

Door Height	Section Quantity	C-Channel Quantity	Track Brackets Per Side
6'-0" to 7'-0"	4	4	5
7'-6" to 8'-3"	5	5	6
8'-6" to 8'-9"	5	5	7
9'-0" to 9'-9"	6	6	7
10'-0" to 10'-6"	6	6	8
10'-9" to 11'-0"	7	7	8
11'-3" to 12'-3"	7	7	9
12'-6"	8	8	9
12'-9" to 14'-0"	8	8	10

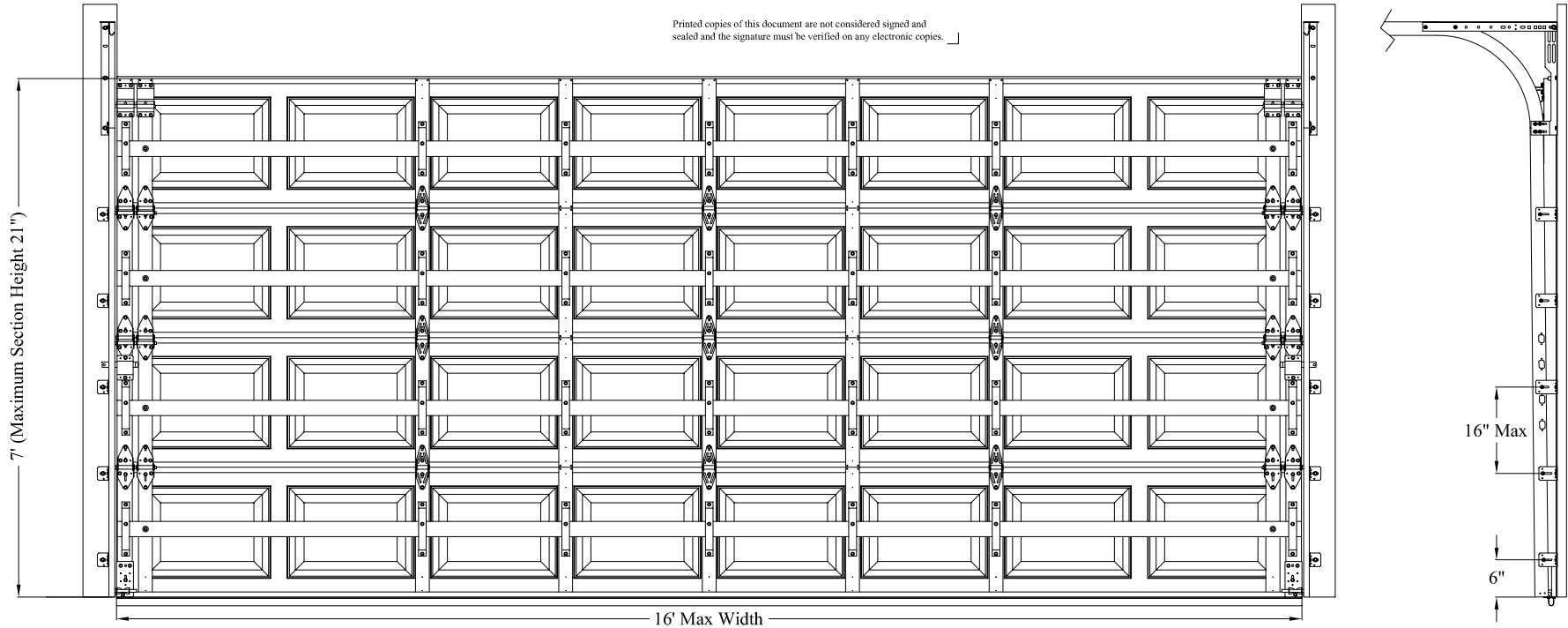
**Note:** Maximum door height is 14'. Consult Sheet 3 for C-Channel and Section Location Chart. Detail views shown on Sheet 2.

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

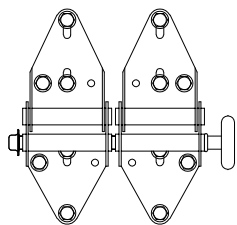
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**NOTE:**

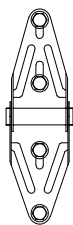
1. This product has been evaluated per ANSI/DASMA 108 and ASTM E330.
2. This product complies with the requirements of the 2018 IBC/IRC.
3. Doors with glazing not qualified for use in windborne debris regions.
4. Not all models available. Consult evaluation report for model references.
5. This drawing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

<b>Max Size:</b> 16' x 14'  <b>Design Pressure:</b> +35.0/-38.8 PSF	  5700 NW 39th Street Riverside, MO 64150	<b>DESCRIPTION:</b> Wind Load Rated Residential Pan Sectional Garage Door 16' Wide 500 and 400 Series Doors <sup>4</sup>	
		<b>DRAWING NUMBER:</b> RO16A_35.0_38.8	<b>REV:</b> 01
<b>DRAWN BY:</b> DMK	<b>DATE DRAWN:</b> 9/25/20	<b>REV DATE:</b> 7/11/22	
<b>SIZE:</b> ANSI A	<b>SCALE:</b> NTS	<b>SHEET:</b> 1 of 3	

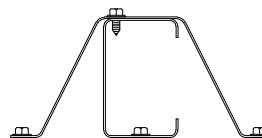


**End Hinge**  
14 gauge galvanized steel double end hinges attached with four 1/4" x 3/4" screws and two 1/4" x 5/8" self tapping screws each.

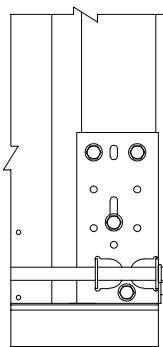
**Roller**  
10 ball steel or nylon roller with 7" stem and push nuts on all hinge rollers.



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



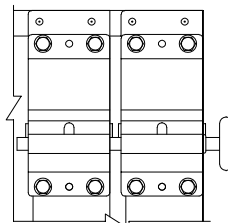
**C Channels**  
4" x 2 1/2" 16 gauge 50 ksi C channel attached with one 1 1/4" wide 16 gauge strap and four 1/4" x 5/8" self-tapping screws per stile, except no strap required on double end stiles (single attachment screw still required on double end stiles).  
Note: Screws must not attach to stiles at punched knockout locations, and reinforcement on lock section may be moved down to accommodate keyed lock.



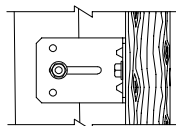
**End and Center Stiles**  
20 gauge galvanized steel stiles attached to section with two rivets or two #8 x 1/2" pan head sheet metal screw on each end.

**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).

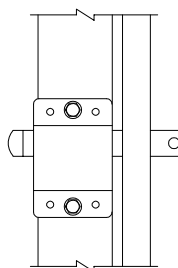
**Bottom Weatherstrip**  
Aluminum extrusion with vinyl insert.



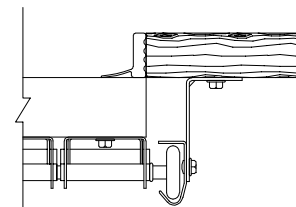
**Top Fixture**  
12 gauge galvanized steel double top fixtures attached to door with four 1/4" x 5/8" self-tapping screws each (push nut not required on roller).



**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 16".

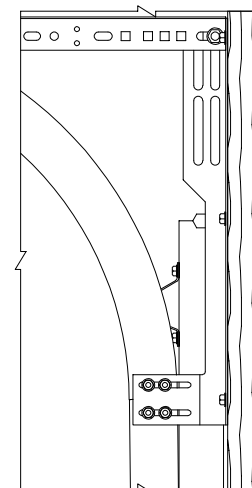


**Locking Mechanism**  
Doors must have either an electronic operator or locking device(s) installed (inside slide lock shown, other lock types permitted) that engage(s) both vertical tracks.  
Note: Extension spring doors require locking point on each side if no electronic operator is installed.



**Wood Jambs**  
Vertical jambs are to be 2x6 Southern Yellow Pine (SYP) 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".



**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 .060".


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<b>SIZE:</b> ANSI A		<b>SCALE:</b> NTS	<b>SHEET:</b> 2 of 3	

### C-Channel and Sections Location Chart

Door Height	Section Heights	C-Channel Locations	Track Brackets
6 - 0	18 18 18 18	8.25 26.25 44.25 62.25	5
6 - 3	21 18 18 18	9.75 29.25 47.25 65.25	5
6 - 6	21 18 18 21	9.75 29.25 47.25 66.75	5
6 - 9	21 21 18 21	9.75 30.75 50.25 69.75	5
7 - 0	21 21 21 21	9.75 30.75 51.75 72.75	5
7 - 6	18 18 18 18 18	8.25 26.25 44.25 62.25 80.25	6
7 - 9	21 18 18 18 18	9.75 29.25 47.25 65.25 83.25	6
8 - 0	21 18 18 18 21	9.75 29.25 47.25 65.25 84.75	6
8 - 3	21 21 18 18 21	9.75 30.75 50.25 68.25 87.75	6
8 - 6	21 21 18 21 21	9.75 30.75 50.25 69.75 90.75	7
8 - 9	21 21 21 21 21	9.75 30.75 51.75 72.75 93.75	7
9 - 0	18 18 18 18 18 18	8.25 26.25 44.25 62.25 80.25 98.25	7
9 - 3	21 18 18 18 18 18	9.75 29.25 47.25 65.25 83.25 101.25	7
9 - 6	21 21 18 18 18 18	9.75 30.75 50.25 68.25 86.25 104.25	7
9 - 9	21 21 21 18 18 18	9.75 30.75 51.75 71.25 89.25 107.25	7
10 - 0	21 21 21 21 18 18	9.75 30.75 51.75 72.75 92.25 110.25	8
10 - 3	21 21 21 21 21 18	9.75 30.75 51.75 72.75 93.75 113.25	8
10 - 6	21 21 21 21 21 21	9.75 30.75 51.75 72.75 93.75 114.75	8
10 - 9	21 18 18 18 18 18 18	9.75 29.25 47.25 65.25 83.25 101.25 119.25	8
11 - 0	21 21 18 18 18 18 18	9.75 30.75 50.25 68.25 86.25 104.25 122.25	8
11 - 3	21 21 21 18 18 18 18	9.75 30.75 51.75 71.25 89.25 107.25 125.25	9
11 - 6	21 21 21 21 18 18 18	9.75 30.75 51.75 72.75 92.25 110.25 128.25	9
11 - 9	21 21 21 21 21 18 18	9.75 30.75 51.75 72.75 93.75 113.25 131.25	9
12 - 0	21 21 21 21 21 21 18	9.75 30.75 51.75 72.75 93.75 114.75 134.25	9
12 - 3	21 21 21 21 21 21 21	9.75 30.75 51.75 72.75 93.75 114.75 135.75	9
12 - 6	21 21 18 18 18 18 18 18	9.75 30.75 50.25 68.25 86.25 104.25 122.25 140.25	9
12 - 9	21 21 21 18 18 18 18 18	9.75 30.75 51.75 71.25 89.25 107.25 125.25 143.25	10
13 - 0	21 21 21 21 18 18 18 18	9.75 30.75 51.75 72.75 92.25 110.25 128.25 146.25	10
13 - 3	21 21 21 21 21 18 18 18	9.75 30.75 51.75 72.75 93.75 113.25 131.25 149.25	10
13 - 6	21 21 21 21 21 21 18 18	9.75 30.75 51.75 72.75 93.75 114.75 134.25 152.25	10
13 - 9	21 21 21 21 21 21 21 18	9.75 30.75 51.75 72.75 93.75 114.75 135.75 155.25	10
14 - 0	21 21 21 21 21 21 21 21	9.75 30.75 51.75 72.75 93.75 114.75 135.75 156.75	10

**NOTE:**

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

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