)	1-1/2" (38)	3-1/2" (89)	1" (25)	6" (127)
	3" (76)	H.L. + 9-1/2" (241) to H.L. + 18-1/2" (470)	16" (406)	2" (51)	4" (102)	1" (25)	6" (152)
Vertical Lift	2" (51)	D.H. + 22" (559)	-	1-1/2" (38)	3-1/2" (89)	1" (25)	6" (127)
	3" (76)	D.H. + 22" (559) to 27-1/2" (699)	-	2" (51)	4" (102)	1" (25)	6" (152)
Low Headroom Front Springs	2" (51)	11" (279) to 11-3/4" (298)	-	1-1/2" (38)	3-1/2" (89)	1" (25)	5" (127)
	3" (76)	13" (330) to 15-1/2" (394)	-	2" (51)	4" (102)	1" (25)	6" (152)
Low Headroom Rear Springs	2" (51)	5" (127) to 5-1/2" (140)	-	1-1/2" (38)	3-1/2" (89)	1" (25)	5" (127)
	3" (76)	7-1/2" (191)	-	2" (51)	4" (102)	1" (25)	6" (152)
Low Headroom Vertical Lift	2" (51)	D.H. + 10" (254) or D.H. + 4" (102)	-	1-1/2" (38)	3-1/2" (89)	1" (25)	5" (127)
	3" (76)	D.H. + 10" (254) or D.H. + 4" (102)	-	2" (51)	4" (102)	1" (25)	6" (152)



Standard Hardware



Weatherstripping

Full length retainer and bulb weather strip minimize air flow and ensure weather-tightness at the base of your door.

Trussing

Doors are constructed to withstand wind load specified in ANSI/DASMA 108. Linear style trusses are provided according to door size. Additional trussing can be provided for higher wind load applications.



Track

Roll formed from commercial galvanized steel. Vertical tracks sloped to ensure weather tight seal. Horizontal track curve available in 12" (305mm) or normally provided 16" (406mm) radius.

Track Brackets

Bolted type, field adjustable, rib reinforced, stamped from 0.123" (3.1mm) thick commercial galvanized steel.



Rollers

Ten ball bearings provide years of smooth and quiet operation. 7/16" (11mm) diameter standard stem, long stem on doors over 16'-2" (4928mm) wide.

Counter Balance

Helically wound torsion springs manufactured from oil tempered spring wire, stress relieved, minimum 10,000 cycles. Aluminum die-cast grooved drums. Flexible 7 x 19 construction aircraft type galvanized cables with 5:1 safety factor. Higher cycle available upon request.



Horizontal Angle

72" (1829mm) long or 90" (2286mm) for 3" hardware.

Hinges

Linear type, fabricated from 0.078" or 0.106" (2 or 2.7mm) thick zinc plated steel with embossments designed to resist higher load and provide greater stability resulting in improved performance.

Top Roller Carrier

Fabricated from zinc plated steel designed to provide greater stability, field adjustable to ensure weather tight seal.

Roller Brackets

Linear type fabricated from 0.078" or 0.106" (2 or 2.7mm) zinc plated steel. Graduated type design to ensure weather tight seal.

Shafts

1" (25mm) diameter 0.078" (2mm) tube or 1/8" (3mm) wall keyed full length or 1" (25mm) diameter cold rolled galvanized steel keyed full length.

Head Plates

Full height fabricated from galvanized steel, complete with bolt-on type bearings.

Lock

Interior slide bolt type.

Mounting Fasteners

Zinc plated.

Optional Hardware



Thermatite

- Combination PVC step plate and lift handle
- **Exhaust port:** 3" (76mm) / 4" (102mm) / 5" (127mm) diameter
- Flexible top weather strip for full width of door
- Full height thermal break and anti-friction strip for galvanized end caps
- Aluminum end tiles with full height jamb seal (Note: For T175-MR, T175, T175-20 only)
- **Pass doors:** 32" x 80" (813mm X 2032mm) four section pass door available in doors up to 16.2' (4928mm) (Note: 14.2' (4381mm) for T150 and T200A)



Alumatite

- **Exhaust port:** 3" (76mm) / 4" (102mm) / 5" (127mm) diameter
- **Plywood Kick Panel:** 3/8" (9.5mm) thick plywood covered on both sides with 0.032" (0.8mm) aluminum or 0.037" (0.94mm) embossed steel sheets