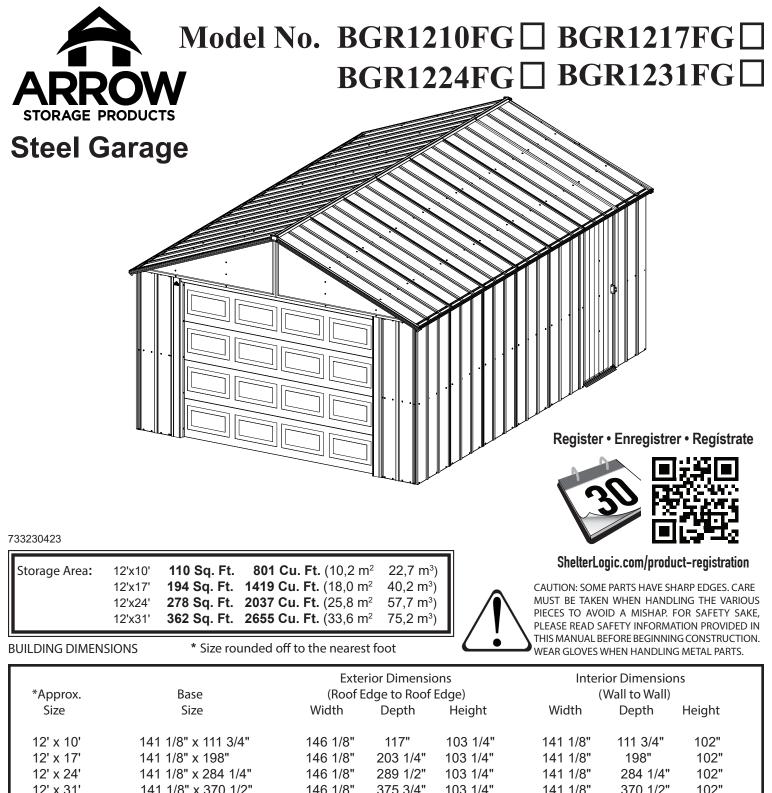
# **Owner's Manual & Assembly Instructions**

JM01b



12' x 24'	141 1/8" x 284 1/4"	146 1/8"	289 1/2"	103 1/4"	141 1/8"	284 1/4"	102"
12' x 31'	141 1/8" x 370 1/2"	146 1/8"	375 3/4"	103 1/4"	141 1/8"	370 1/2"	102"
3,7 m x 3,0 m	358,5 cm x 283,8 cm	371,2 cm	297,2 cm	262,3 cm	358,5 cm	283,8 cm	259,1 cm
3,7 m x 5,2 m	358,5 cm x 502,9 cm	371,2 cm	516,3 cm	262,3 cm	358,5 cm	502,9 cm	259,1 cm
3,7 m x 7,3 m	358,5 cm x 722,0 cm	371,2 cm	735,3 cm	262,3 cm	358,5 cm	722,0 cm	259,1 cm
3,7 m x 9,4 m	358,5 cm x 941,1 cm	371,2 cm	954,4 cm	262,3 cm	358,5 cm	941,1 cm	259,1 cm

# **BEFORE YOU BEGIN....**

BW02a

## **Owner's Manual**

Before beginning construction, check local building codes regarding footings, location and other requirements. Study and understand this owner's manual.

Important information and helpful tips will make your construction easier and more enjoyable.

**Assembly Instructions:** Instructions are supplied in this manual and contain all appropriate information for your building model. Review all instructions before you begin, and during assembly, follow the step sequence carefully for successful results.

**Flooring and Anchoring:** Your storage building must be anchored to prevent wind damage. A base is necessary to construct a square and level building. Anchoring and base materials are not included with your building. We recommend the use of an Arrow Anchoring Kit as an effective method of securing your building to the ground (Available by mail order or at your local dealer) or you may construct a base and anchoring system of your choice. Your assembly instructions provide information on a few methods commonly used to secure and level a storage building.

**Parts and Parts List:** Check to be sure that you have all the necessary parts for your building.

•All part numbers can be found on the parts. All of these numbers (before the -) must agree with the numbers on the parts list.

•If you find that a part is missing, include the model number of your building and contact:

•Separate contents of the carton by the part number while reviewing parts list. The first few steps show how to join related parts to make larger sub assemblies which will be used later.

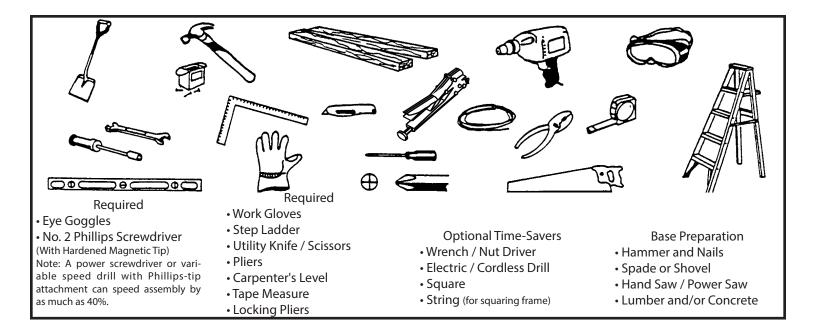
•Familiarize yourself with the hardware and fasteners for easier use during construction. These are packaged within the carton. Note that extra fasteners have been supplied for your convenience.

## PLAN AHEAD....

Watch the Weather: Be sure the day you select to install your building is dry and calm. Do not attempt to assemble your building on a windy day. Be careful on wet or muddy ground.

**Teamwork:** Whenever possible, two or more people should work together to assemble your building. One person can position parts or panels while the other is able to handle the fasteners and the tools.

**Tools and Materials:** These are some basic tools and materials you will need for the construction of your building. Decide which method of anchoring and the type of base you wish to use in order to form a complete list of the materials you will need.



Selecting and Preparing Your Site: Before assembly, you will want to decide on a location for your building. The best location is a level area with good drainage.

•Allow enough working space for ease of moving parts into position during assembly. Be sure there will be enough space at entrance for doors to open fully and enough space around the building to be able to fasten the panel screws from the outside.

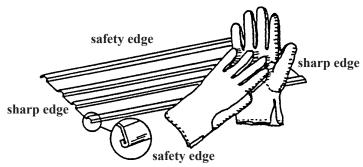
•Before you begin the first steps in assembling your parts, a base should be constructed and an anchoring system should be ready to use.

BW04

## SAFETY FIRST....

Safety precautions are important to follow throughout the construction of your building.

•Care must be taken when handling various pieces of your building since some contain sharp edges. Please wear work gloves, eye protection and long sleeves when assembling or performing any maintenance on your building.



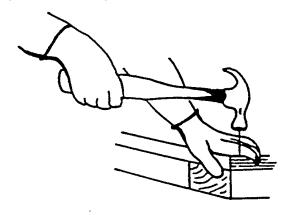
•Keep children and pets away from worksite to avoid distractions and any accidents which may occur.



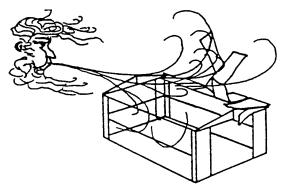
•Never concentrate your total weight on the roof of the building. When using a step ladder make sure that it is fully open and on even ground before climbing on it.



•Practice caution with the tools being used in the assembly of this building. Be familiar with the operation of all power tools.



•Do not attempt to assemble the building if parts are missing because any building left partially assembled may be seriously damaged by light winds.



•Do not attempt to assemble the building on a windy day, because the large panels acting as a "sail", can be whipped about by the wind making construction difficult and unsafe.



4

# **CARE & MAINTENANCE....**

**Finish:** For long lasting finish, periodically clean and wax the exterior surface. Touch-up scratches as soon as you notice them on your unit. Immediately clean the area with a wire brush; wash it and apply touch-up paint per manufacturer's recommendation.

**Roof:** Keep roof clear of leaves and snow with long handled, soft-bristled broom. Heavy amounts of snow on roof can damage building making it unsafe to enter.

**Doors:** Always keep the door tracks clear of dirt and other debris that prevent them from sliding easily. Lubricate door track annually with furniture polish or silicone spray. Keep doors closed and locked to prevent wind damage.

**Fasteners:** Use all washers supplied to protect against weather infiltration and to protect the metal from being scratched by screws. Regularly check your building for loose screws, bolts, nuts, etc. and retighten them as necessary.

**Moisture:** A plastic sheet (vapor barrier) placed under the entire floor area with good ventilation will reduce condensation.

#### **Other Tips....**

- Wash off inked part numbers on coated panels with soap and water.
- Silicone caulking may be used for watertight seals throughout the building.

Do not store swimming pool chemicals in your building. Combustibles and corrosives must be stored in air tight approved containers.

Keep this Owner's Manual and Assembly Instructions for future reference.

## Base

BW08

#### The Base For Your Building

#### **Concrete Slab**

The slab should be at least 4" (10,2 cm) thick. It must be level and flat to provide good support for the frame. The following are the recommended materials for your base.

2 x 4's (38 mm x 89 mm) (will be removed once the concrete cures)

Concrete Sheet of 6 mil plastic

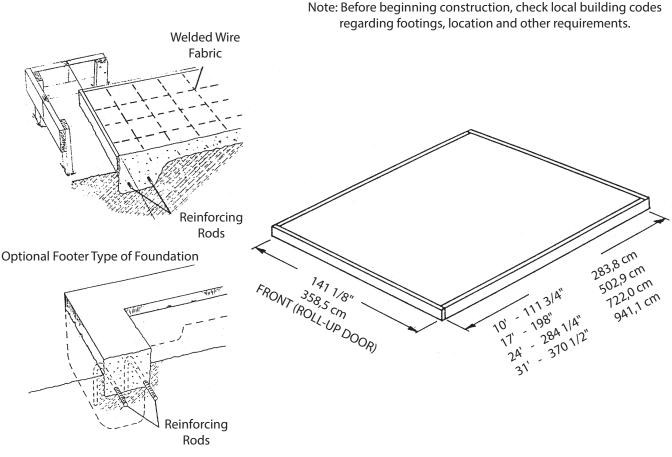
We recommend for a proper strength concrete to use a mix of:

1 part cement 3 parts pea sized gravel 2 1/2 parts clean sand

Prepare the Site/Construct a Base

- 1. Dig a square, 6" (15,2 cm) deep into the ground (remove grass).
- 2. Fill up to 4" (10,2 cm) in the square with gravel and tamp firm.
- 3. Cover gravel with a sheet of 6 mil plastic.
- 4. Construct a wood frame using four planks of 2x4 (38 mm x 89 mm) lumber.
- 5. Pour in concrete to fill in the hole and the frame giving a total of 4" (10,2 cm) thick concrete. Be sure surface is level.

Allow 3 - 5 hours for construction and a week for concrete curing time.



Note: Finished Slab dimensions, with lumber removed.

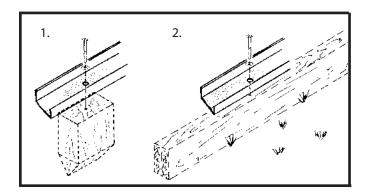
## Anchoring

#### **Anchoring Down The Building**

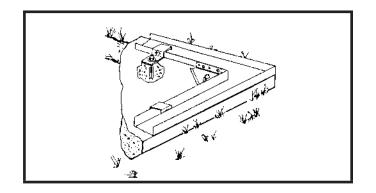
It is important that the entire floor frame be anchored after the building is erected. Below are recommended ways of anchoring.

#### **Anchoring into Wood/Post:**

Use 1/4" (6 mm) Wood Screws. There are 1/4" (6 mm) dia. holes provided in the frames for proper anchoring.

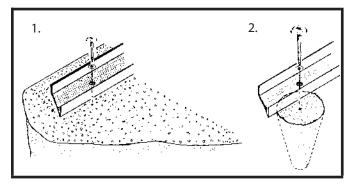


Arrow Anchoring Kit: (Model No. AK100 or 68383) Recommended for use with the concrete base. Contains: Corner gussets, perimeter clips, hardware, 1/4" masonary drill bit and installation instruction.



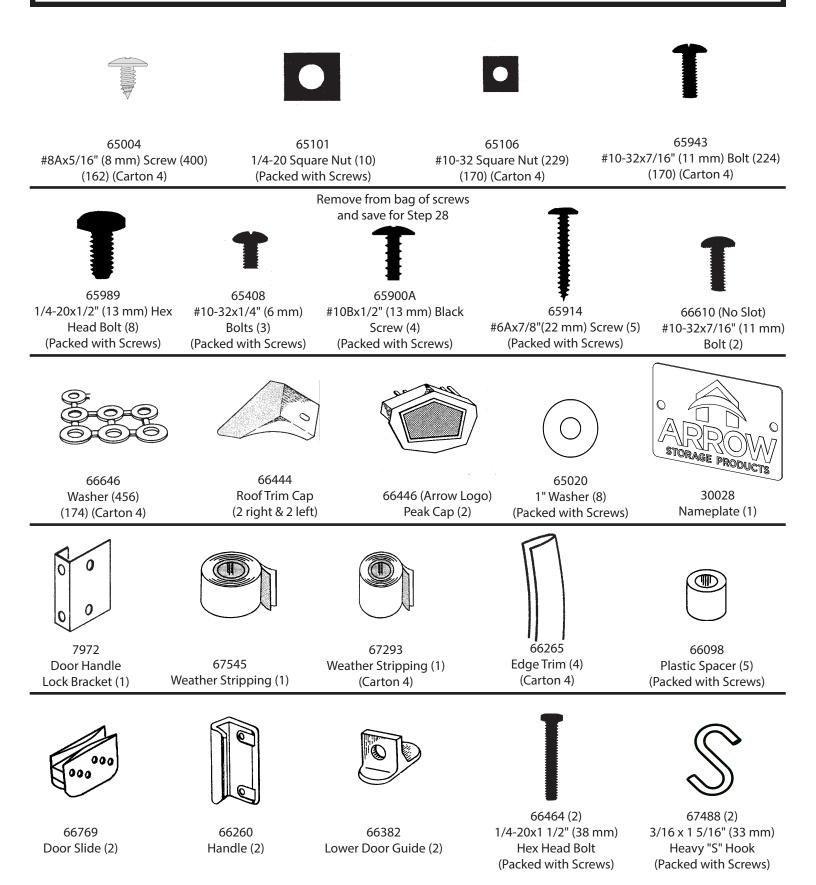
#### Anchoring into Concrete:

 For poured concrete slab or footing or patio blocks: Use 1/4" x 2" (6 mm x 51 mm) Lag Screws.
 For Anchor Post of Concrete poured after building is erected: Use 1/4" x 6" (6 mm x 152 mm) Lag Screws.



# Hardware for Building

JM10



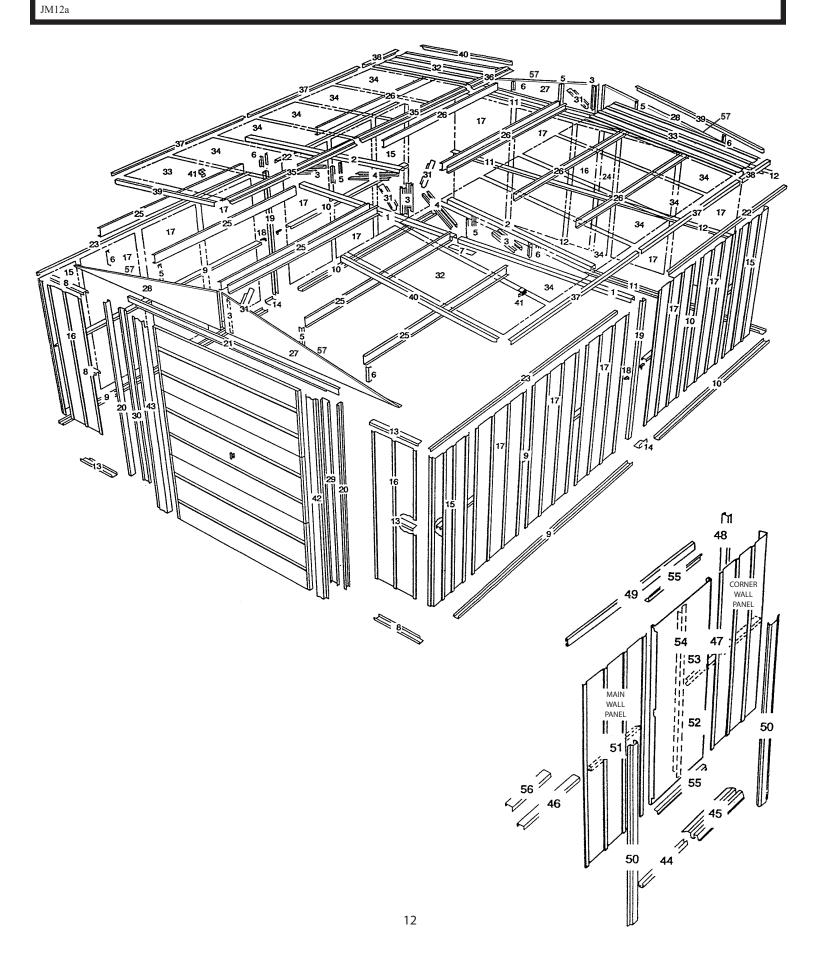
## **Parts List**

JM11a

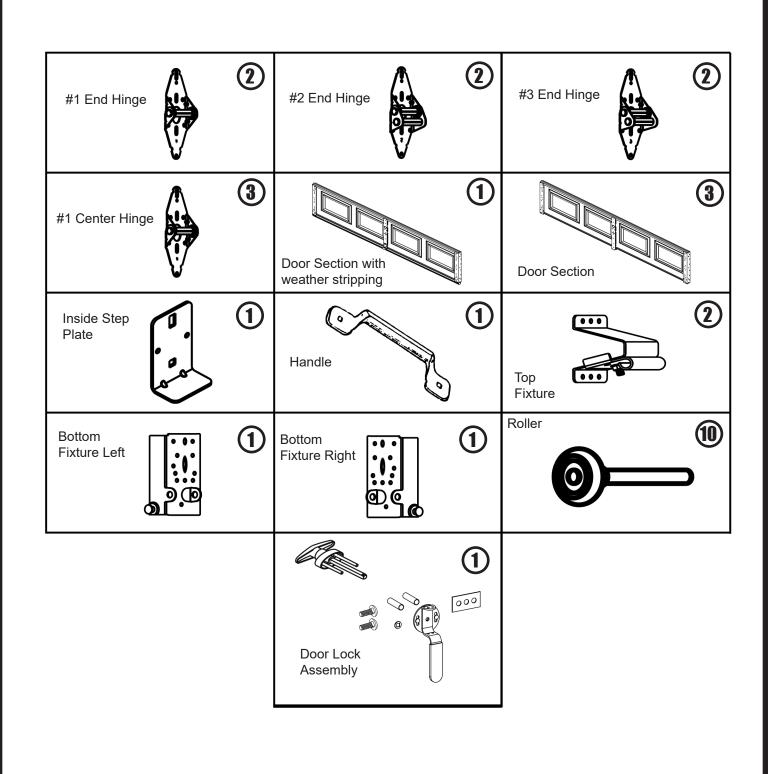
Carton #4 of the 12' x17' (3,7 m x 5,2 m) can be deleted for a complete 12' x10' (3,7 m x 3,0 m) building, or more than one carton #4 may be used to extend depth in multiples of 7' (2,1 m).

				1	1	l	
Assemb Key No.		Part Number	Description	Carton 1	Carton 2	Carton 3 CHI Door	Carton 4
Key NO.		Number	Description	Carton	Carton 2		Carton 4
	1	7855	Truss Lower Chord				2
	2	7856	Truss Upper Chord				2
	3	6382	Center Gable Brace		2		8
	4	7739	Truss Diagonal				4
	5	6381	Mid Gable Brace		4		4
	6	6380	Outer Gable Brace		4		4
	7	7738	Splice Plate				1
	8	7834	Right Front Frame		3		
	9	7837	Side Frame		4		
	10	7914	Side Frame				4
	11	11770	Right Rear Frame		3		
	12	80321	Left Rear Frame		3		
	13	7835	Left Front Frame		3		
	14	7857	Truss Support				2
	15	7824	Corner Wall Panel	4			
	16	7825	Wall Panel	3			
	17	7822	Main Wall Panel	7			6
	18	6228	Frame Support	1			4
	19	7917	Truss Column				2
	20	7839	Front Column	2			
	21	7831	Lintel	1	1		
	22	7915	Side Top Angle				2
	23	7838	Side Top Angle		2		
	24	11768	Wall Panel	1			
	25	10462	Roof Beam		6		
	26	7912	Roof Beam				6
	27	7942	Right Gable	2			
	28	7943	Left Gable	2			
	29	10460	Right Track Support	1			
	30	10461	Left Track Support	1			
	31	6372	Gable Strut		2		2
	32	7827	Left Roof Panel	2			
	33	7826	Right Roof Panel	2			0
	34	7828	Middle Roof Panel	4	4		6 1
	35	7843	Ridge Cap		1		1
	36	6874	Ridge Cap		1		0
	37	5220	Side Roof Trim	1	2		2
	38 39	6014 7845	Side Roof Trim Left Rake	1	2 2		
	39 40	7845 7846	Right Rake	1	2		
	40 41	7913		2	<u> </u>		
	41 42	7913 7830	Spring Support Bracket	2			
	42 43	7830 7829	Right Door Jamb Left Door Jamb	1			
	43 44	7829 7517	Len Door Jamb Lower Door Track				
	44 45	7560	Ramp				
	45 46	7950	Side Wall Channel				
	40 47	7949	Side Wall Channel				
	47	7951	Support Column				
	40	7958	Door Track				
	49 50	7946	Door Jamb	2			
	50 51	7948	Door Wall Brace	1			
	52	10474	Door				
	52 53	3719	Door Handle Brace				
	53 54	7947	Vertical Door Brace				
	55	10497	Horizontal Door Brace	2			
	56	8530	Splice Channel	1			
	50 57	69835	Edge Trim (Green)	4			
	Ŭ.						

# Assembly by Key No.



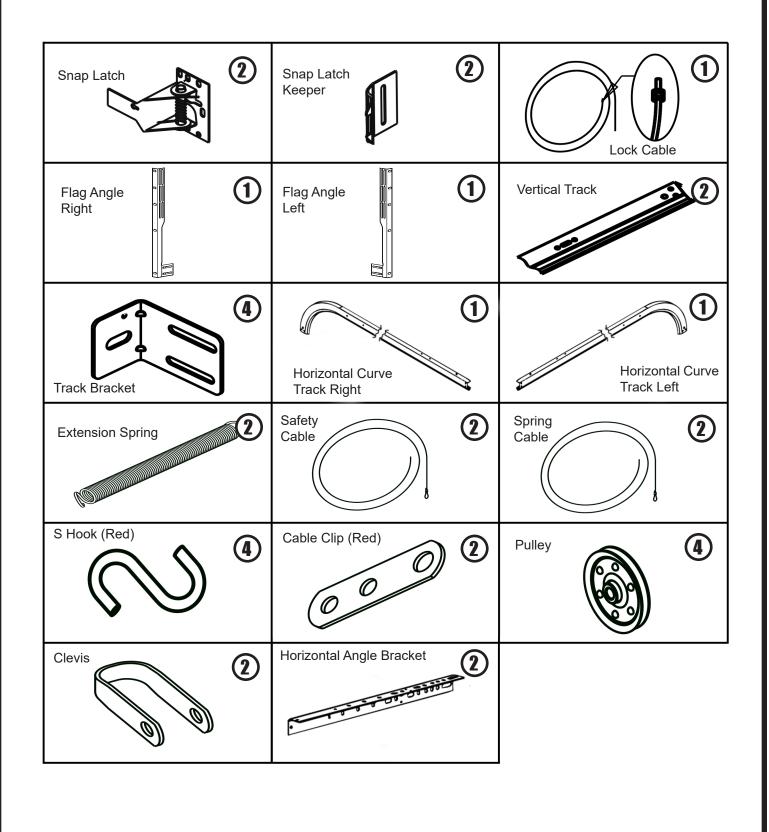
# **Components for Door**



-13-

01FFd

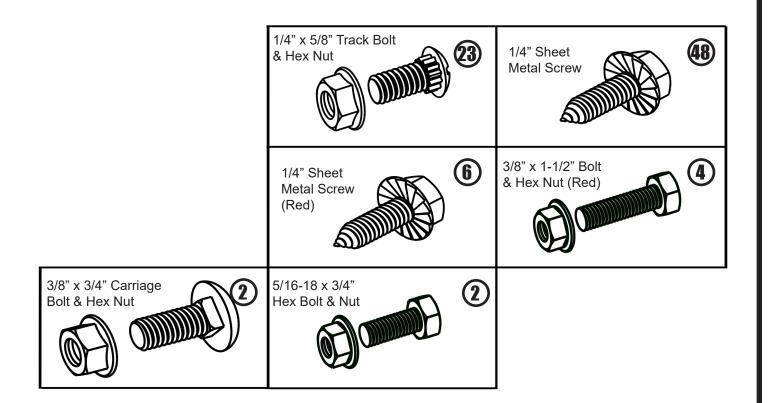
# **Components for Door**



02FFa

-14-

# Hardware for Door



03FF

## ALL RED HARDWARE IS UNDER TENSION ONCE DOOR IS ASSEMBLED. DO NOT REMOVE FROM ASSEMBLY UNTIL DOOR IS PROPERLY SECURED.

#### Parts Needed For **Step 1** Truss Assembly 12x17, 12x24 & 12x31 (3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m) ONLY

7855 Truss Lower Chord (2) 7856 Truss Upper Chord (2) 6382 Center Gable Brace (8) 7739 Truss Diagonal (4) 6381 Mid Gable Brace (4) 6380 Outer Gable Brace (4) 7738 Splice Plate (1)

**1** Assemble 1/2 truss at a time, using #10-32x7/16" (11 mm) bolts and square nuts, on all connections loosely.

2 Attach truss lower chord to truss upper chord.

**3** Attach 2 center gable braces to the upper and lower chords at the opposite end of truss.

4 Attach 2 truss diagonals to upper and lower chords.

**5** Attach 2 mid gable braces to upper and lower chords.

6 Attach 2 center gable braces to upper and lower chords at middle of truss.

7 Attach 2 outer gable braces to upper and lower chords. Mount with short leg of brace.

8 Square up 1/2 truss, adjust and tighten.

9 Make other half and square.

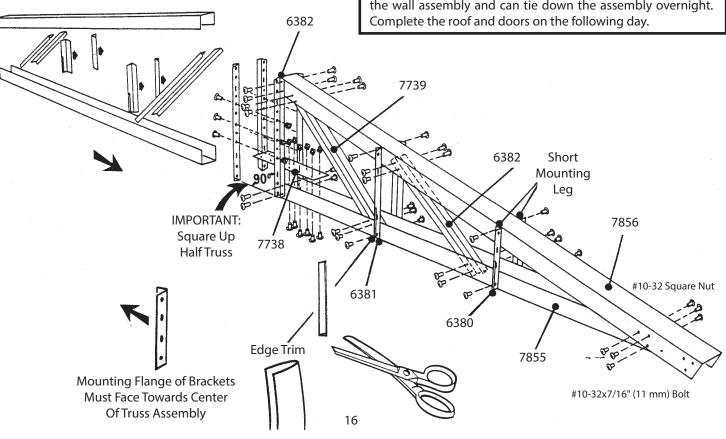
10 Splice both halves together with splice plate and fasten center gable braces together, using 3 bolts and nuts.

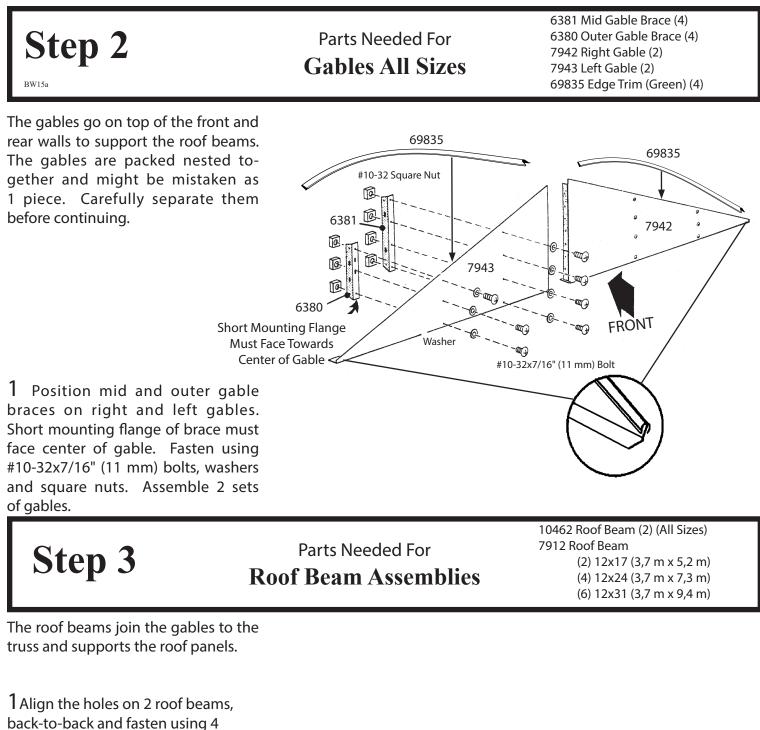
11 Cut the 4 pieces of edge trim in half and slip over the bottom edges of gable braces. This trim is a must to protect against injury from the sharp edge.

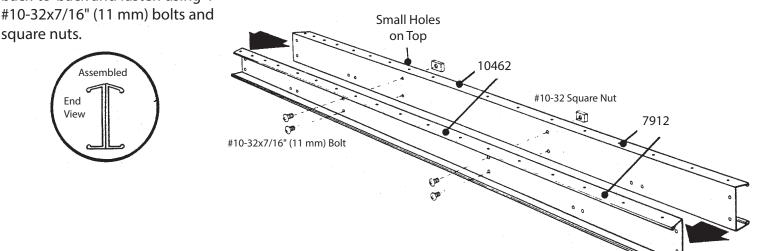
Make 1 assembly for the 12x17 (3,7 m x 5,2 m) Make 2 assemblies for the 12x24 (3,7 m x 7,3 m) Make 3 assemblies for the 12x31 (3,7 m x 9,4 m)

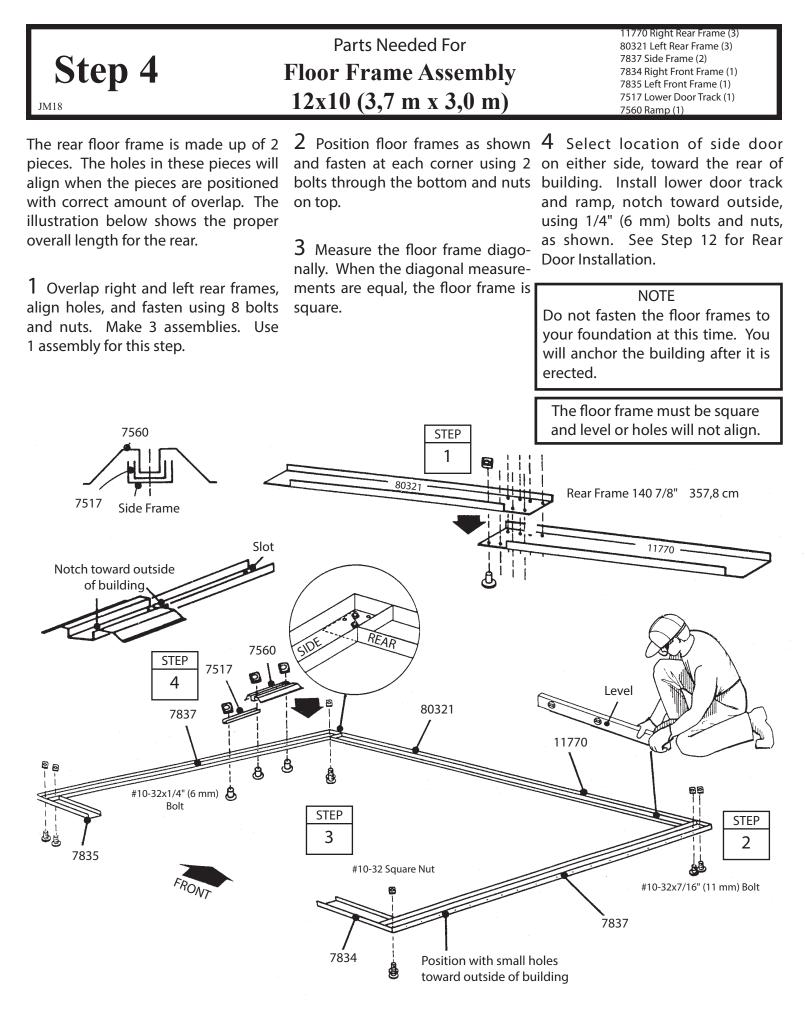
NOTE

The day before construction of the building, complete the sub-assemblies so they will be ready. EXAMPLE: Truss, floor frames, roof beams, gables, side and overhead doors. Set the assemblies aside, so they will not get damaged. The remainder of the building assembly requires more than 1 work session and more than 1 person. Do not continue beyond this point if you do not have enough time to complete the wall assembly and can tie down the assembly overnight. Complete the roof and doors on the following day.









The rear floor frame is made up of 2 NOTE IF YOU ARE BUILDING A 12x24 pieces. The holes in these pieces will (3,7 m x 7,3 m)Position of holes, and fasten at align when the pieces are positioned Fasten additional side frame 7914 and the 1st set of holes. See side truss support 7857 to side frame 7914 with correct amount of overlap. The connection. using the side connection. Position rear illustration below shows the proper frame at rear of assembly and fasten overall length for the rear. 4 Measure the floor frame diagousing the rear corner connection. nally. When the measurements are 1 Overlap right and left rear frames, IF YOU ARE BUILDING A 12x31 equal, the floor frame is square. align holes, and fasten using 8 bolts (3,7 m x 9,4 m) and nuts. Make 3 assemblies. Use 5 Select location of side door on Fasten 2 additional side frames 7914 1 assembly for this step. and truss supports 7857 to side frame either side, toward the rear of build-7914 using the side connection. Positon ing. Install lower door track and 2 Position floor frames as shown rear frame at rear of assembly and fasten ramp, notch toward outside, using and fasten at each corner using 2 using the rear corner connection. 1/4" (6 mm) bolts and nuts. See bolts through the bottom and nuts Step 12 for Rear Door Installation. on top. When installing side frame 7914, be sure set of holes 1" (2,5 cm) in from end of frames are installed NOTE Level toward rear of building. Do not fasten the floor frames to your foundation at this time. **3** Fasten side frames together with a You will anchor the building truss support using 4 bolts through after it is erected. the bottom and nuts on top. The floor frame must be square and level or holes will not align. STEP 1 80321 Rear Frame 140 7/8" 357,8 cm 1770 Slot STEP Notch toward outside 3 of building 7857 7914 Level STEP 80321 2 1177 7837 STEP #10-32x7/16" (11 mm) Bolt 7857 5 STEP 4 #10-32x1/4" (6 mm) Bolt 18 7914 7835 **8**7517 #10-32 Square Nut PONT 7560 7857 7837 Position with small holes 7834 7517 toward outside of building Side Frame 19

Parts Needed For

**Floor Frame Assembly** 

12x17, 12x24 & 12x31

(3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m)

Step 5

JM19

11770 Right Rear Frame (3)

7914 Side Frame (see below)

7857 Truss Support (see below)

80321 Left Rear Frame (3)

7837 Side Frame (2)

7560 Ramp (1)

7834 Right Front Frame (1)

7835 Left Front Frame (1)

7517 Lower Door Track (1)

Step 6 BW18a

#### Parts Needed For **Corners All Sizes**

7824 Corner Wall Panel (4) 7825 Wall Panel (2) 7822 Main Wall Panel (2)

7822

Each screw and bolt in the wall requires a washer.





INCORRECT

1 Install a corner wall panel at the corner of the floor frame as shown. The widest part of each corner panel must be placed along the side of the building for all 4 corners. Fasten the corner panel to the floor frame with 4 screws.

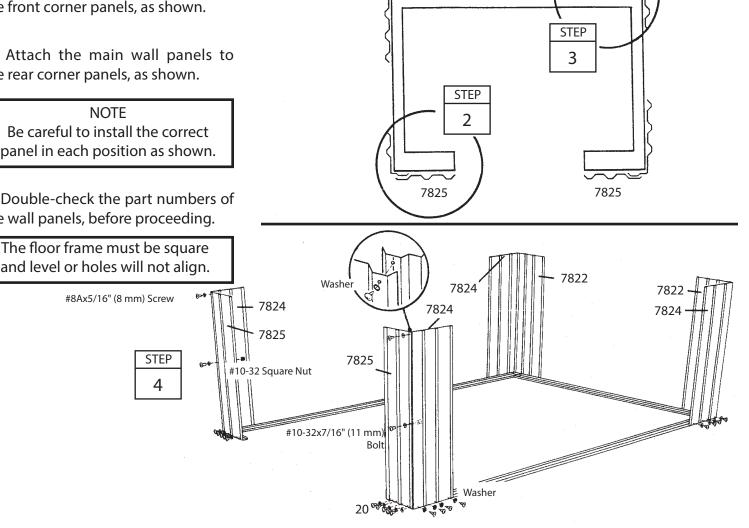
Support the corner panel with a step ladder until a wall panel is attached.

2 Attach the front wall panels to the front corner panels, as shown.

**3** Attach the main wall panels to the rear corner panels, as shown.

NOTE Be careful to install the correct panel in each position as shown.

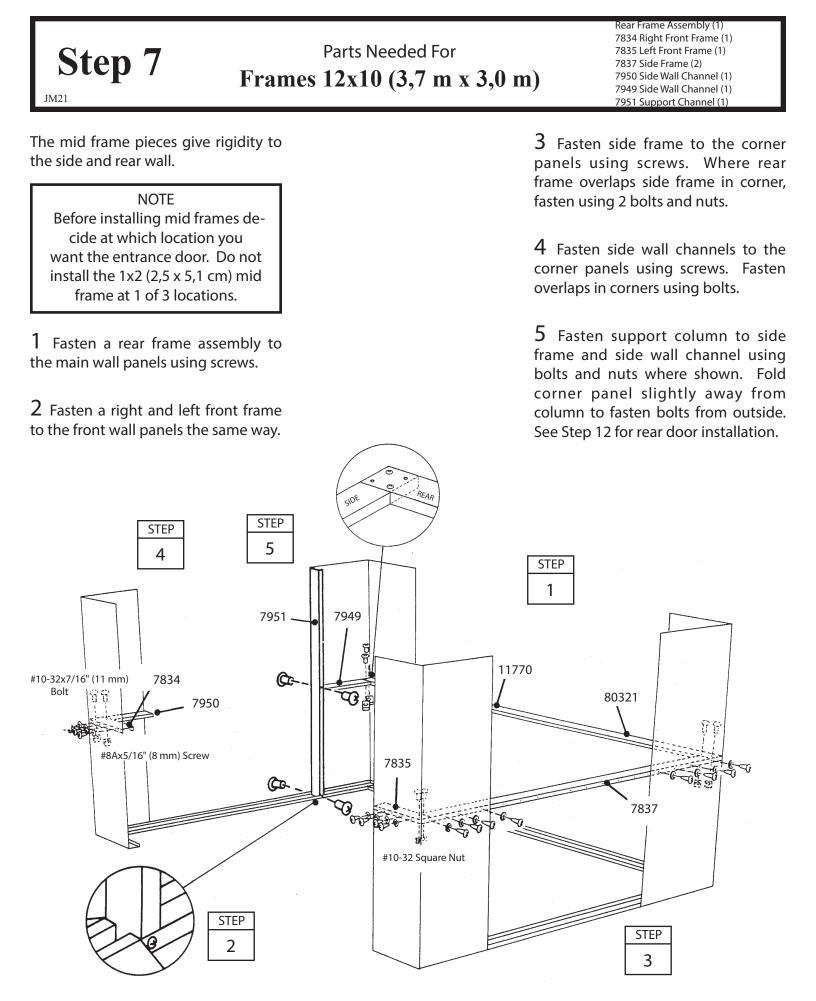
4 Double-check the part numbers of the wall panels, before proceeding.



Side 7824 Wide Side REAR 7824 SIDE SIDE TOP VIEW STEP 7824 7824 1 FRONT

7822

Narrow



Parts Needed For Frames 12x17, 12x24 & 12x31

(3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m)

Rear Frame Assembly (1) 7834 Right Front Frame (1) 7835 Left Front Frame (1) 7917 Truss Column (see below) 7914 Side Frame (see below) 7837 Side Frame (2) 6228 Frame Support (4) 7949 Side Wall Channel (1) 7951 Support Column (1)

The mid frame pieces give rigidity to the side and rear wall.

Step 8

JM22

NOTE Before installing mid frames decide at which location you want the entrance door. Do not install the 1x2 (2,5 x 5,1 cm) mid frame at 1 of 3 locations.

1 Fasten a rear frame assembly to the main wall panels using screws.

2 Fasten a right and left front frame to the front wall panels the same way.

**3** Attach 4 frame supports to the middle of the 2 truss columns using 2 bolts and nuts on each.

**4** Fasten side frame 7914 to the rear corner panel using screws. Be sure set of holes 1" (2,5 cm) in from end of frame is installed toward rear of building. Where rear frame overlaps ? side frame in corner, fasten using 2 bolts and nuts. Fasten opposite end to frame support on truss column, using 2 bolts and nuts in the 1st set of holes. Fasten truss support to truss column at bottom with 1screw at the 1st hole on column. Support column assembly with step ladder.

7834

IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m) Each side of building will have 2 column assemblies and 2 extra side frames 7914.

IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m)Each side of building will have 3 column assemblies and 4 extra side frames 7914.

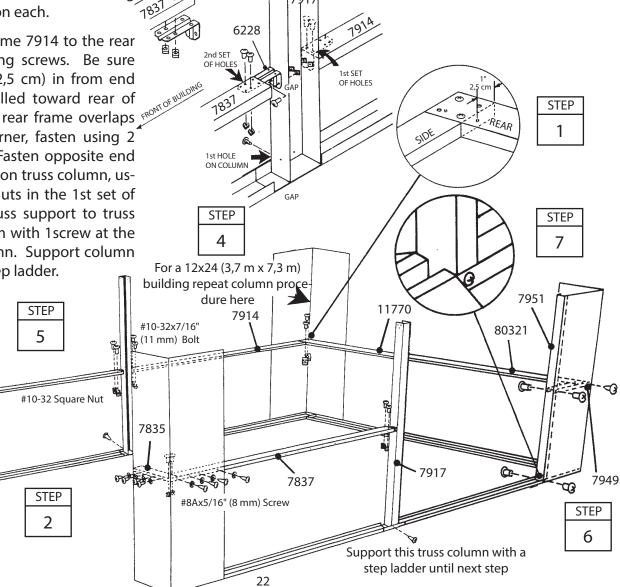
STEP

3

5 Fasten side frame 7837 to the front corner panel using screws. Fasten overlap in corner. Fasten opposite end to the frame support on truss column, using 2nd set of holes. This will leave a gap between side frame and truss column.

6 Fasten side wall channel to the rear corner panel using screws.

7 Fasten support column to side frame and side wall channel using bolts and nuts where shown. Fold corner panel slightly away from column to fasten bolts from outside. See Step 12 for rear door installation.



# Step 9

JM23

#### Parts Needed For Frames 12x10 (3,7 m x 3,0 m)

STEP

6

**END VIEW** 

**OF TRACK** 

7839 Front Column (2) 7834 Right Front Frame (1) 7835 Left Front Frame (1) 7831 Lintel (1) Rear Frame Assembly (1) 7838 Side Top Angle (2) 7958 Door Track (1)

The top frame pieces give rigidity to the side walls and provide a surface for attaching the gables which support the roof.

**1** Fasten front columns to the bottom and mid front frames with bolts and nuts. Flange with 2 holes at each end must be facing outside. Fold front panel slightly away from column to tighten bolts and nuts.

2 Fasten right and left front frame to the top of front wall panels using 4 screws.

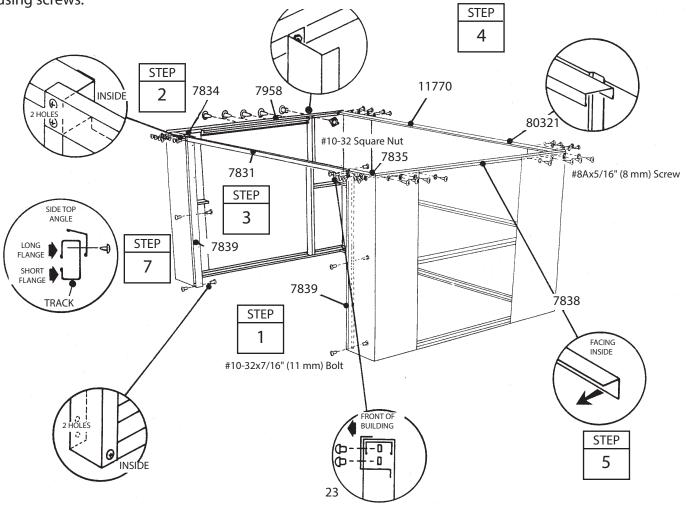
**3** Position lintel across top of frames and columns and fasten with bolts.

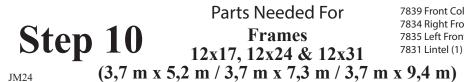
4 Position rear frame assembly across top of main wall panels and fasten using screws.

**5** Fasten side top angles to the corner panels using screws. Fasten support column to top angle using a bolt.

6 Position door slides onto the legs, from the end of door track, as shown in the end view.

7 Position door track to the inside of side top angle, butted up against support column. With short flange of track at bottom, fasten angle to track using 4 screws at the 2nd, 3rd, 4th and 5th hole in from support column. See Step 12 for rear door installation.





7839 Front Column (2) 7834 Right Front Frame (1) 7835 Left Front Frame (1)

Rear Frame Assembly (1) 7915 Side Top Angle (see below) 7838 Side Top Angle (2) 7958 Door Track (1)

The top frame pieces give rigidity to the side walls and provide a surface for attaching the gables which support the roof.

1 Fasten front columns to the bottom and mid front frames with bolts and nuts. Flange with 2 holes at each end must be facing outside. Fold front panel slightly away from column to tighten bolts and nuts.

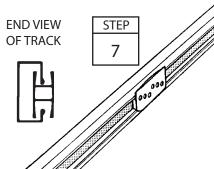
2 Fasten right and left front frame to the top of front wall panels using 4 screws.

**3** Position lintel across top of frames and columns and fasten with bolts.

4 Position rear frame assembly across top of main wall panels and fasten using screws.

IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m) Repeat side top angle assembly using 2 additional angles 7915.

IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m) Repeat side top angle assembly using 4 additional angles 7915.



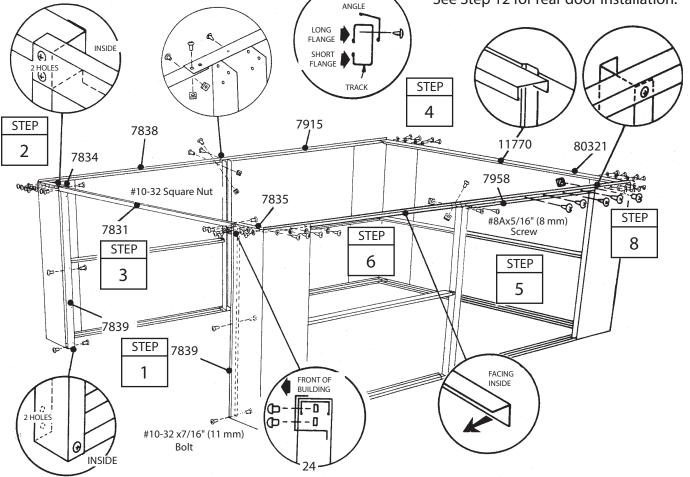
5 Fasten side top angles 7915 to the truss column using a screw and to rear corner panels using screws.

6 Fasten side top angles 7838 under 7915 and fasten to front corner panels using screws. Fasten over

lap (2 1/2" [6,4 cm]) with 2 bolts and nuts. Side angles overlap front and rear frames in the corners. Fasten support column to side top angle using a bolt and nut.

/ Position door slides onto the legs, from the end of door track, as shown in the end view.

8 Position door track to the inside of side top angle, butted up against support column. With short flange of track at bottom, fasten angle to track using 4 screws at the 2nd, 3rd, 4th and 5th hole in from support column. See Step 12 for rear door installation.



SIDE TOP

# Step 11

JM25

#### Parts Needed For Walls All Sizes

7822 Main Wall Panel (see below) 7825 Wall Panel (1) 11768 Wall Panel (1)

Each wall panel has a crimped rib on 1 side. The crimped rib should go under the rib of the panel that follows it. Leave out 1 main wall panel at the side or rear entry door location.

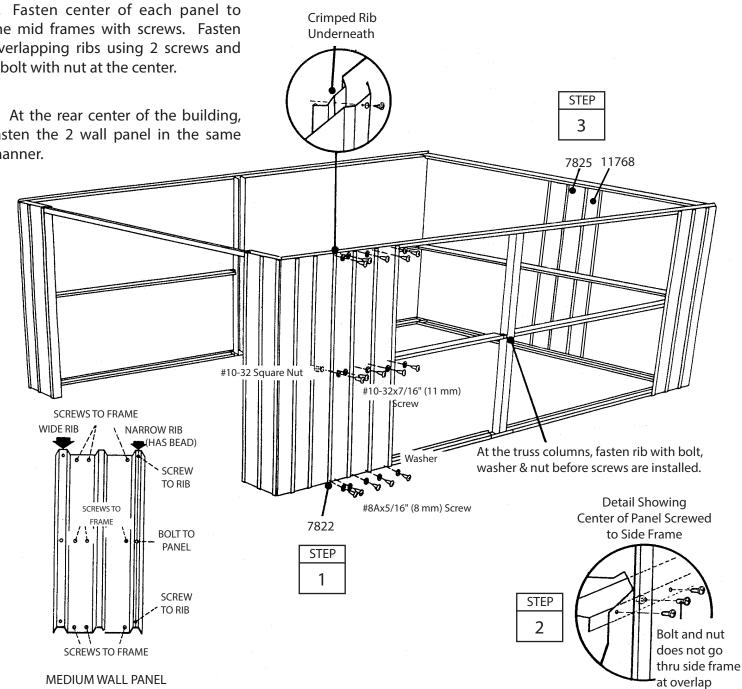
**1** Fasten the main wall panels at the top and bottom with screws.

2 Fasten center of each panel to the mid frames with screws. Fasten overlapping ribs using 2 screws and a bolt with nut at the center.

3 At the rear center of the building, fasten the 2 wall panel in the same manner.

IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m) Install 3 additional main wall panels on each side of the building.

IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m) Install 6 additional main wall panels on each side of the building.



# Step 12

#### Parts Needed For **Rear Entry Door All Sizes**

7517 Lower Door Track (1) 7560 Ramp (1) 8530 Splice Channel (1) 7951 Support Column (1) 7958 Door Track (1)

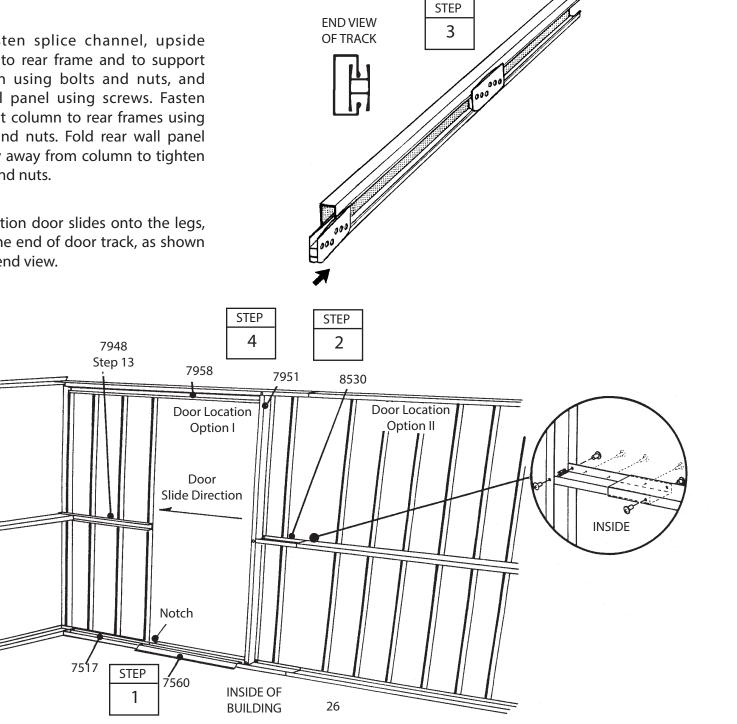
Using the previous side entry door steps and this illustration, you can install the entry door at 2 locations along the rear wall. Whichever you choose, the door will always slide towards the corner of the building.

1 Install lower door track and ramp using 1/4" (6 mm) bolts and nuts.

2 Fasten splice channel, upside down, to rear frame and to support column using bolts and nuts, and to wall panel using screws. Fasten support column to rear frames using bolts and nuts. Fold rear wall panel slightly away from column to tighten bolts and nuts.

3 Position door slides onto the legs, from the end of door track, as shown in the end view.

4 Position door track to the inside of the rear frame, butted up against support column. With short flange of track at bottom, fasten frame to track using 4 screws at the 2nd, 3rd, 4th and 5th hole in from support column.



#### Step 13 Parts Needed For Side or Rear Entry Door All Sizes

7946 Door Jamb (2) 7948 Door Wall Brace (1) 7972 Door Handle Lock Bracket (1)

The door jambs reinforce the door opening and provide an attractive trim. Follow these steps for both door jambs.

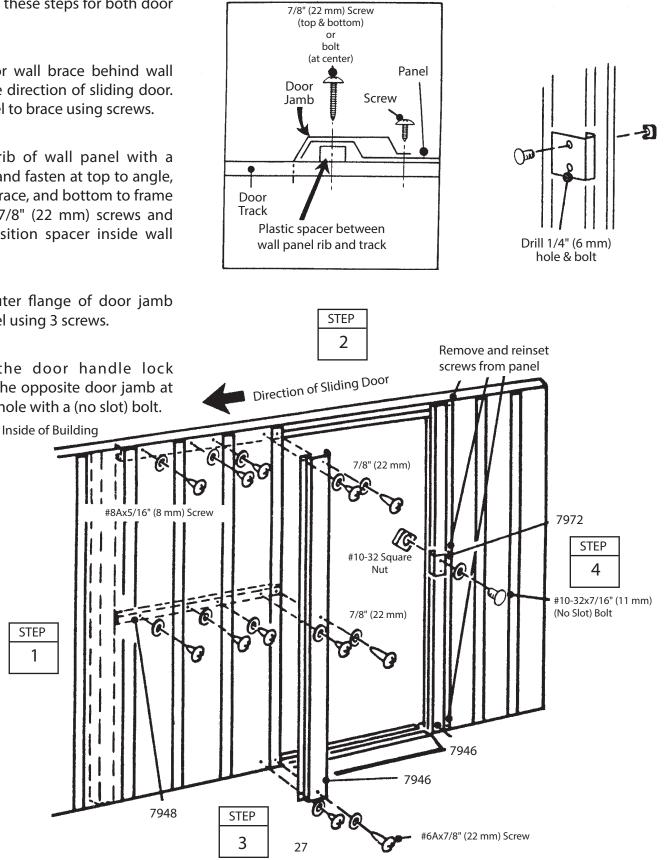
1 Place door wall brace behind wall panel in the direction of sliding door. Fasten panel to brace using screws.

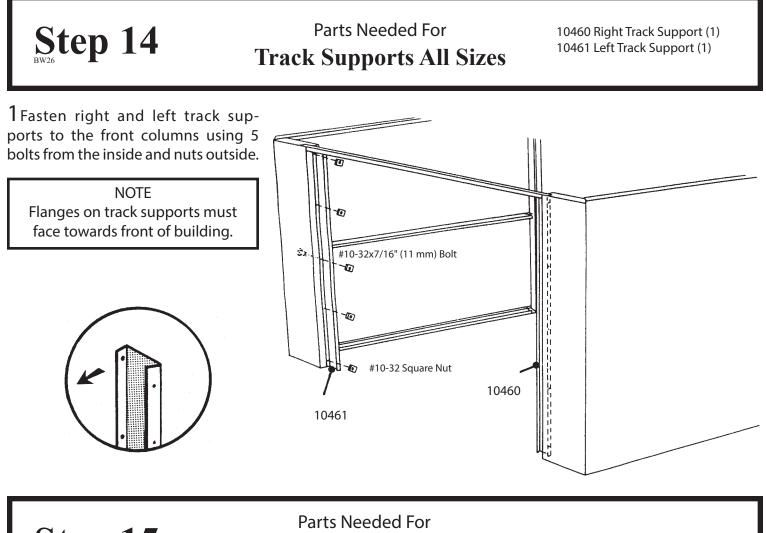
20verlap rib of wall panel with a door jamb and fasten at top to angle, middle to brace, and bottom to frame using #6Ax7/8" (22 mm) screws and spacers. Position spacer inside wall panel rib.

**3**Fasten outer flange of door jamb to wall panel using 3 screws.

4 Secure the door handle lock bracket to the opposite door jamb at the middle hole with a (no slot) bolt.

1

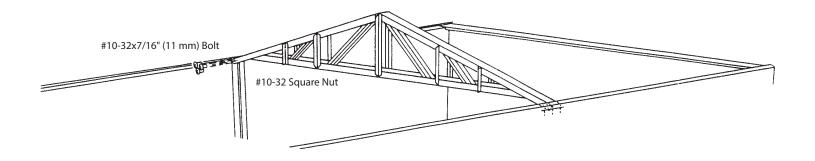




#### Step 15 Truss 12x17, 12x24 & 12x31 (3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m)

Truss Assembly (see below)

**1** Position Truss Assembly on building by sliding truss upper chords over truss columns and fasten with 6 bolts and nuts on each side. IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m) Install 2 trusses on truss columns. IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m) Install 3 trusses on truss columns.



#### Parts Needed For **Roof Beams 12x17, 12x24 & 12x31** (3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m)

Right Gable Assembly (1) 10462 Roof Beam (4) Left Gable Assembly (1) 6382 Center Gable Brace (1) 10462 Roof Beam Assembly (1) 6372 Gable Strut (2)

1 Lift and fasten a right gable assembly at top of lintel using bolts & screws.

Step 16

BW27

2Install single roof beams 10462 to the gable braces at the front section.

**3**Lift and fasten a left gable assembly in the same manner.

4Join left and right gables together with a center gable brace using 3 bolts and nuts, at middle holes.

5 Apply weather stripping along the mating edge of the left and right

gables as shown. Cut the weather

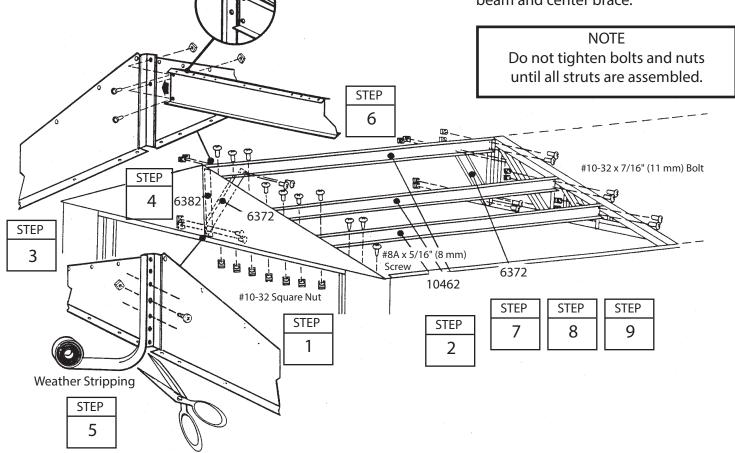
stripping to length.

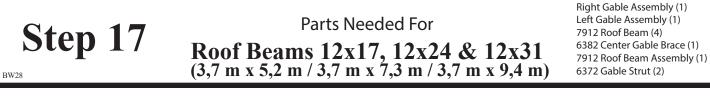
**6**Install single roof beams to the left side of building in the same manner. Slide a roof beam assembly 10462 over center gable flange and other end over center gable braces on truss and fasten using bolts & nuts.

7Fasten a gable strut to the middle roof beam behind the front gable by placing tab on end of strut between the roof beams. Align the tab with holes and fasten strut with 2 bolts.

8Fasten the lower end of the strut to center gable flange with 2 bolts.

9At the truss assembly the gable struts are attached between the middle roof beam and center brace.

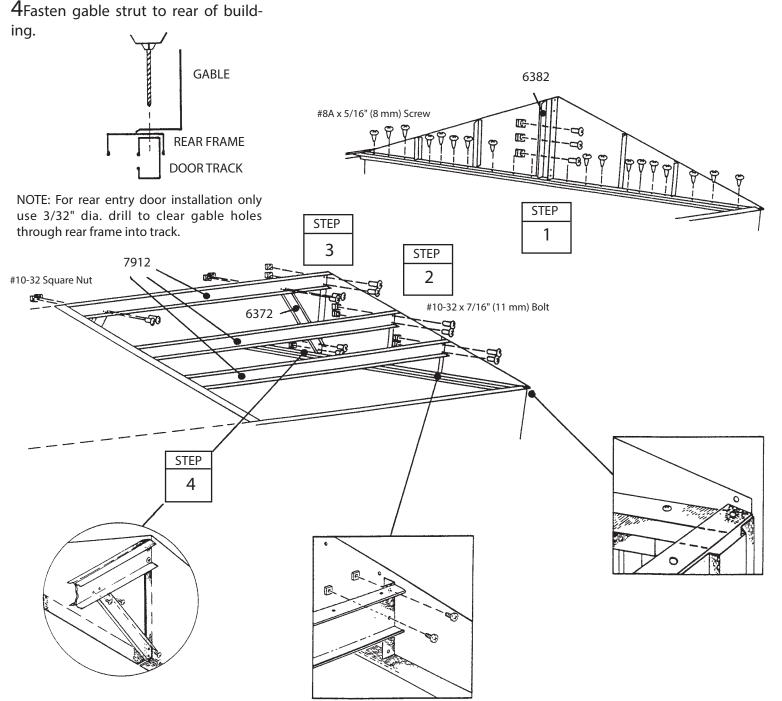




1 Fasten gables to rear frame using all screws.

2Install single roof beams 7912 and center gable brace to rear section in the same manner.

**3**Fasten roof beam assembly 7912 and struts as before.



# Step 18

#### Parts Needed For Roof Beams 12x10 (3,7 m x 3,0 m)

Right Gable Assembly (2) Left Gable Assembly (2) 6382 Center Gable Brace (2) 10462 Roof Beam (4) 10462 Roof Beam Assembly (1) 6372 Gable Strut (2)

1 Lift and fasten a right gable assembly at top of lintel using bolts & screws.

2Lift and fasten a left gable assembly at top of rear frame using screws.

3Install single roof beams to gable braces using bolts and nuts.

**4**Fasten gables to left side of building in the same manner. 5 Join left and right gables together with a center gable brace using 3 bolts and nuts, at middle holes.

6Apply weather stripping along the mating edge of the left and right gables as shown. Cut the weather stripping to length.

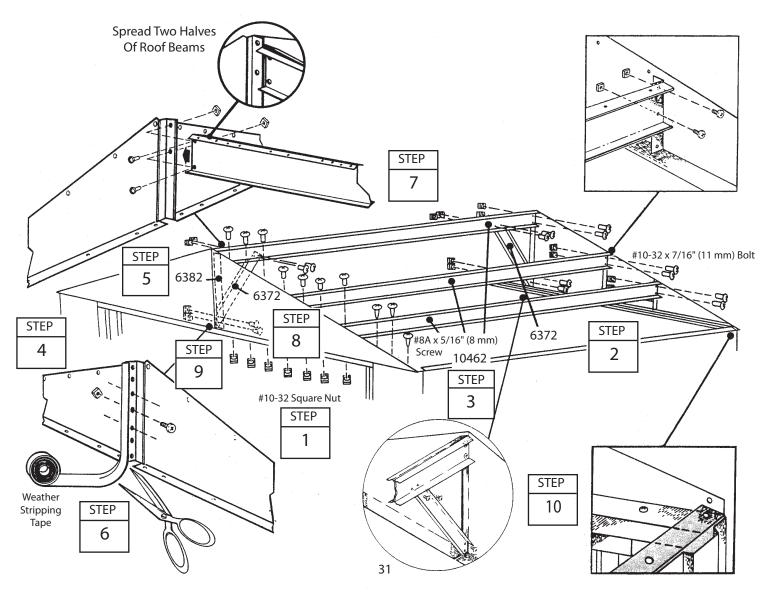
7Install single roof beams to the left side of building in the same manner. Slide a roof beam assembly over center gable flange and fasten.

**8**Fasten a gable strut to the middle roof beam behind the front gable by placing tab on end of strut between the roof beams. Align the tab with holes and fasten strut with 2 bolts.

**9**Fasten the lower end of the strut to center gable flange with 2 bolts.

NOTE Do not tighten bolts and nuts until the strut is assembled at rear.

10Repeat Steps 8 & 9 for rear of building.



# Step 19

### **Squaring the Building All Sizes**

BW30

1 Square the building on the foundation and at the top, by measuring diagonally from corner to corner as previously done.

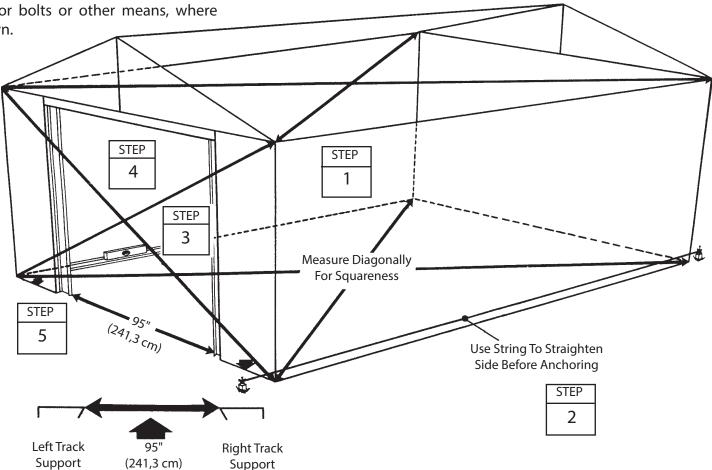
2Use string to check and see if the sides and rear of building are straight, not bowed inward or outward.

**3**Level the full perimeter of the floor frame. Shim under with wood shingles if necessary.

4Square the front of building as previously done for base.

5Anchor front frame to concrete with 1/4" (6 mm) diameter expandable anchor bolts or other means, where shown.

NOTE The 95" (241,3 cm) door opening must be held for proper door alignment. Measure between the left and right track support.



#### Parts Needed For Corner Roof Panels All Sizes

7826 Right Roof Panel (2) 7827 Left Roof Panel (1)

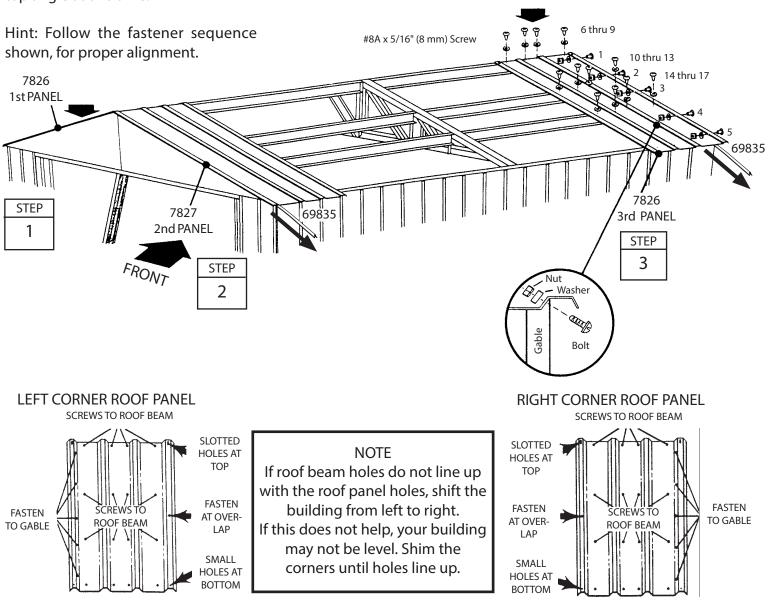
BW31a

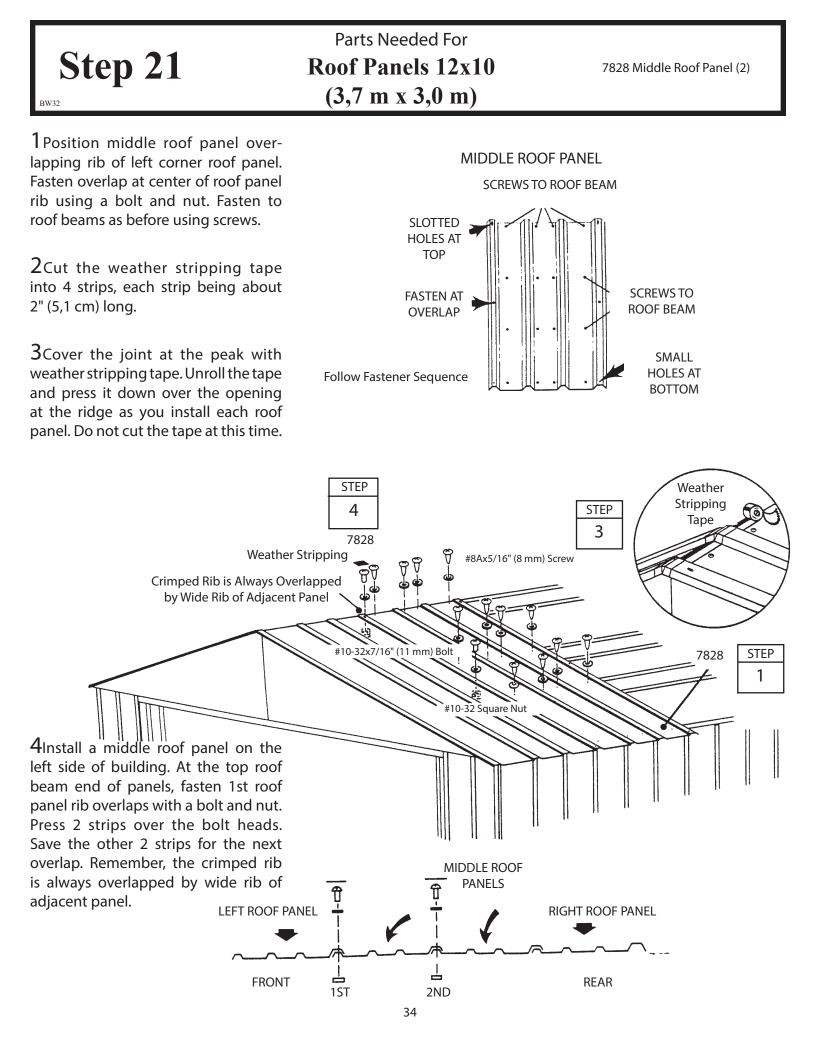
Installing the roof panels is best done with a step ladder. Each screw and bolt in the roof requires a washer. Support lintel by propping up at center with a wood 2x4 (38 mm x 89 mm) until sag is gone and there are no buckles in gables.

Step 20

1 Position a right roof panel at the front left corner and fasten to the gable and roof beams using screws and bolts as shown. Do not fasten the lower end of the panels to the side top angle at this time. 2Install the left roof panel for the right side in the position shown. Remove lintel support.

**3**Temporarily install a second right roof panel loosely as shown, for removal later. Do not fasten left rear panel at this time.





# Step 22 Parts Needed For 7828 Middle Roof Panel BW33 (3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m) 7828 Middle Roof Panel

1 Position middle roof panel overlapping rib of left corner roof panel. Fasten overlap at center of roof panel rib using a bolt and nut. Fasten to roof beams as before using screws.

2Cut the weather stripping tape into 8 strips, each strip being about 2" (5,1 cm) long.

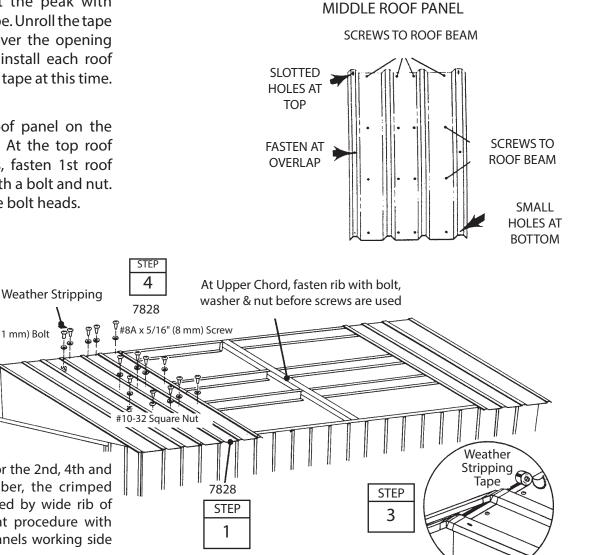
**3**Cover the joint at the peak with weather stripping tape. Unroll the tape and press it down over the opening at the ridge as you install each roof panel. Do not cut the tape at this time.

**4**Install a middle roof panel on the left side of building. At the top roof beam end of panels, fasten 1st roof panel rib overlaps with a bolt and nut. Press 2 strips over the bolt heads.

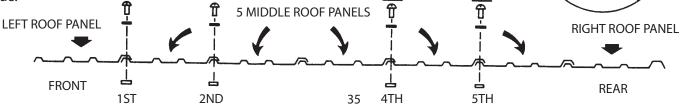
#10-32 x 7/16" (11 mm) Bolt

IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m) Cut 12 - 2" (5,1 cm) strips. There are 3 extra middle roof panels on each side of building. Fasten 7th and 8th panel overlap and apply strip over head of bolt, along with ridge caps.

IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m) Cut 16 - 2" (5,1 cm) strips. There are 6 extra middle roof panels on each side of building. Fasten 7th, 8th, 10th & 11th panel overlap and apply strip over head of bolt, along with ridge caps.



Save the other strips for the 2nd, 4th and 5th overlaps. Remember, the crimped rib is always overlapped by wide rib of adjacent panel. Repeat procedure with 2 more middle roof panels working side to side.



## Step 23Parts Needed For<br/>Ridge Caps 12x10 (3,7 m x 3,0 m)

7828 Middle Roof Panel (2) 7843 Ridge Cap (1) 7827 Left Roof Panel (1) 6874 Ridge Cap (1)

1 Temporarily remove right rear roof panel.

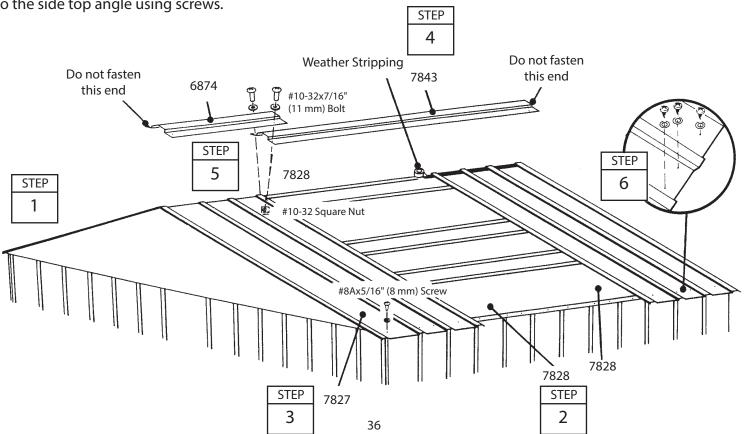
**2**Install 2 middle roof panels. Fasten 2nd roof panel rib overlaps with a bolt and nut. Press 2 strips over the bolt heads. Continue weather stripping.

**3**Install the right and left roof panels at the rear gables. Follow fastener sequence.

4Position a ridge cap 7843 on the completed front roof section.

5 Install the second ridge cap 6874 overlapping the first ridge cap. Align the holes and fasten using bolts.

6Fasten the lower end of the panels to the side top angle using screws.



_	Parts Needed For aps 12x17, 12x24 & 12x31 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m)	7828 Middle Roof Panel (see below) 7843 Ridge Cap (see below) 7827 Left Roof Panel (1) 6874 Ridge Cap (1)
1 Continue weather stripping and fastening overlaps.	$\boldsymbol{6}$ Install the right and left roof panels at the rear gables. Follow fastener sequence.	
2Position a ridge cap 7843 on the completed front roof section.	7Install the third ridge cap 6874 overlapping the second ridge cap. Align the holes and fasten using bolts.	
3Install 2 middle roof panels.		

8 Fasten the lower end of the

panels to the side top angle using

screws.

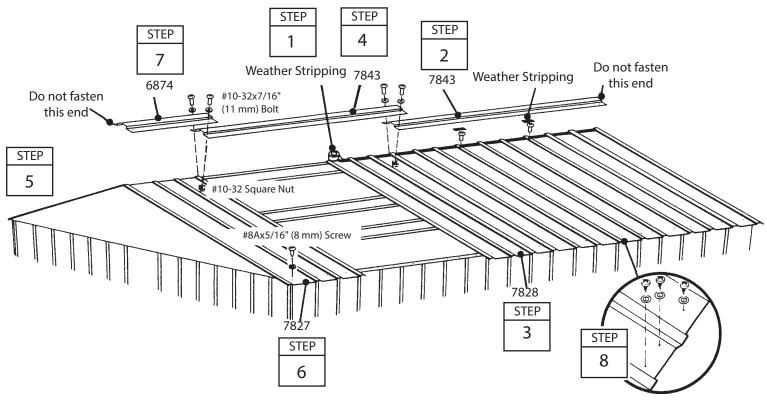
4Install the second ridge cap 7843 overlapping the first ridge cap. Align the holes and fasten using bolts.

5 Temporarily remove right rear roof panel. Install 4 middle roof panels. As each panel is fastened, carefully raise 2nd ridge cap slightly away from panels for fasteners and tape.

IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m)

Replace ridge cap 6874 with an additional ridge cap 7843 and install ridge cap 6874 to rear of building.

IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m) Replace ridge cap 6874 with 2 additional ridge caps 7843 and install ridge cap 6874 to rear of building.



### Parts Needed For Trim 12x10 (3,7 m x 3,0 m)

5220 Side Roof Trim (2) 6014 Side Roof Trim (2) 7846 Right Rake (2) 7845 Left Rack (2)

1 Attach the side roof trim to the lower end of the roof panels on each side of the building using screws at each panel overlap.

Step 25

BW36

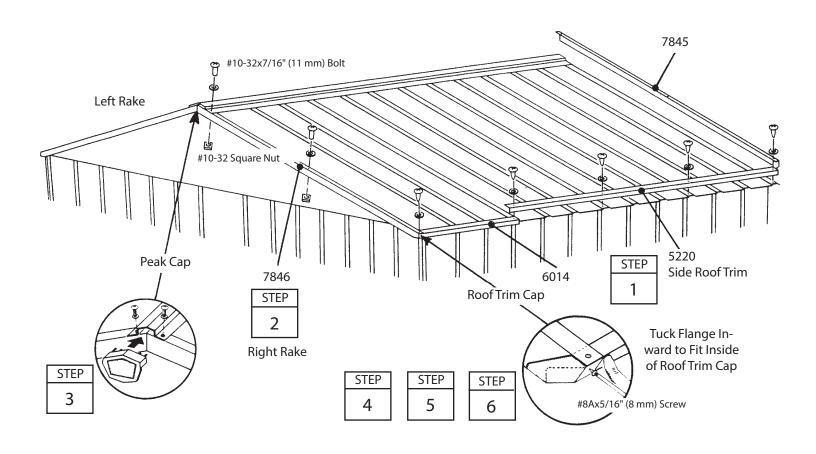
NOTE A single screw fastens both trim pieces at the overlap.

2Position left and right rake to the ends of roof, noting that rake slips under ridge cap, but fits on top of side roof trim. Fasten rake to the center of roof panel rib using a bolt. **3**Fasten roof panel rib, rake, peak cap and ridge cap together using bolts and nuts. Fasten remaining peak cap in the same manner.

**4**Using your thumb and index finger, overbend the bottom flange of the side roof trim at the corner inward enough so the right and left roof trim caps fit onto right and left corners.

5 Fasten rake to side trim using a screw into roof panel.

 $\mathbf{6}$ Fasten the roof trim caps to the side trim using a screw.



### Parts Needed For Trim 12x17, 12x24 & 12x31 (3,7 m x 5,2 m / 3,7 m x 7,3 m / 3,7 m x 9,4 m)

5220 Side Roof Trim (see below) 6014 Side Roof Trim (2) 7845 Left Rack (2) 7846 Right Rake (2)

Attach the side roof trim to the lower end of the roof panels on each side of the building using screws at each panel overlap.

Step 26

BW37

NOTE A single screw fastens both trim pieces at the overlap.

2Position left and right rake to the ends of roof, noting that rake slips under ridge cap, but fits on top of side roof trim. Fasten rake to the center of roof panel rib using a bolt.

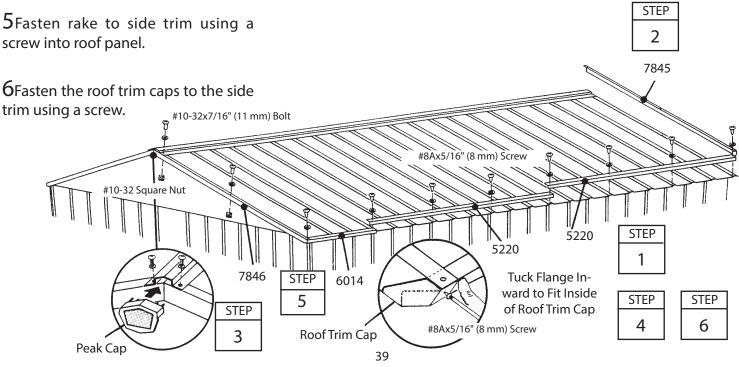
**3**Fasten roof panel rib, rake, peak cap and ridge cap together using bolts and nuts. Fasten remaining peak cap in the same manner.

4Using your thumb and index finger, overbend the bottom flange of the side roof trim at the corner inward enough so the right and left roof trim caps fit onto right and left corners.

5 Fasten rake to side trim using a screw into roof panel.

IF YOU ARE BUILDING A 12x24 (3,7 m x 7,3 m) Install additional side roof trim 5220 towards rear of building.

IF YOU ARE BUILDING A 12x31 (3,7 m x 9,4 m) Install 2 additional side roof trim 5220 pieces towards rear of building.



### Step 27 Parts Needed For Side or Rear Entry Door All Sizes

10474 Door (1)3719 Door Handle Brace (1)7947 Vertical Door Brace (1)10497 Horizontal Door Brace (2)

#### BW38

#### NOTE

To assemble door to slide from left to right (opening), position door with handle holes on left side of door. Position handle holes on right side if door is to slide from right to left (opening).

Each bolt and screw in the door requires a washer.

**1** Attach the door handle brace and handle to the door with 1 bolt as shown. Don't tighten the bolt yet.

2Swing the door handle brace up to the hole in the center of the door and insert a screw.

**3**Hold the vertical door brace against the center of the inside surface of the door and turn the screw to hold the vertical door brace and door handle brace in place. Fasten to door above and below center connection using 2 screws.

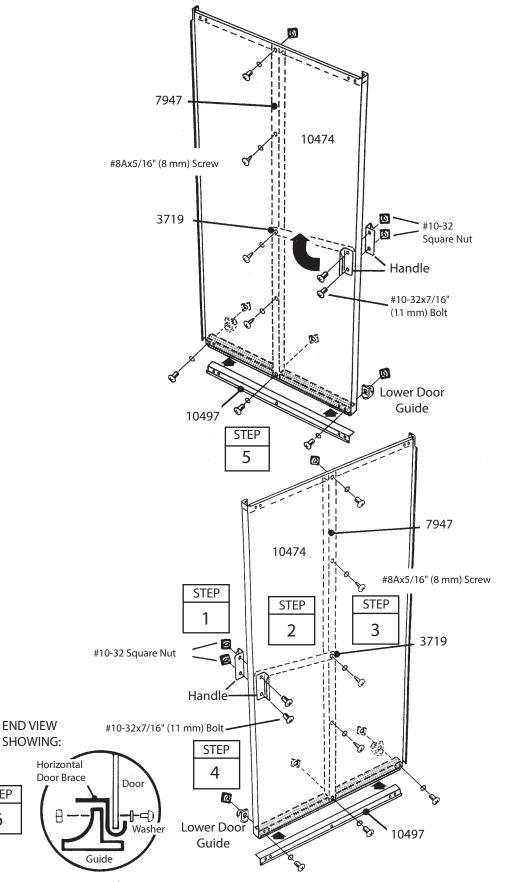
4Insert a second bolt in the door handle and tighten both bolts.

5Put a horizontal door brace onto the top edge and bottom edge and fasten with 1 bolt in the center.

**6**Attach the lower door guides and END VIEW bolts as shown. SHOWING

STEP

6



### Parts Needed For Step 28 Side or Rear Entry Door All Sizes

Door Assembly (1)

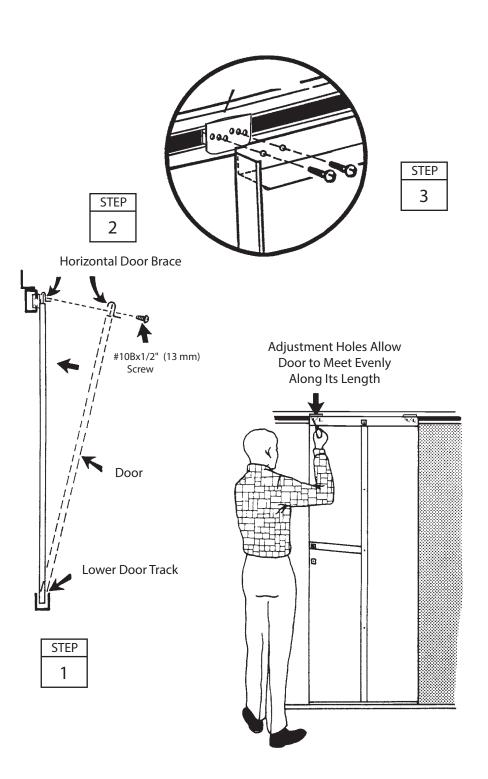
BW39

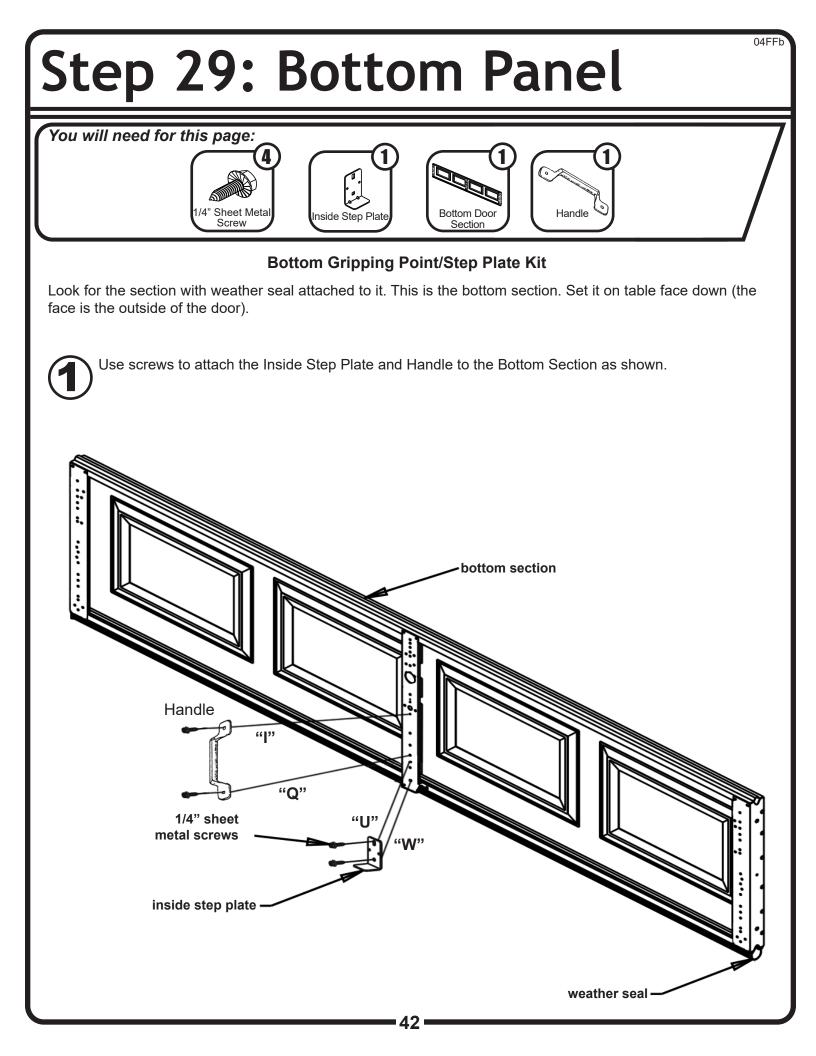
1 From inside the building, put the bottom of the door behind door jamb into the lower door track.

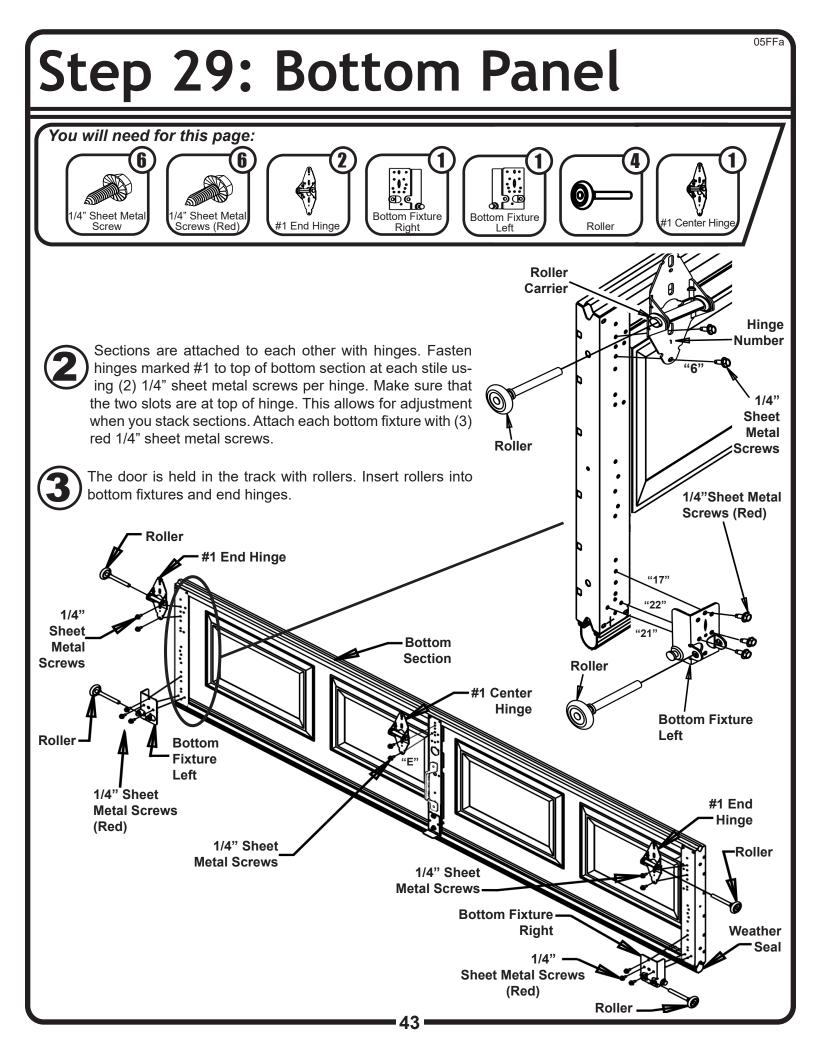
2 Position the top of the door so that the holes in the door line up with the holes in the door slides.

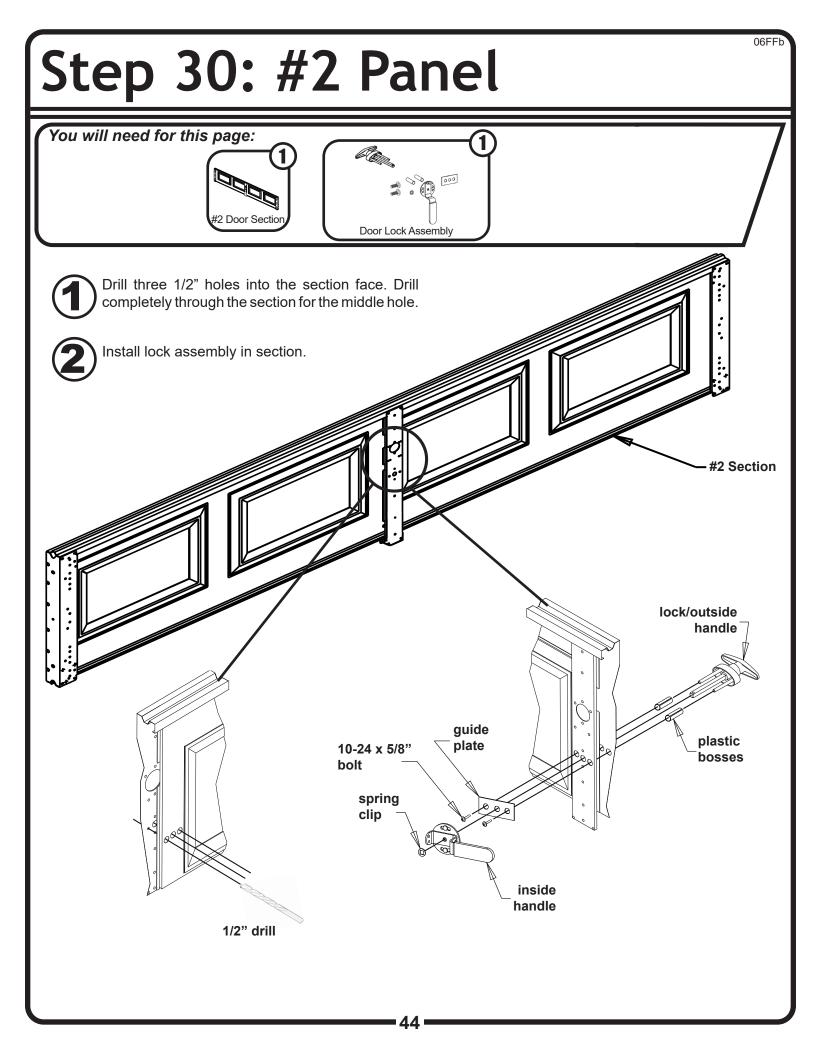
**3** Fasten the door to the door slides using two #10Bx1/2" (13 mm) screws per door slide.

NOTE The holes in the door slides allow you to adjust the door. Place the door in the middle holes.





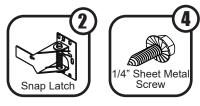




## Step 30: #2 Panel

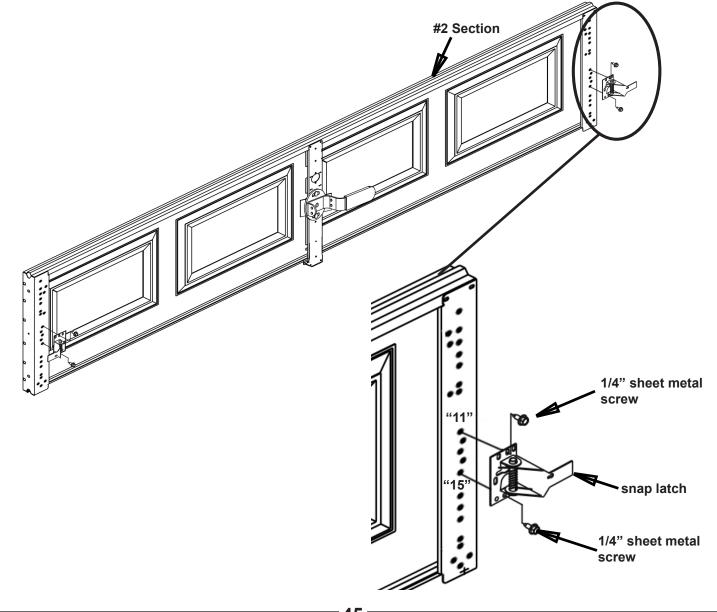
You will need for this page:

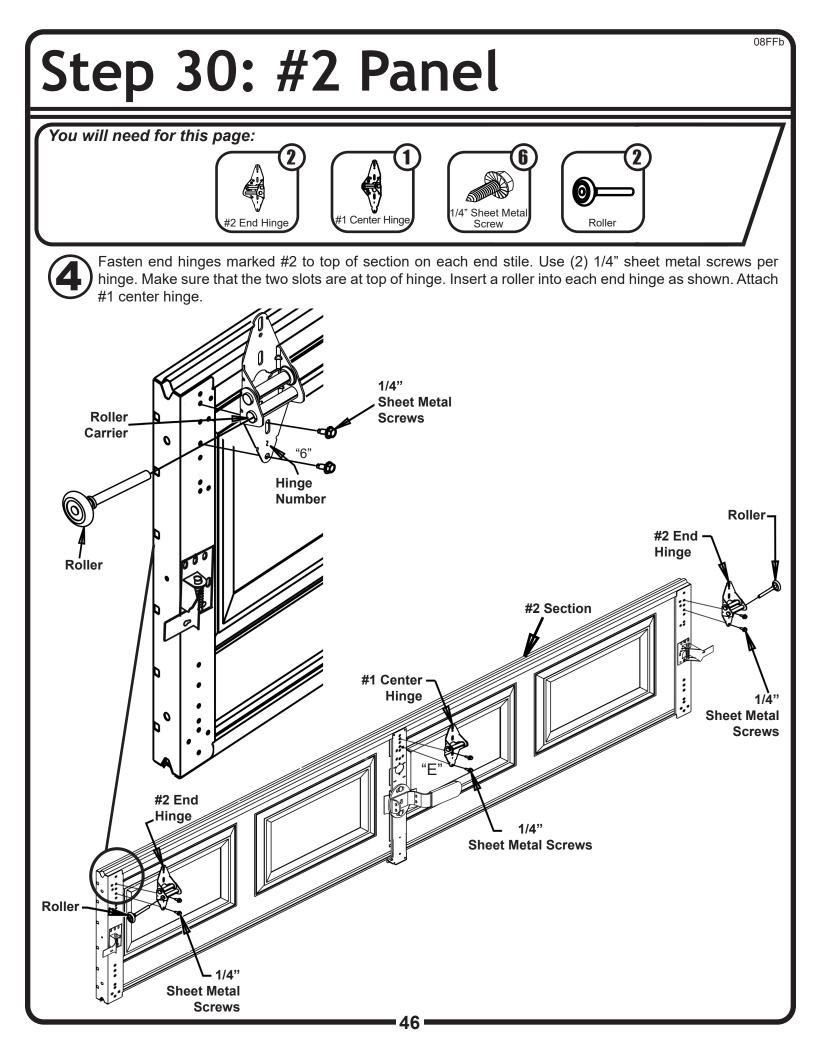
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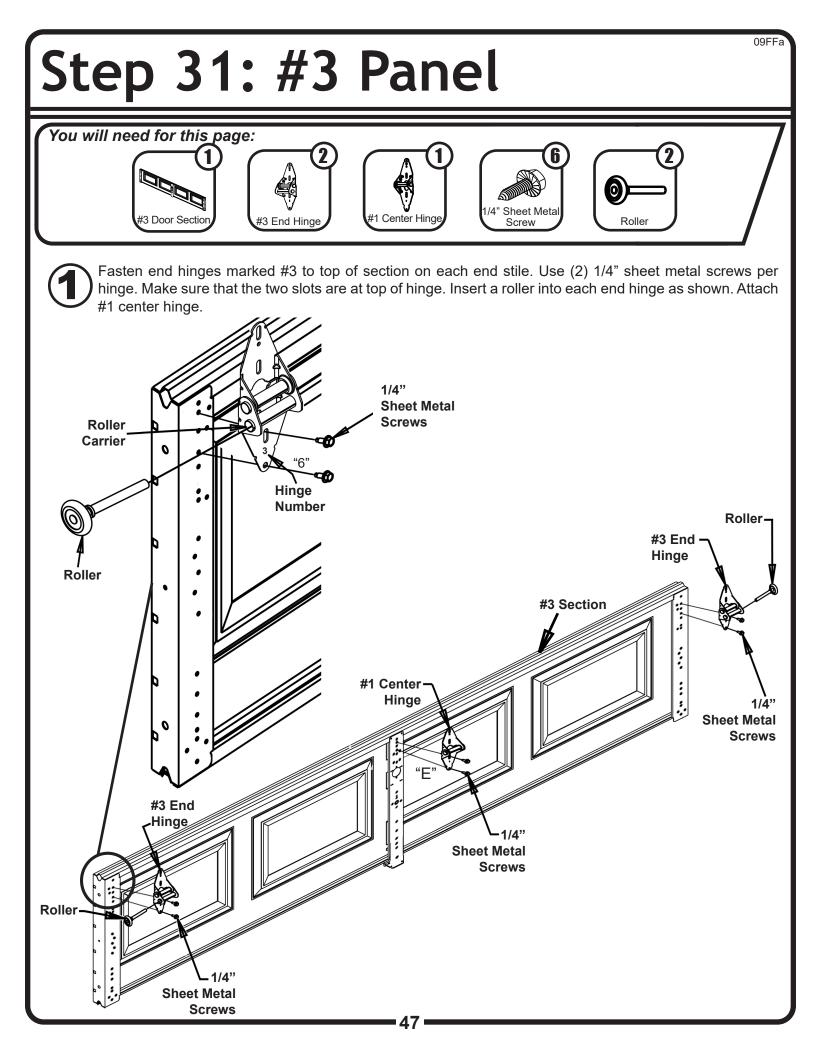


07FFb

Attach a snap latch assembly to each end stile using two 1/4" self drilling screws.

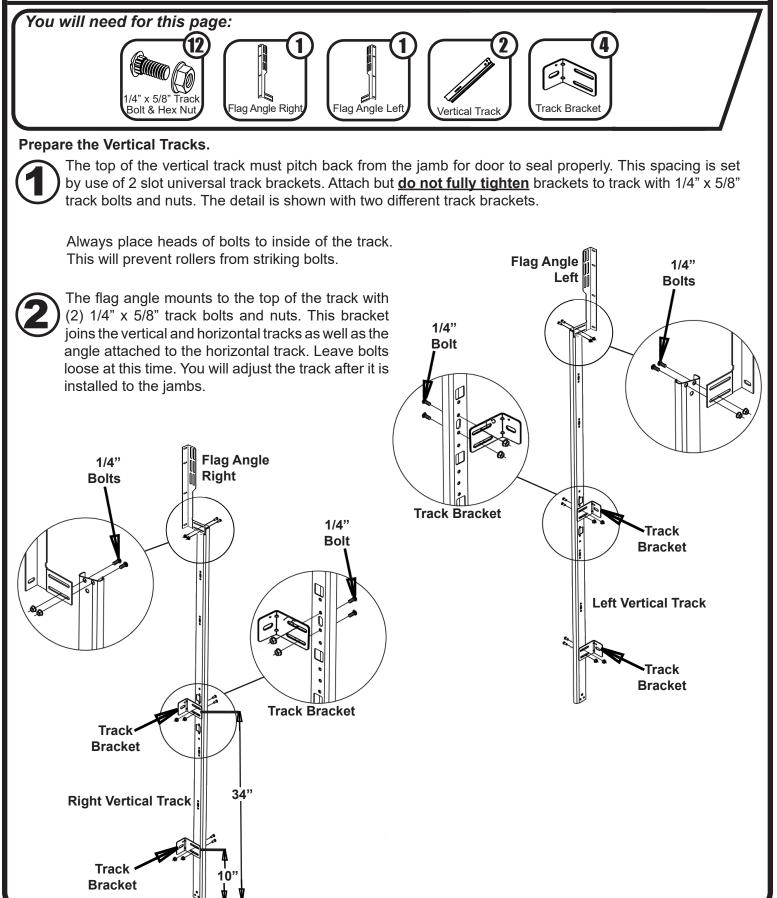


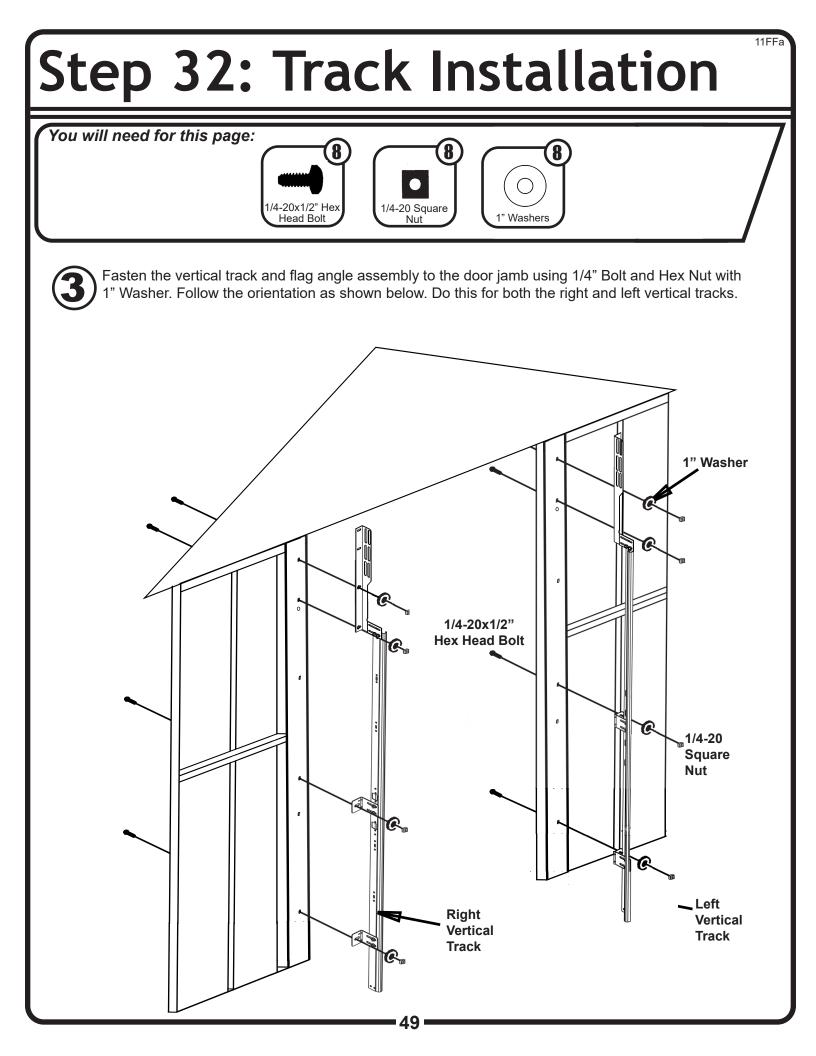




# Step 32: Track Installation

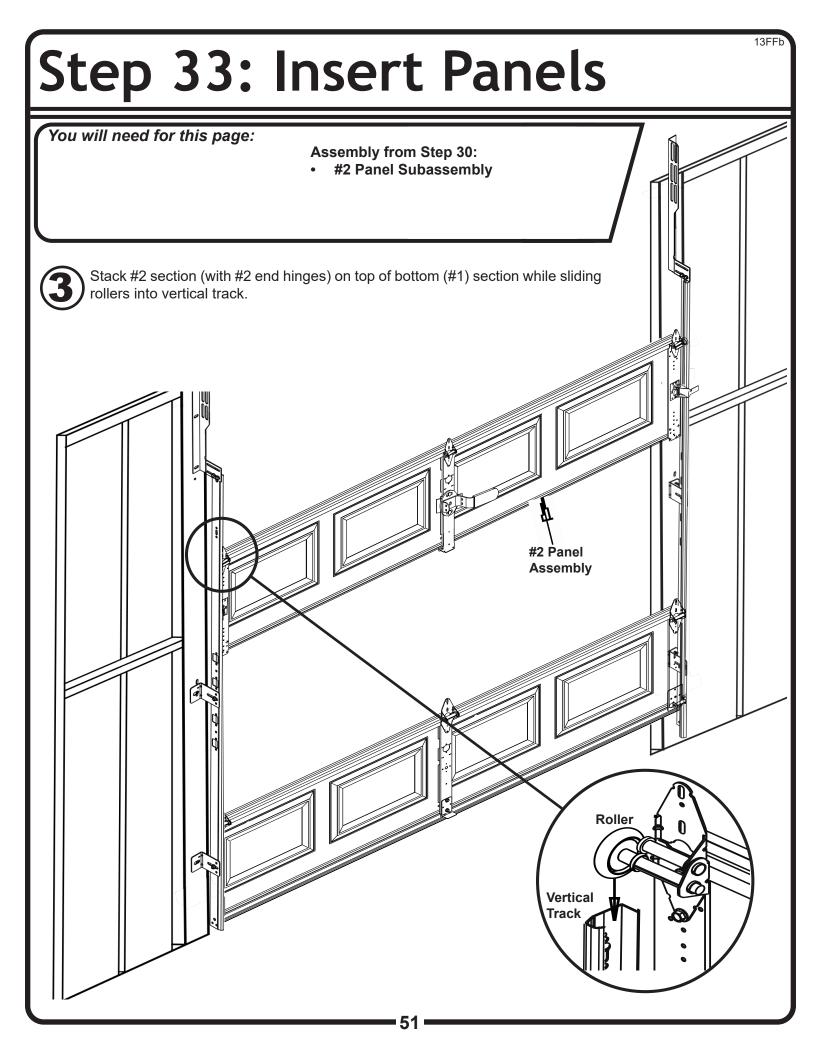
10FFb

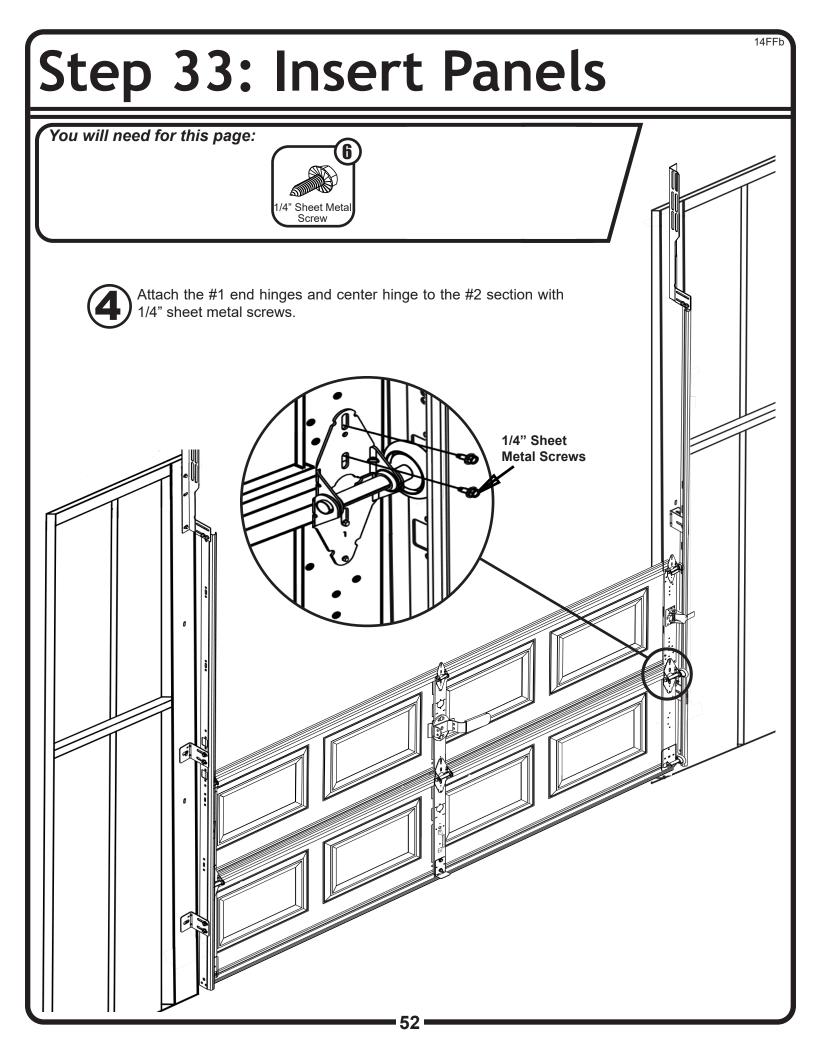


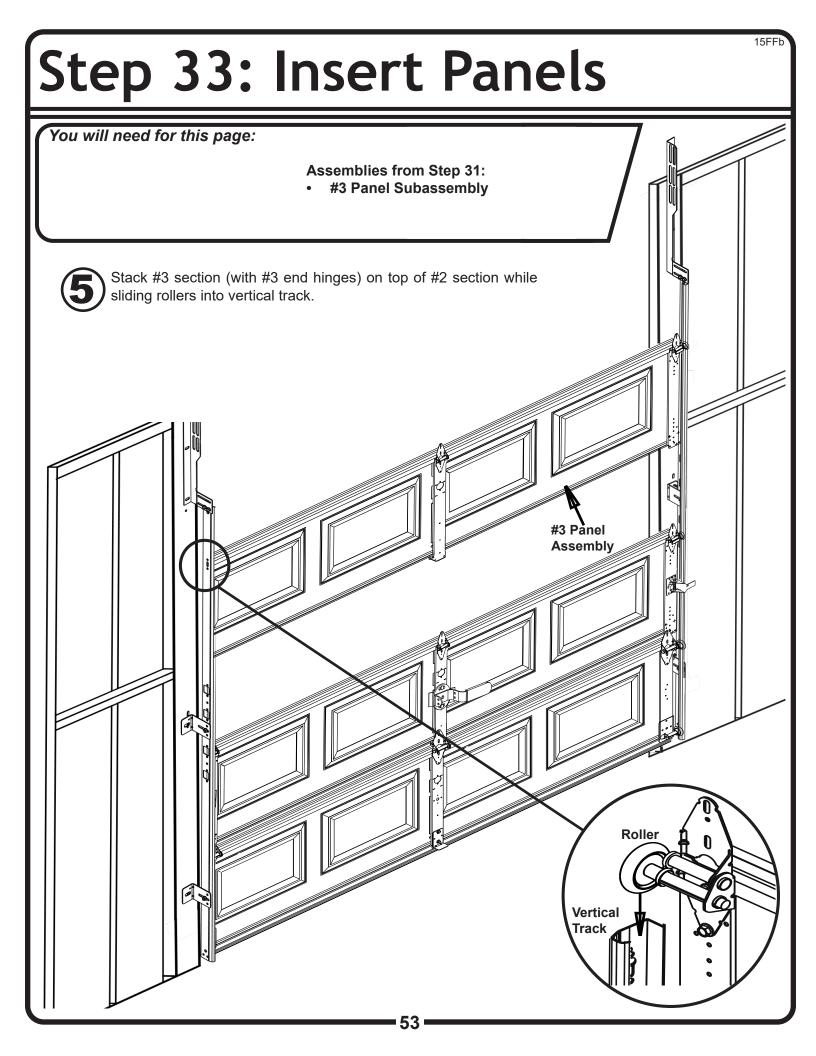


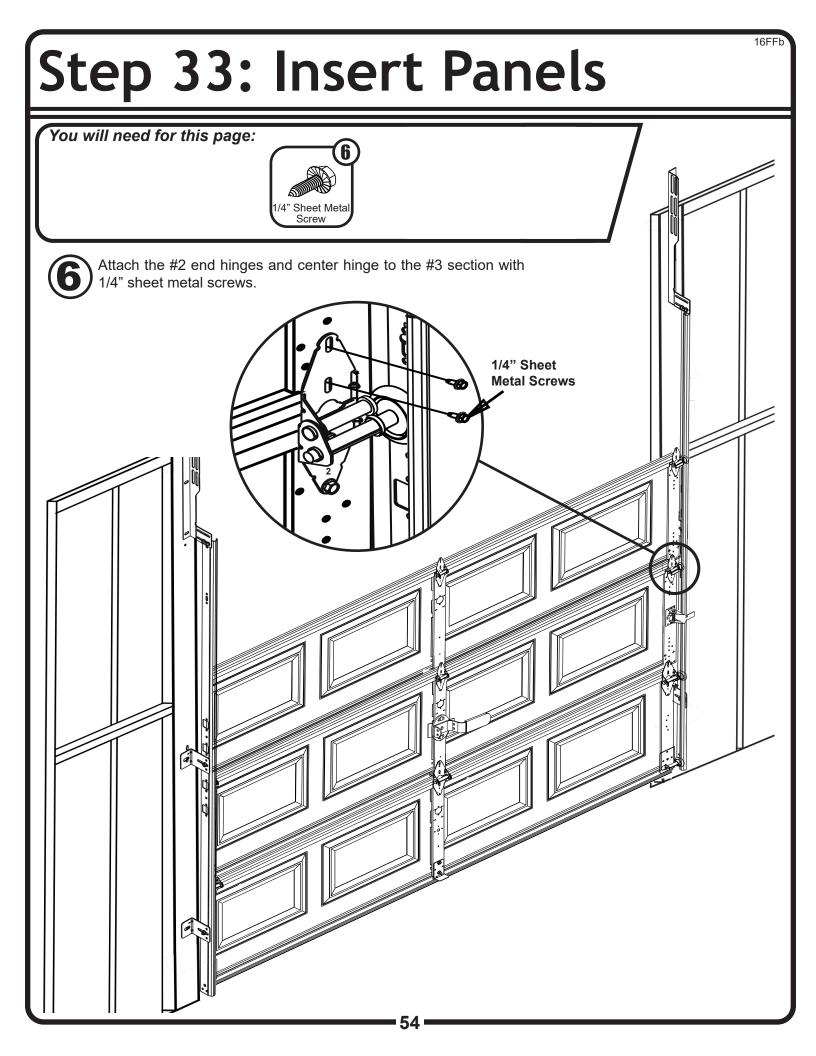
### 12FF Step 33: Insert Panels You will need for this page: Assembly from Step 29: • **Bottom Panel Subassembly** Insert the bottom section into the doorway. Slide the rollers into the vertical track as shown. Center and level bottom section in opening. If there is a gap on one end at the floor then the track will not rest on the floor by the same amount. Check this when vertical tracks are in place. **Bottom Panel** Assembly Roller Vertical Track

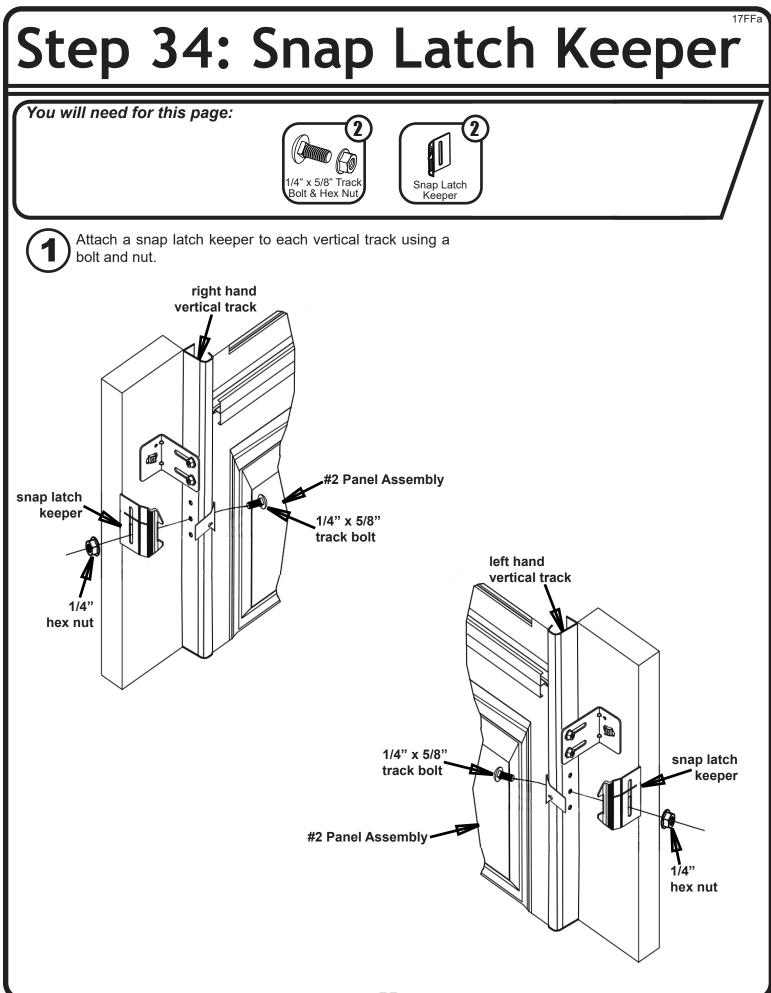
**50** 

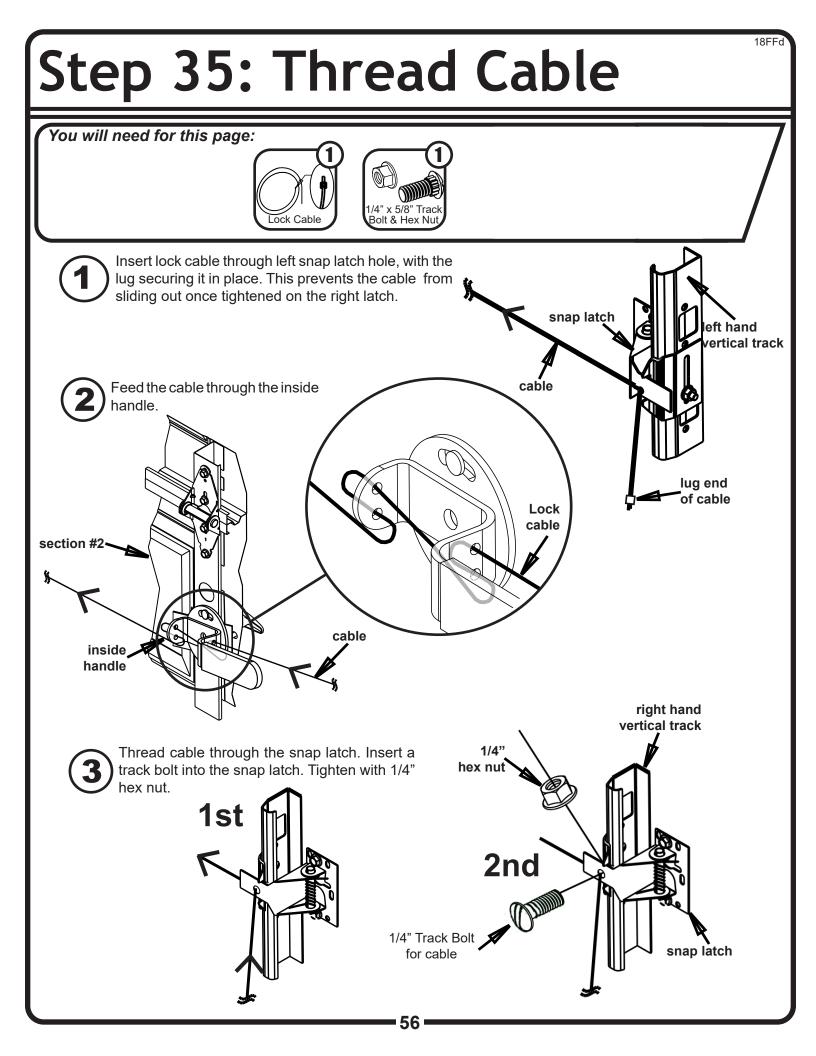


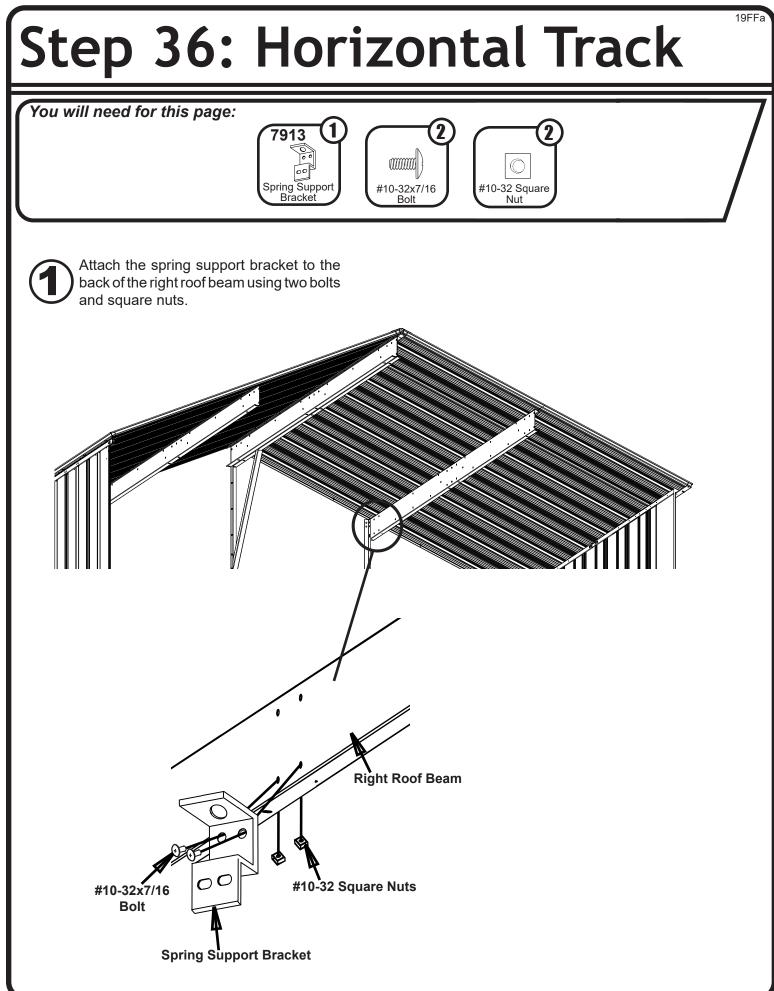


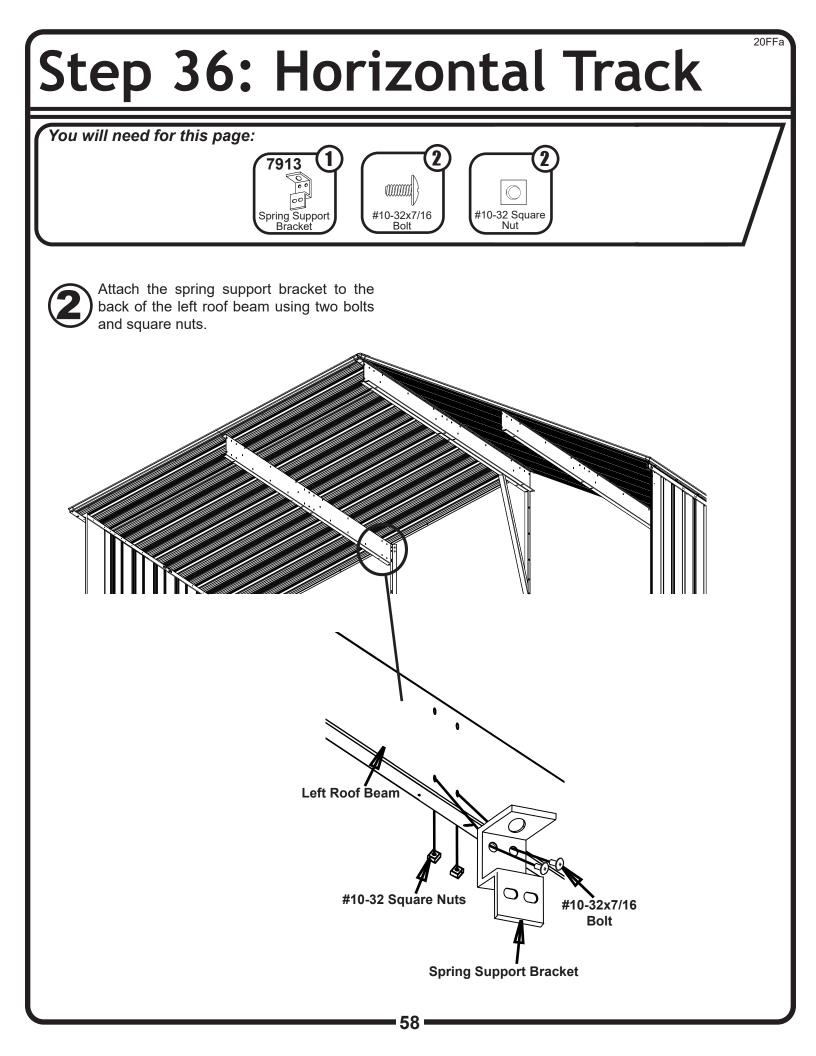


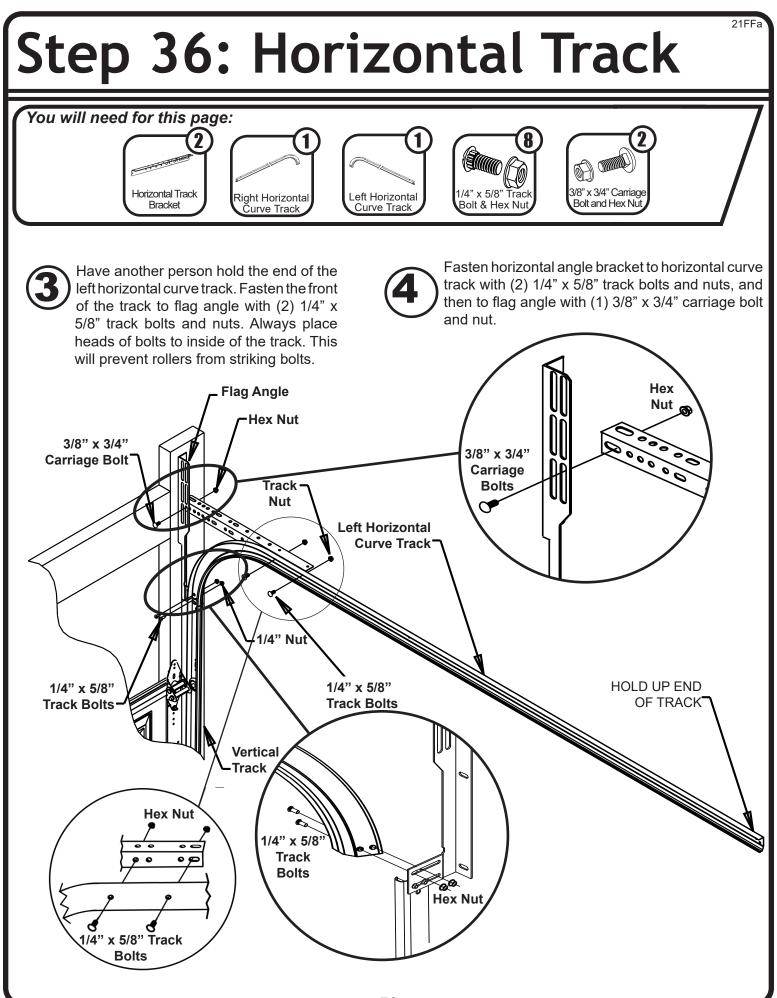


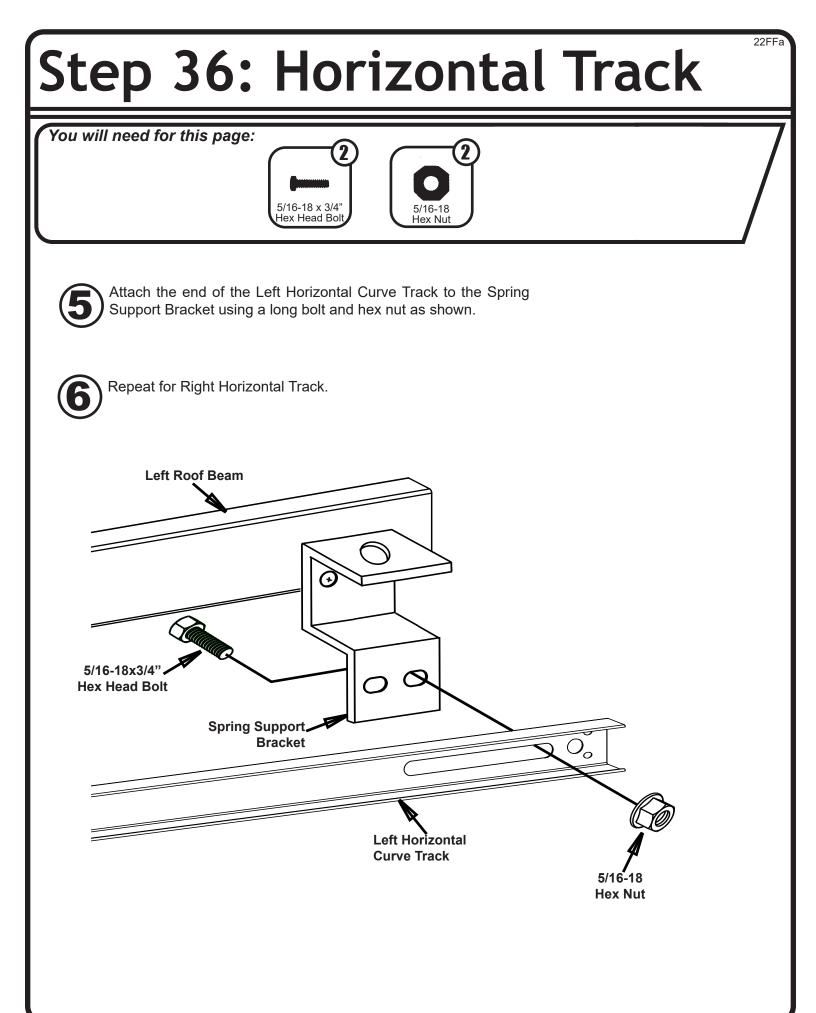


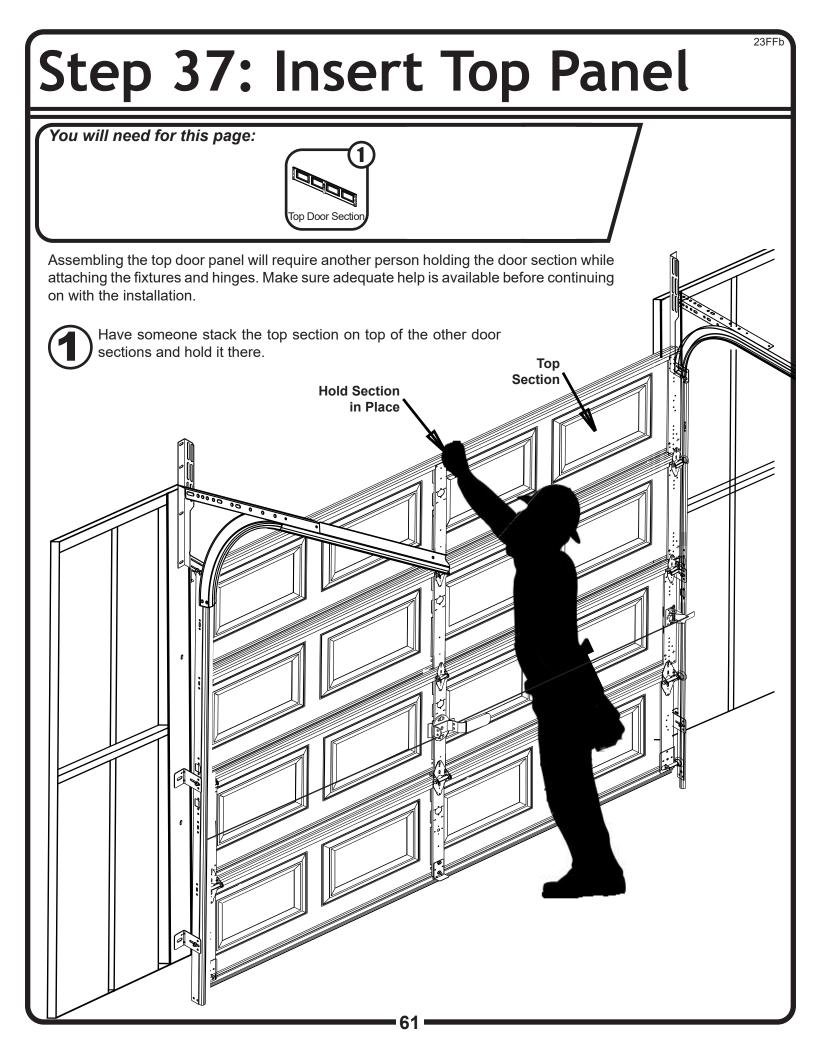


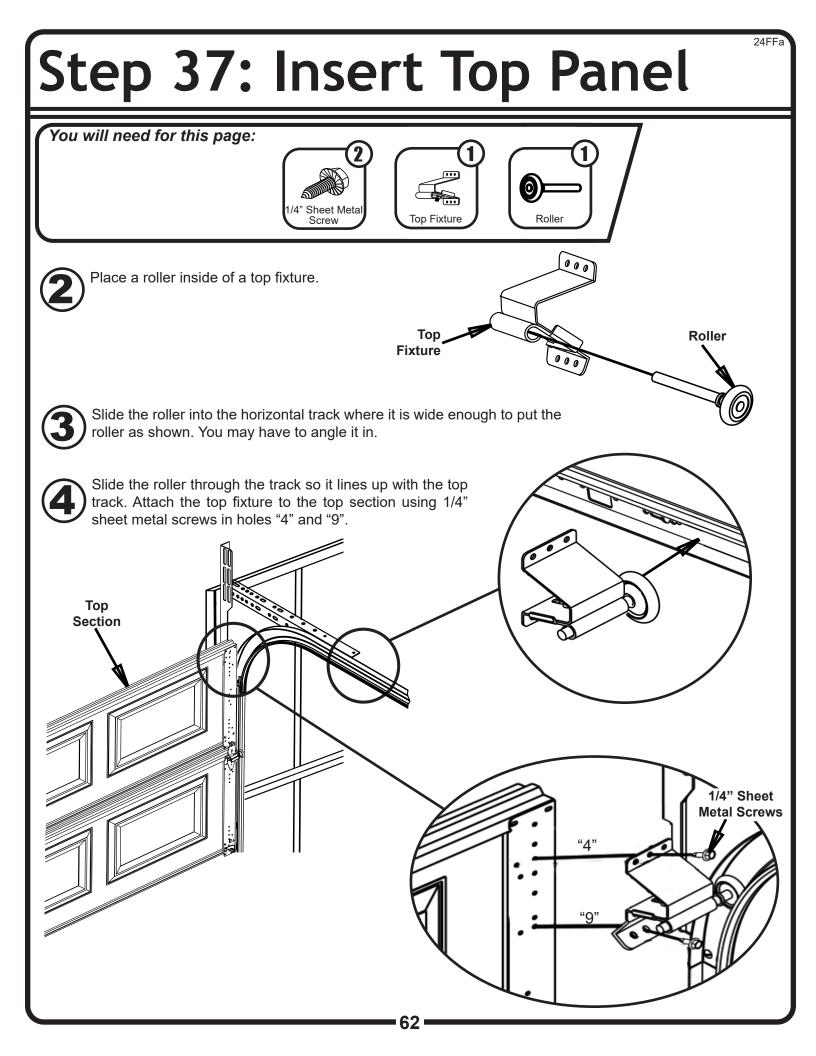


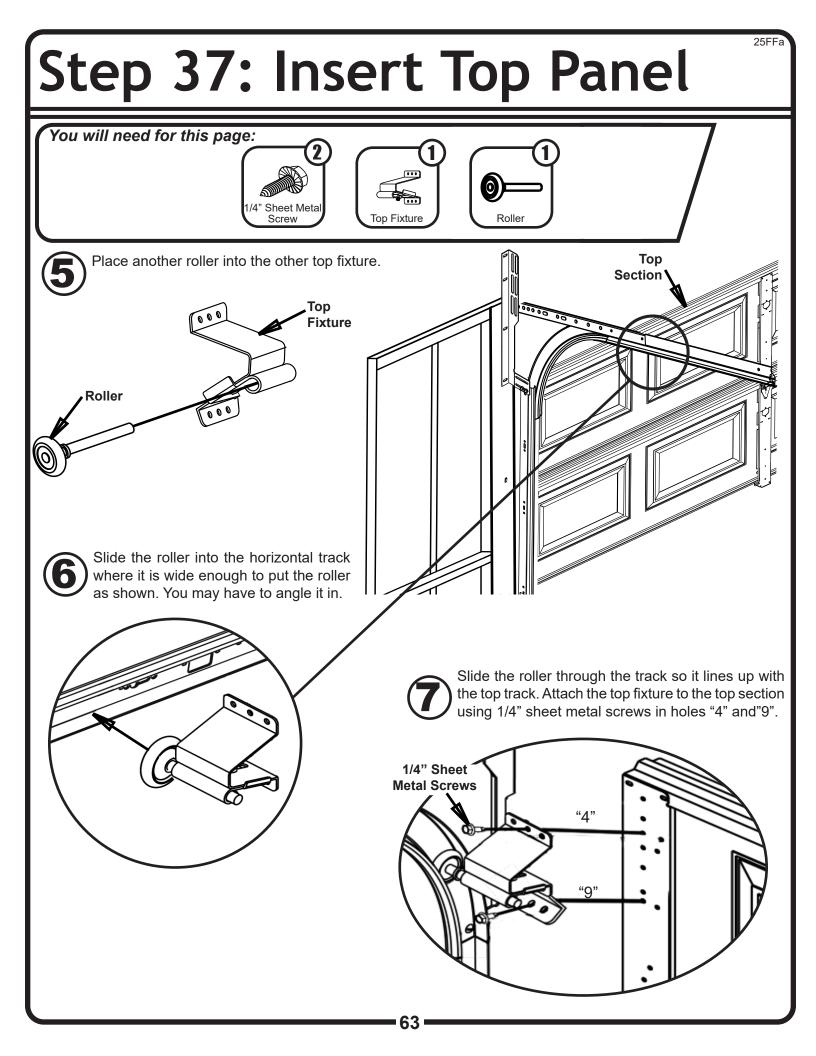


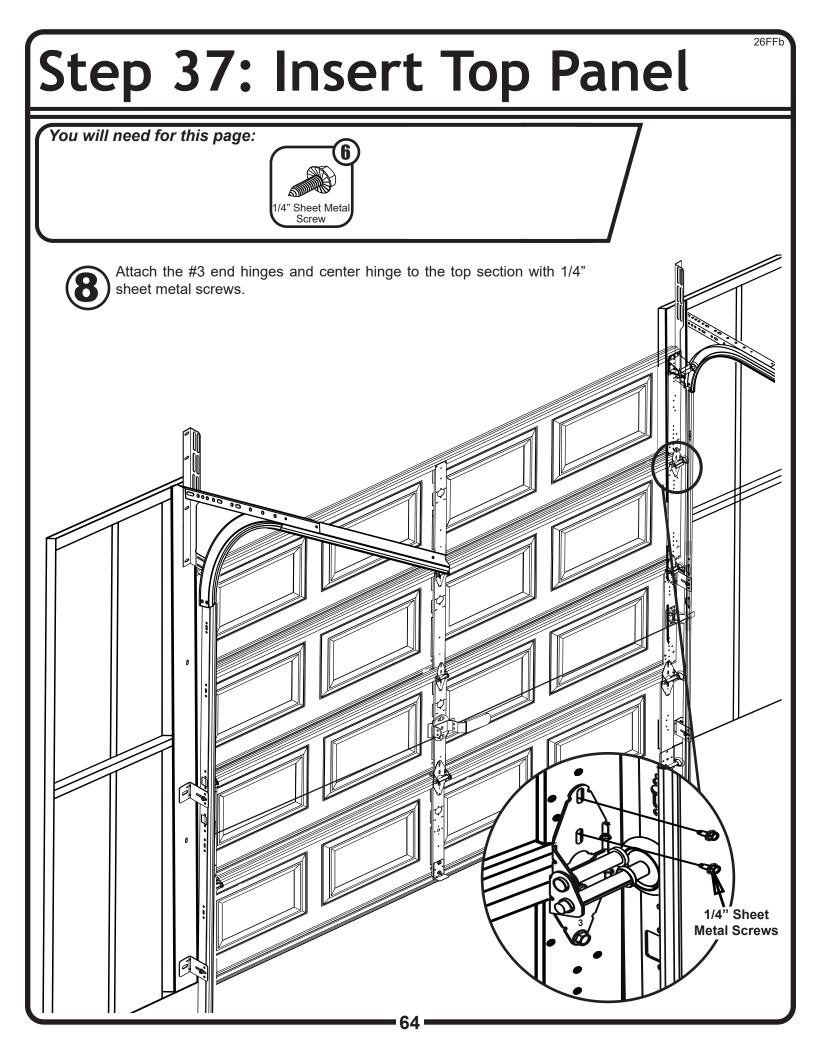












# Spring Assembly Preparation

Check all spring assembly instructions and parts. Warning! If there appears to be any parts missing stop here and contact your Arrow Customer Service immediately. Do not substitute parts.

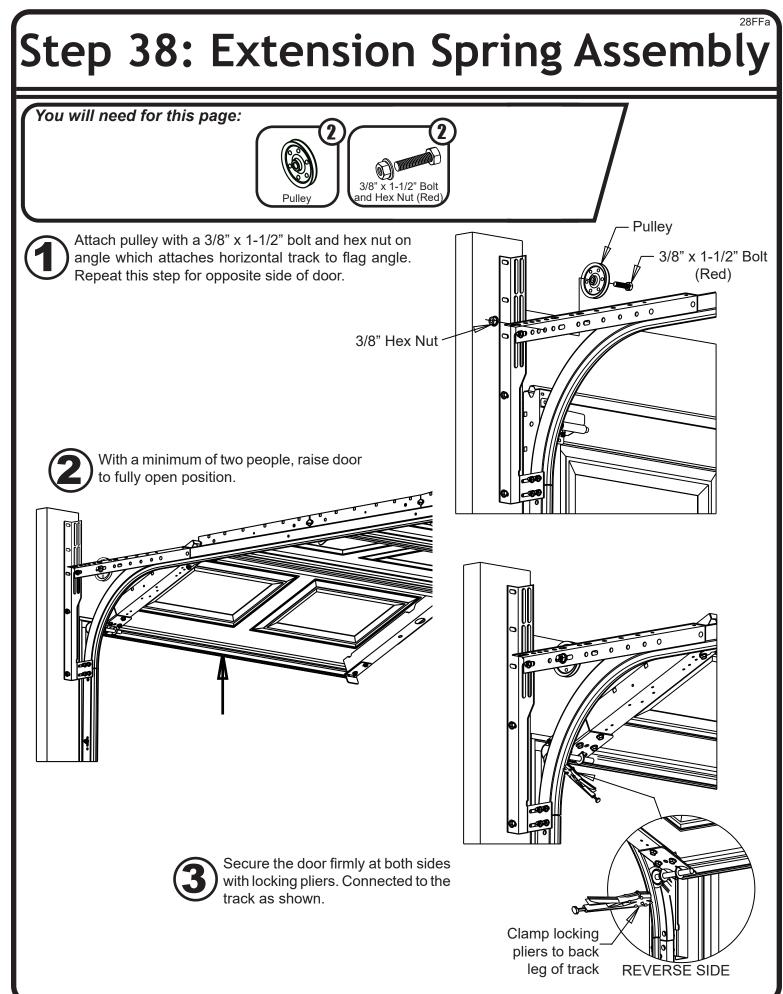
Warning! Do not remove any factory applied spring tag or warning label! If any tags or labels are missing or unreadable, contact your Arrow Customer Service immediately.

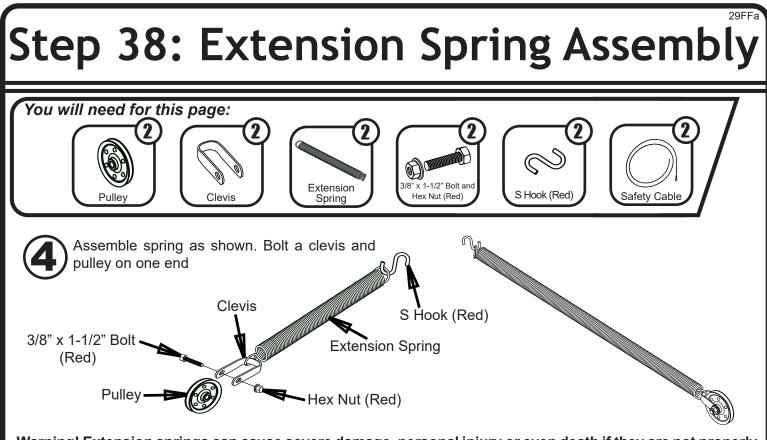
Warning! Never place your fingers in or near section joints while the door is moving.

Take time to study the parts and identify them.

**Extension Springs:** Extension springs mount alongside the horizontal track. They stretch as the door is closed and contract as the door opens. This type of spring is always used in pairs, one on each side of the door. Both springs are the same, it will not matter which one you assemble first.

**Safety Cable:** Extension springs can cause severe damage, personal injury or even death if they are not properly restrained. In the event of a spring failure the safety cable will prevent the spring from being propelled away from the door.

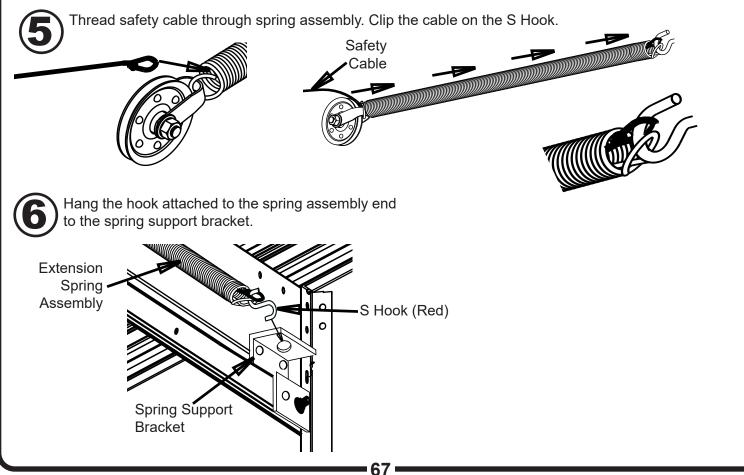


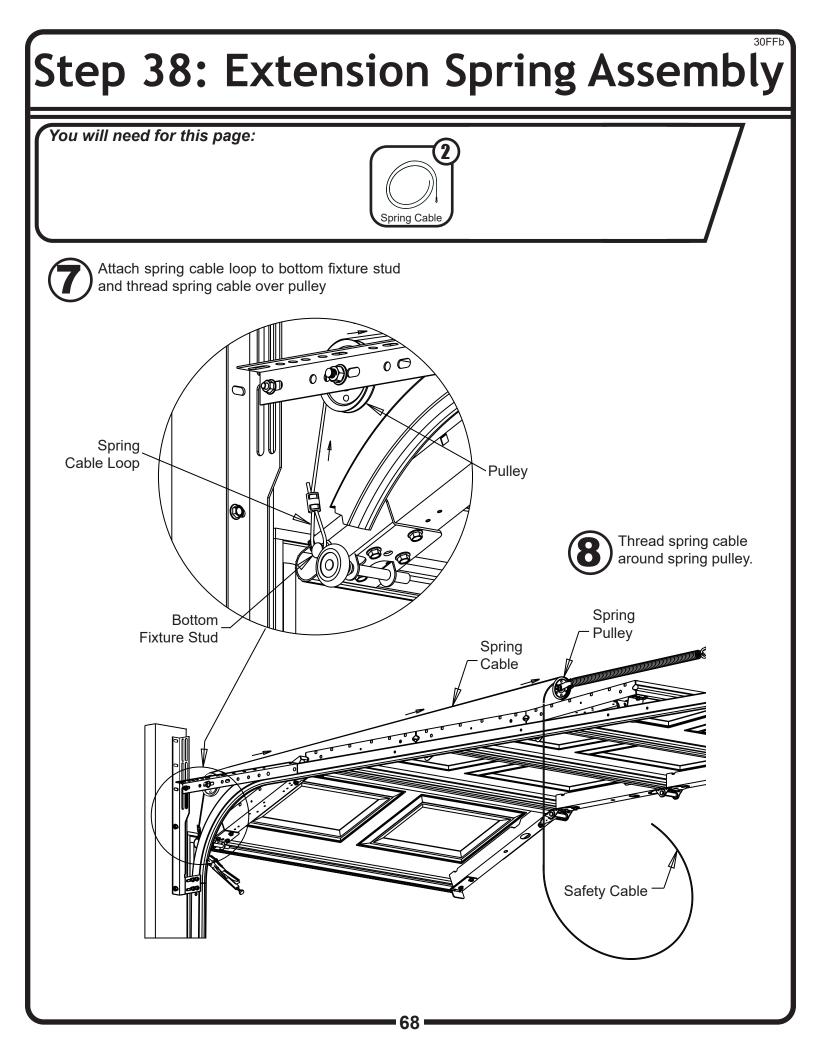


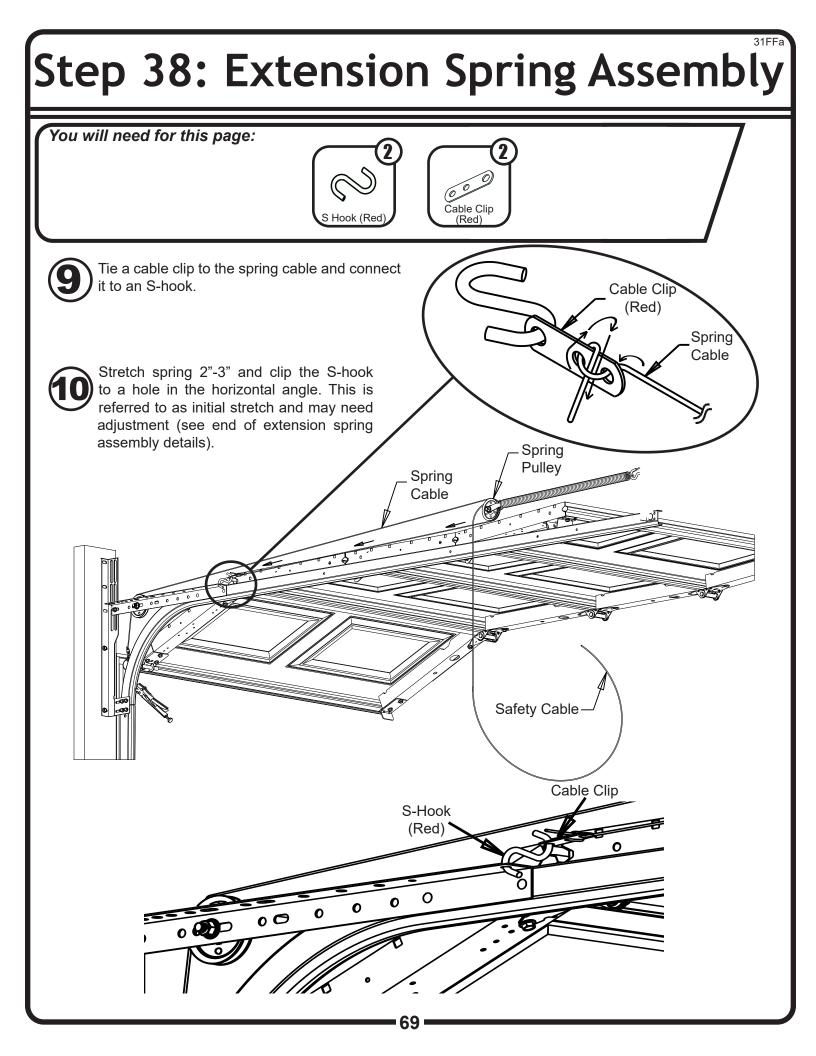
Warning! Extension springs can cause severe damage, personal injury or even death if they are not properly restrained. In the event of a spring failure the safety cable will prevent the spring from being propelled away from the door.

Both springs are the same, it will not matter which one you assemble first.

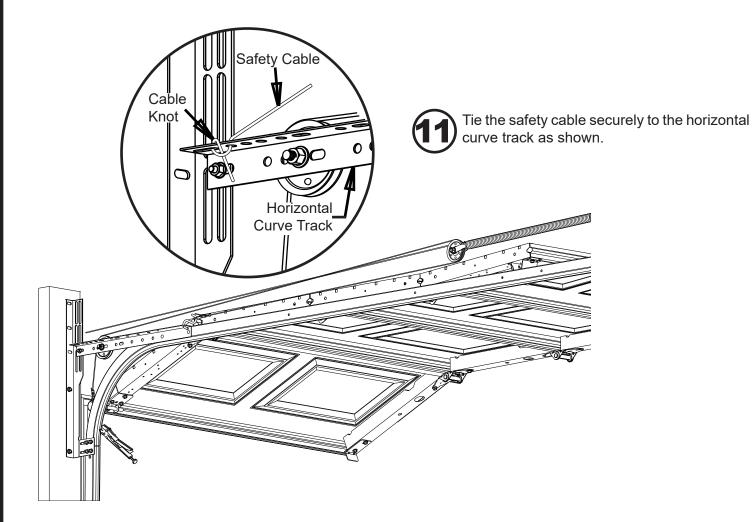
The spring cable is thicker than the safety cable. Be sure to use the correct cable for the appropriate step.







### Step 38: Extension Spring Assembly



Repeat steps 4 through 11 for the other spring.

Lowering the door and spring adjustment.

Warning! Until all adjustments are completed, always assume you will have to physically support the full weight of the door. Make sure adequate help is available.

Warning! Never place your fingers in or near section joints while the door is moving.

Warning! All spring component parts whether part of the spring assembly, attached to the door, or attached to the wall are now under tension and are extremely dangerous.

Warning! Spring adjustments from this point onward must be performed in accordance with all warnings and directions as previously stated.

Warning! Spring adjustments can only be performed when door is in fully open position and door restraints are applied to tracks.

With one person holding door in the fully open position, carefully remove locking pliers.

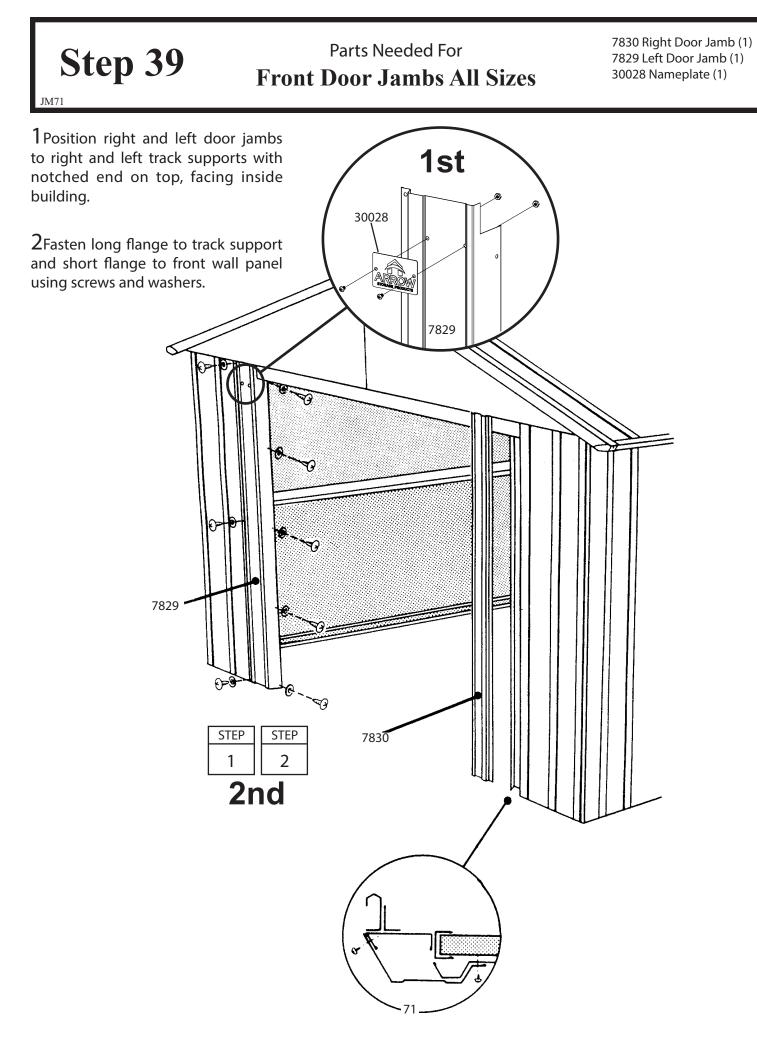
Slowly lower door, testing the balance of the springs. If door does not lift off of the floor by itself, or does not roll back to the floor when not supported, it is properly counterbalanced.

If door lifts off of floor by itself, the springs are too strong and the initial stretch must be reduced.

If door rolls back to floor, the springs are too weak and the initial stretch must be increased.

#### Finalize the track adjustments

Operate door through one full cycle. Check door stops and top fixture for proper seal. If door is not functioning correctly, check for binding against jamb, header or tracks.



#### SOME FACTS ABOUT RUST

Rusting is a natural oxidizing process that occurs when bare metal is exposed to moisture. Problem areas include screw holes, unfinished edges, or where scrapes and nicks occur in the protective coating through normal assembly, handling and use. Identifying these natural rusting problem areas and taking some simple rust protection precautions can help to stop rust from developing, or stop it quickly as soon as it appears. 1. Avoid nicking or scraping the coating surface, inside and out.

2. Use <u>all</u> the washers supplied. In addition to protecting against weather infiltration, the washers protect the metal from being scraped by the screws.

3. Keep roof, base perimeter and door tracks free of debris and leaves which may accumulate and retain moisture. These can do double damage since they give off acid as they decay.

4. Touch up scrapes or nicks and any area of visible rust as soon as possible. Make sure the surface is free of moisture, oils, dirt or grime and then apply an even film of high quality touch-up paint.