

Door Height	Section Quantity	Strut Quantity	Track Brackets Per Side
6'-0" to 7'-0"	4	5	4
7'-6" to 8'-9"	5	6	5
9'-0" to 10'-6"	6	7	6
10'-9" to 12'-3"	7	8	7
12'-6" to 14'-0"	8	9	8

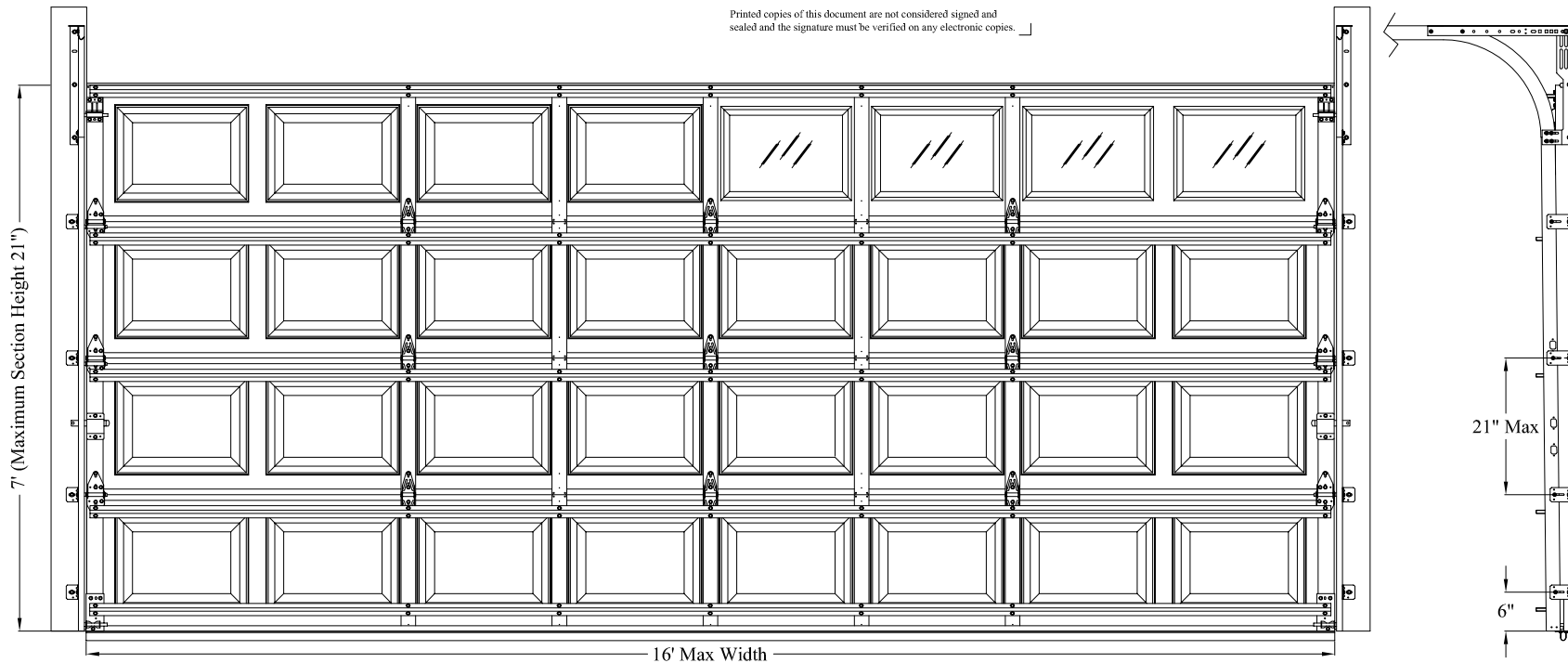
Note: Maximum door height is 14'. Consult Sheet 3 for Strut and Section Location Chart. Detail views shown on Sheet 2.

Model Numbers Available
510, 511
410, 411, 430, 431, 450, 451

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
01	UPDATED FOR TDI COMPLIANCE	07/11/2022	DMK


John E. Scates, PE
 2560 King Arthur Blvd. Ste 124-54
 Lewisville, TX 75056
 FL PE 51737
 TX PE 56308 / F-2203

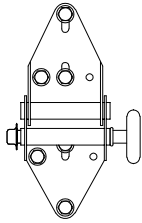
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NOTE:

1. This product has been evaluated per ANSI/DASMA 108 and ASTM E330.
2. This product complies with the requirements of the 2018 IBC/IRC.
3. Doors with glazing not qualified for use in windborne debris regions.
4. Not all models available. Consult evaluation report for model references.
5. This drawing provides windload assembly details for the claimed size and pressures.

Max Size: 16' x 14' Design Pressure: +22.0/-24.5 PSF	 5700 NW 39th Street Riverside, MO 64150	DESCRIPTION: Wind Load Rated Residential Pan Sectional Garage Door 16' Wide 500 and 400 Series Doors ⁴	
		DRAWING NUMBER: RO16A_22.0_24.5	REV: 01
DRAWN BY: DMK	DATE DRAWN: 9/25/20	REV DATE: 7/11/22	SIZE: ANSI A
SCALE: NTS	SHEET: 1 of 3		

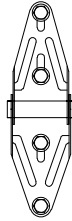


End Hinge

14 gauge galvanized steel end hinge attached with four 1/4" x 3/4" screws and two 1/4" x 5/8" self tapping screws.

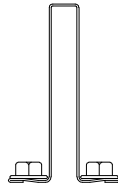
Roller

Minimum 7 ball steel roller or 10 ball nylon roller with 4" stem and push nuts on all hinge rollers.



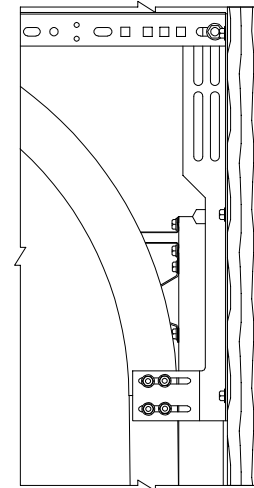
Center Hinge

18 gauge galvanized steel narrow or wide body hinge attached with four 1/4" x 3/4" screws.



Struts

3" x 1 7/8" 16 gauge 33 ksi hat strut attached with two 1/4" x 5/8" self-tapping screws per stile.



Flag Bracket

12 gauge galvanized steel flag bracket attached to wood jamb with three 5/16" x 1 5/8" wood lag screws and to the horizontal and vertical tracks with two 1/4" x 3/4" track bolts and nuts each.

Horizontal Track and Angle

Horizontal track and angle to suit with suitable back hang.

Vertical Track

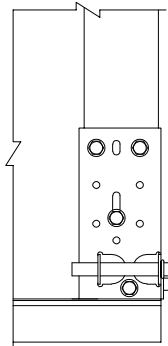
2" galvanized steel track with a minimum thickness of .056".

Wood Jamb

Vertical jambs are to be 2x6 #2 Spruce-Pine-Fir (S-P-F) or better. Refer to DASMA TDS 161 or a licensed design professional for jamb configurations. Note: Preparation of jambs by others, and supporting structural elements must be capable of withstanding the rated windload.

Stop Molding

Stop molding (attached with minimum 6D headed nails or screws) is required, or door must overlap jambs by 5/16".



End and Center Stiles

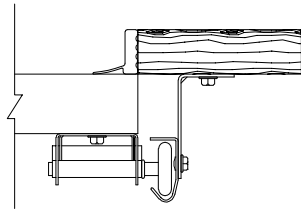
20 gauge galvanized steel stiles attached to section with two rivets or two #8 x 1/2" pan head sheet metal screw on each end.

Bottom Bracket

13 gauge galvanized steel bottom bracket attached with four 1/4" x 5/8" self-tapping screws (push nut not required on roller).

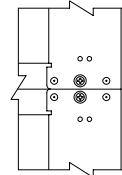
Bottom Weatherstrip

Aluminum extrusion with vinyl insert.



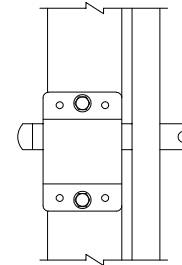
Top Fixture

16 gauge galvanized steel top fixture with two bolt roller carrier and attached to door with four 1/4" x 5/8" self-tapping screws (push nut not required on roller).



End Stile

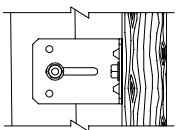
Each end stile requires a total of two #8 x 1/2" pan head screws located as shown between the pop rivets at the top and bottom of the stile.



Locking Mechanism

Doors must have either an electronic operator or locking device installed (inside slide lock shown, other lock types permitted).

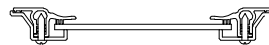
Note: Extension spring doors require locking point on each side if no electronic operator is installed.



Track Brackets

2 1/4" wide x 12 gauge galvanized steel track bracket attached to wood jamb with one 5/16" x 1 5/8" wood lag screw and to vertical track with one 1/4" x 3/4" track bolt and nut.

Note: Center distance between track brackets not to exceed 21".



Windows (optional)

Windows available in sizes listed below. Frames are molded plastic.

Frame	Max Daylight Opening	Fastener Pattern	Glazing Types
Short	18" x 12-1/2"	#8-5/8" (12) total, (3) along each horizontal edge & (3) along each vertical edge	1/8" DSB Annealed, 1/8" DSB Tempered, and 0.100" Polycarbonate


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		<p>DRAWING NUMBER: RO16A_22.0_24.5</p>		<p>REV: 01</p>	
		<p>DRAWN BY: DMK</p>	<p>DATE DRAWN: 9/25/20</p>	<p>REV DATE: 7/11/22</p>	
		<p>SIZE: ANSI A</p>	<p>SCALE: NTS</p>	<p>SHEET: 2 of 3</p>	

Strut and Sections Location Chart

Door Height	Section Heights	Strut Locations	Track Brackets
6 - 0	18 18 18 18	3 15.5 33.5 51.5 71	4
6 - 3	21 18 18 18	3 18.5 36.5 54.5 74	4
6 - 6	21 18 18 21	3 18.5 36.5 54.5 77	4
6 - 9	21 21 18 21	3 18.5 39.5 57.5 80	4
7 - 0	21 21 21 21	3 18.5 39.5 60.5 83	4
7 - 6	18 18 18 18 18	3 15.5 33.5 51.5 69.5 89	5
7 - 9	21 18 18 18 18	3 18.5 36.5 54.5 72.5 92	5
8 - 0	21 18 18 18 21	3 18.5 36.5 54.5 72.5 95	5
8 - 3	21 21 18 18 21	3 18.5 39.5 57.5 75.5 98	5
8 - 6	21 21 18 21 21	3 18.5 39.5 57.5 78.5 101	5
8 - 9	21 21 21 21 21	3 18.5 39.5 60.5 81.5 104	5
9 - 0	18 18 18 18 18 18	3 15.5 33.5 51.5 69.5 87.5 107	6
9 - 3	21 18 18 18 18 18	3 18.5 36.5 54.5 72.5 90.5 110	6
9 - 6	21 21 18 18 18 18	3 18.5 39.5 57.5 75.5 93.5 113	6
9 - 9	21 21 21 18 18 18	3 18.5 39.5 60.5 78.5 96.5 116	6
10 - 0	21 21 21 21 18 18	3 18.5 39.5 60.5 81.5 99.5 119	6
10 - 3	21 21 21 21 21 18	3 18.5 39.5 60.5 81.5 102.5 122	6
10 - 6	21 21 21 21 21 21	3 18.5 39.5 60.5 81.5 102.5 125	6
10 - 9	21 18 18 18 18 18 18	3 18.5 36.5 54.5 72.5 90.5 108.5 128	7
11 - 0	21 21 18 18 18 18 18	3 18.5 39.5 57.5 75.5 93.5 111.5 131	7
11 - 3	21 21 21 18 18 18 18	3 18.5 39.5 60.5 78.5 96.5 114.5 134	7
11 - 6	21 21 21 21 18 18 18	3 18.5 39.5 60.5 81.5 99.5 117.5 137	7
11 - 9	21 21 21 21 21 18 18	3 18.5 39.5 60.5 81.5 102.5 120.5 140	7
12 - 0	21 21 21 21 21 21 18	3 18.5 39.5 60.5 81.5 102.5 123.5 143	7
12 - 3	21 21 21 21 21 21 21	3 18.5 39.5 60.5 81.5 102.5 123.5 146	7
12 - 6	21 21 18 18 18 18 18 18	3 18.5 39.5 57.5 75.5 93.5 111.5 129.5 149	8
12 - 9	21 21 21 18 18 18 18 18	3 18.5 39.5 60.5 78.5 96.5 114.5 132.5 152	8
13 - 0	21 21 21 21 18 18 18 18	3 18.5 39.5 60.5 81.5 99.5 117.5 135.5 155	8
13 - 3	21 21 21 21 21 18 18 18	3 18.5 39.5 60.5 81.5 102.5 120.5 138.5 158	8
13 - 6	21 21 21 21 21 21 18 18	3 18.5 39.5 60.5 81.5 102.5 123.5 141.5 161	8
13 - 9	21 21 21 21 21 21 21 18	3 18.5 39.5 60.5 81.5 102.5 123.5 144.5 164	8
14 - 0	21 21 21 21 21 21 21 21	3 18.5 39.5 60.5 81.5 102.5 123.5 144.5 167	8

NOTE:

- 6. Sequential section heights left to right as stacked from floor to ceiling.
- 7. Individual strut locations in inches from bottom of door.
- 8. Section stacking order may be changed to accommodate window section placement or other factors. Strut locations shall be adjusted accordingly.

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