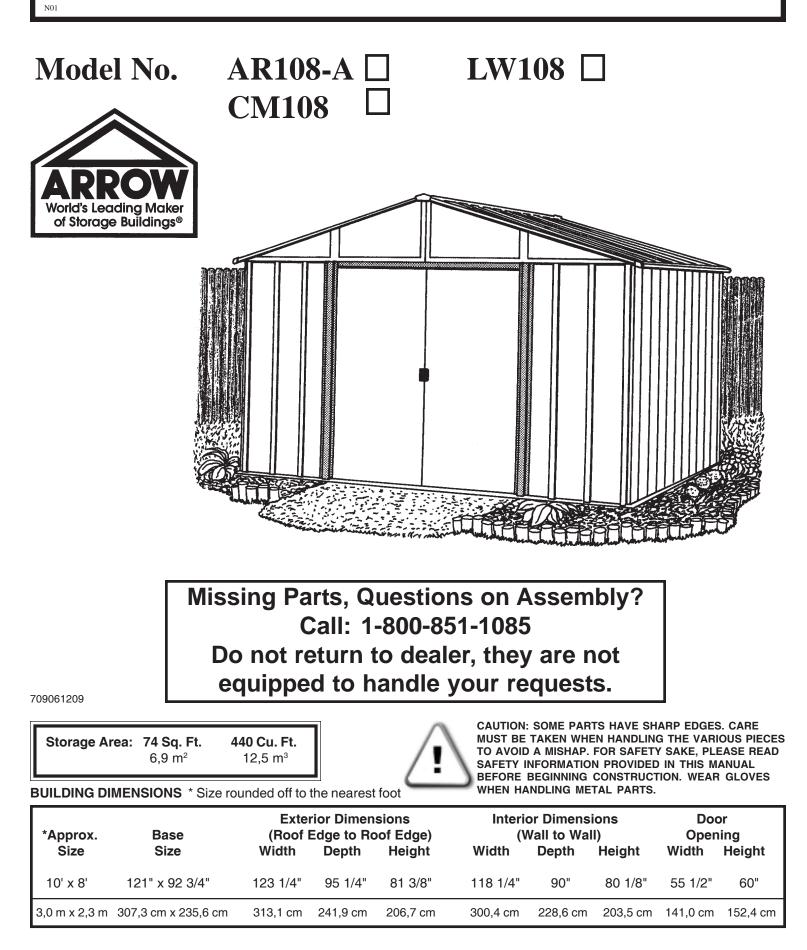
## **Owner's Manual & Assembly Instructions**



### **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 combined use of an **Arrow Floor Frame Kit** and 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. The parts list is located on page 12.

If you find that a part is missing, include the model number of your building and contact:
 Arrow Group Industries, Inc. Customer Service Department
 1101 North 4th Street Breese, Illinois 62230
 1-800-851-1085

•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.

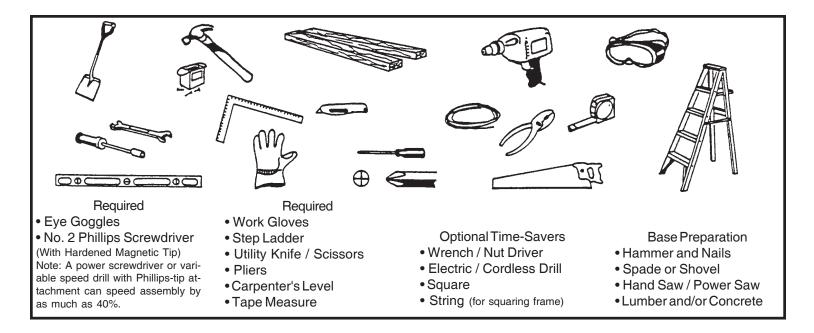
•Familiarize yourself with the hardware and fasteners for easier use during construction. These are packaged within the carton. Note that extra fasteners have been supplied for your convenience.

## 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.

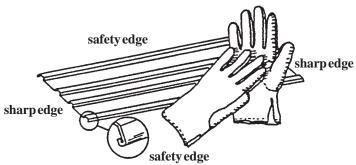
•Allow enough working space for ease of moving parts into position during assembly. Be sure there will be enough space at entrance for doors to open fully and enough space around the building to be able to fasten the panel screws from the outside.

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

## SAFETY FIRST....

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

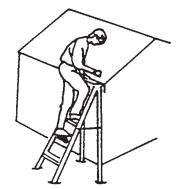
•Care must be taken when handling various pieces of your building since some contain sharp edges. Please wear work gloves, eye protection and long sleeves when assembling or performing any maintenance on your building.



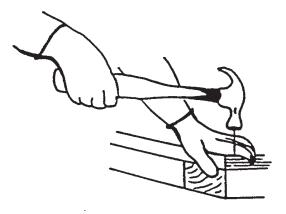
•Keep children and pets away from worksite to avoid distractions and any accidents which may occur.



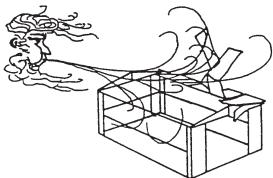
•Never concentrate your total weight on the roof of the building. When using a step ladder make sure that it is fully open and on even ground before climbing on it.



•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. Call 1-800-851-1085



•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.



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

**Finish:** For long lasting finish, periodically clean and wax the exterior surface. Touchup 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. In snow country, Roof Strengthening Kits are available for most Arrow Buildings for added protection against heavy snow accumulation.

**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.

## ACCESSORIES....

A6 WEB

#### **ROOF STRENGTHENING** (heavy snow load) KITS

Extra roof beams and gable braces designed for added protection against heavy snow accumulation. Increases the strength of your roof by 50%.

#### ANCHOR KITS Model No. AK4

Anchor Kit contains heavy-duty steel augers, 60' (18 m) of steel cable and 4 cable clamps. No digging or concrete pouring, just insert cable under roof, over roof beams, into augers and twist augers into the ground. For buildings larger than 10'x9' (3,0 m x 2,6 m), use 2 kits.

#### Model No. AK100

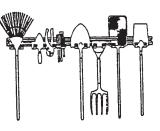
New concrete anchor system permits anchoring any size Arrow building directly to a concrete slab. Each kit contains heavy-duty, hot-dipped galvanized steel corner gussets and perimeter clips which fit over the floor frame and lag bolt into a concrete slab. Full assembly instructions and a 1/4" masonary drill bit are included.

#### Model No. AK600

Earth Anchor Kit anchors any size Arrow building to the ground. Each kit contains heavy duty, hot-dipped galvanized steel corner gussets and 4 earth anchors.

#### TOOL HANGING RACK Model No. TH100

The perfect tool organizer. Twin 25 1/2" (64,8 cm) steel channels plus five heavy-duty snap-in hangers and a small tool holder for screwdrivers, pliers, etc. Holders slide along channel for fully adjustable spacing. Great for garage, basement, or the back of any door. Fits all Arrow storage buildings.



#### FLOOR FRAME KITS



MODELS FB47410, FB5465, FB106-A FB109-A and FB1014-A

A simple new floor frame system made of heavy-duty, hot-dipped galvanized steel. Use as base for plywood, sand or stone.

#### ATTIC KIT / WORKBENCH KIT

#### Model No. AT101

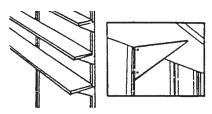
Heavy-duty galvanized steel bars that fit all 10' (3,0 m) wide Arrow buildings. They install quickly and easily to help organize space and create more useable space as an attic or workbench. Will hold up to 250 lbs. (113 kg) evenly distributed.



Some drilling required to fit buildings without mid-wall bracing.

#### SHELF UNITS

Heavy-duty, galvanized steel shelf units help organize storage space. They easily mount on the wall or sit on the floor. Fits all Arrow buildings.\*



Model No. SS404

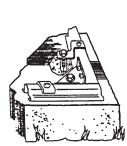
- Makes 8" to 12" (20,3-30,5 cm) wide shelves in any length.
- Brackets, braces, hardware included. Lumber is not included.



Model No. SS900-A • Grey color

- 3 shelves
- Holds up to 85 lbs. (38 kg) (even weight distribution)

\* Some drilling required to fit buildings without mid-wall bracing.



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### Base

A09

### The Base For Your Building

OPTION 1: ARROW FLOOR FRAME KIT: (Order No. FB109-A or 68385-A)

Arrow has the best base for your building in this simple kit. It keeps stored items above the ground. This kit should be used with one of the following:

A. To support a plywood deck B. To be filled with sand. We recommend the combined use of

1. an ARROW FLOOR FRAME KIT and 2. an ARROW ANCHORING KIT as an effective method of securing the building to the ground. Allow 1 - 2 hours for construction.

#### **OPTION 2: Wood Platform**

#### If you decide to build your own base, be sure to select the appropriate materials.

#### These are the recommended materials for your base:

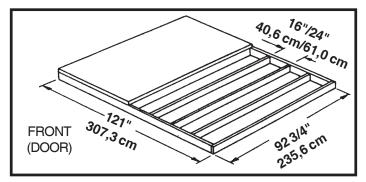
- 2 x 4's (38 mm x 89 mm) Pressure Treated Lumber 5/8" (15,5 mm) 4 x 8 (1220 mm x 2440 mm) Plywood-exterior grade
- 10 & 4 penny Galvanized Nails Concrete Blocks (optional)

The platform should be level and flat (free of bumps, ridges etc.) to provide good support for the building. The necessary materials may be obtained from your local lumber yard.

#### To construct the base follow instructions and diagram.

Construct frame (using 10 penny galvanized nails) Measure 16"/24" (40,6 cm/61,0 cm) sections to construct inside frame (see diagram) Secure plywood to frame (using 4 penny galvanized nails)

Allow 6 - 7 hours for construction.



Note: Platform/Slab will extend 9/16" (1,4 cm) beyond floor frame on all four sides. Seal this 9/16" (1,4 cm) of wood with a roofing cement (not included), or bevel this 9/16" (1,4 cm) of concrete when pouring, for good water drainage.

#### **OPTION 3: 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.

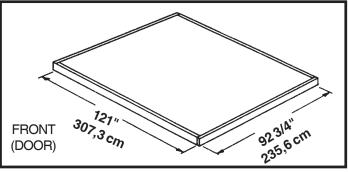
- 1 x 4's (19 mm x 89 mm) (will be removed once the concrete cures)
- Concrete Sheet of 6 mil plastic

• 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 1x4 (19 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.



Note: Finished Slab dimensions, with lumber removed.

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



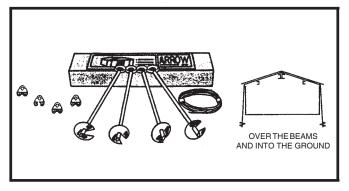
## Anchoring

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

#### It is important that the entire floor frame be anchored after the building is erected.

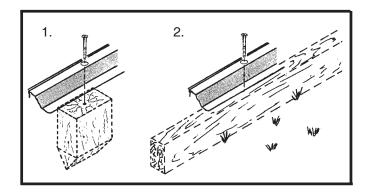
Below are recommended ways of anchoring.

Arrow Anchoring Kit: (Model No. AK4 or 60298) Recommended for use with **any** suggested **base**. **Contains:** 4 Anchors with Cable, Clamps and installation instruction.

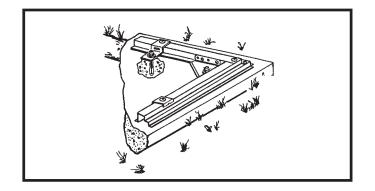


#### Anchoring into Wood/Post:

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

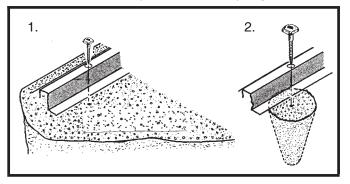


Arrow Anchoring Kit: (Model No. AK100 or 68383) Recommended for use with the **concrete** base. **Contains:** Corner gussets, perimeter clips, hardware, 1/4" masonary drill bit and installation instruction.



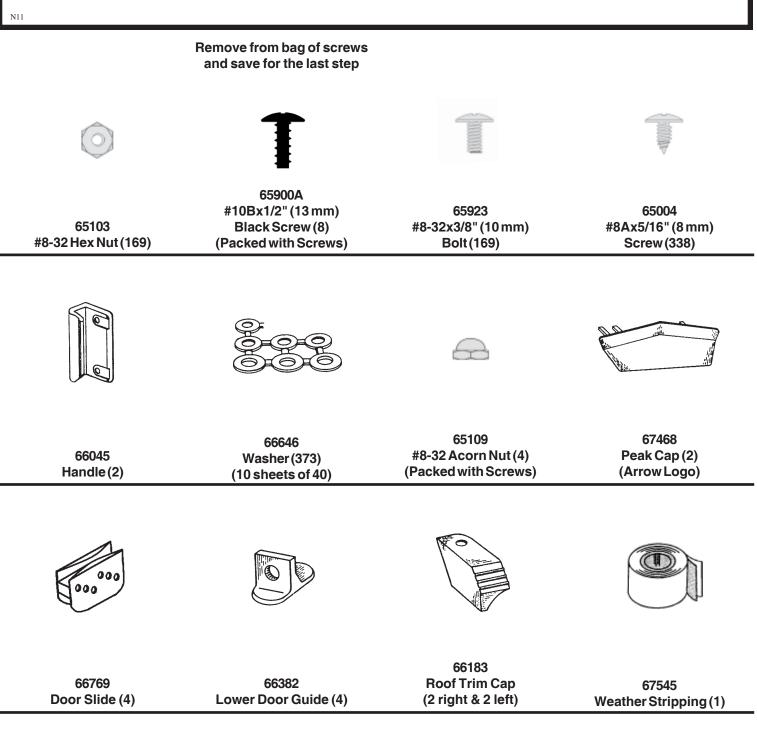
#### Anchoring into Concrete:

 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.



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## Hardware



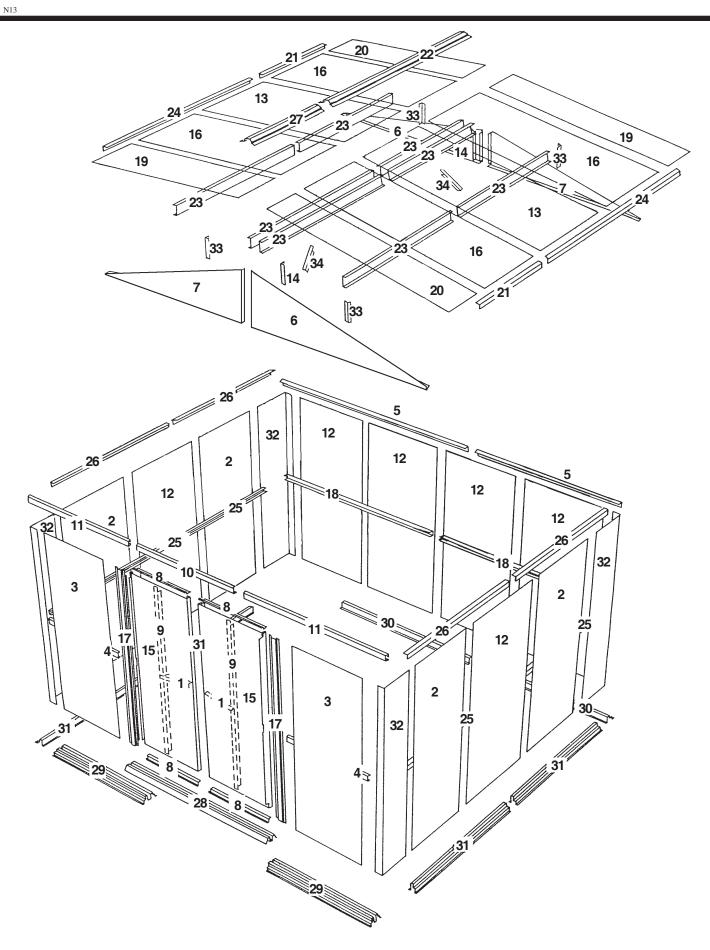
6228 Track Support (2)

## **Parts List**

Assembly	Part	Part	Quantity	Check
Key No.	Number	Description	in Carton	List
1	3719	Door Handle Brace	2	
2	7332	Wall Panel (Side)	4	
3	9373	Front Wall Panel	2	
4	9365	Front Wall Channel	2	
5	5986	Rear Wall Angle	2	
6	8576	Right Gable	2	
7	8577	Left Gable	2	
8	10497	Horizontal Door Brace	4	
9	6278	Vertical Door Brace	2	
10	6403	Door Track Splice	1	
11	9366	Door Track	2	
12	6515	Wall Panel	6	
13	7743	Roof Panel	2	
14	9009	Gable Brace	2	
15	10475	Right and Left Doors	2	
16	7571	Roof Panel	4	
17	9369	Door Jamb	2	
18	9917	Rear Wall Channel	2	
19	8578	Right Roof Panel	2	
20	8579	Left Roof Panel	2	
21	8485	Left Side Roof Trim	2	
22	8840	Ridge Cap	1	
23	10470	Roof Beam	8	
24	8836	Right Side Roof Trim	2	
25	9922	Side Wall Channel	4	
26	8841	Side Wall Angle	4	
27	8486	Ridge Cap	1	
28	8934	Ramp	1	
29	9367	Front Floor Frame	2	
30	8936	Rear Floor Frame	2	
31	8937	Side Floor Frame	4	
32	8470	Corner Panel	4	
33	6635	Roof Beam Bracket	4	
34	9204	Roof Beam Brace	2	

N12

## Assembly by Key No.



Step 1

A14hv

#### ● Parts Needed For ● Floor Frame Assemblies

8934 Ramp (1)

#### 9367 Front Floor Frame (2)

8936 Rear Floor Frame (2)
 8937 Side Floor Frame (4)

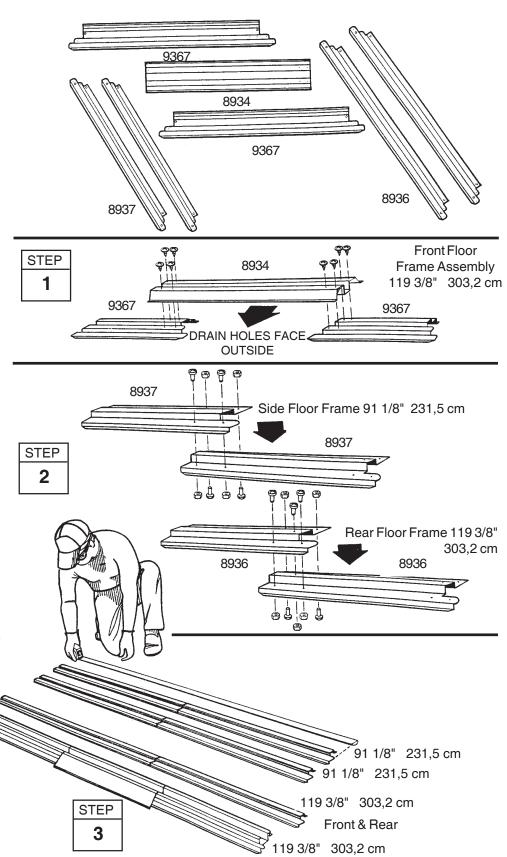


The front floor frame is made up of three pieces. The side floor frames and the rear floor frame are made up of two pieces. The holes in these pieces will align when the pieces are positioned with correct amount of overlap. The illustrations below show the proper overall length for the sides, rear and front. Proceed as follows:

**1** Place the **front floor frames** as shown. Center the **ramp**, with drain holes facing outside, on top of the two front floor frames. Join the frames by inserting eight screws.

**2** Overlap the **side floor frames** and the **rear floor frames** as shown. The holes in these pieces will align when the pieces are positioned with correct amount of overlap. See the illustrations below for the proper overall length of the side and rear floor frames. Join the frames by inserting four/five bolts into each frame set as shown.

**3** Double check the length of each and set these pieces aside for later use.



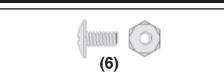


## Parts Needed For Frame Assemblies

• 5986 Rear Wall Angle (2)

9917 Rear Wall Channel (2)
9922 Side Wall Channel (4)

8841 Side Wall Angle (4)



The main frame pieces reinforce the walls. These pieces will later be installed in the center and at the top edge of the side walls and the rear wall. Proceed as follows:

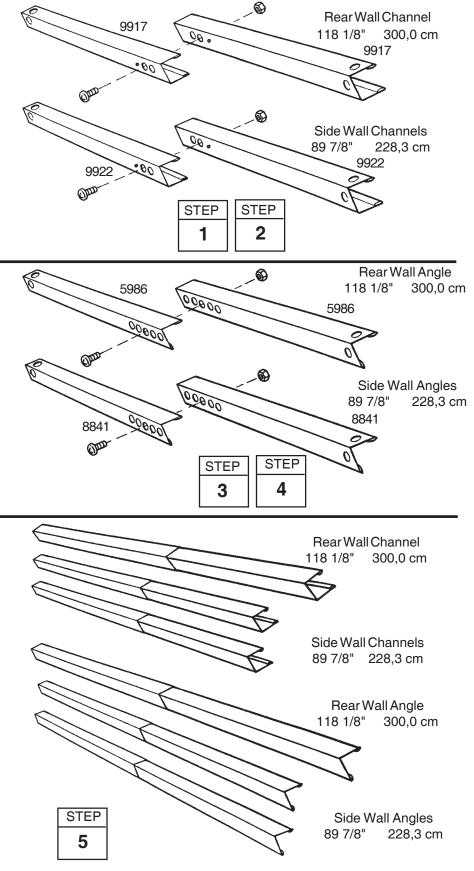
**1** Overlap the **rear wall channel** pieces as shown in the figure and fasten the two pieces together with *one bolt in the center hole* (three holes will align).

**2** Make two **side wall channels** by overlapping the side wall channel pieces as shown. Fasten each set together with *one bolt in the center hole* of each set.

**3** Overlap the **rear wall angle** pieces as shown in the figure and fasten them together with *one bolt in the center hole*.

**4** Make two **side wall angles** by overlapping the side wall angle pieces as shown. Fasten each set together with *one bolt in the center hole.* 

**5** Double check the length of each and set these pieces aside for later use.



# • Parts Needed For • **Roof Beam Assemblies**

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Step 3

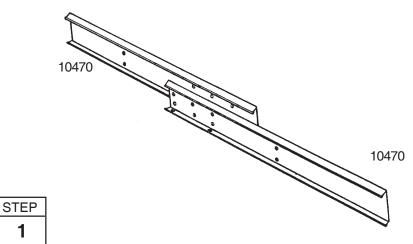
The roof beams join the two gables and support the roof panels. The main roof beam is made up of four pieces overlapped back to back at the center. The left and right roof beam assemblies are made up of two pieces. **Hint:** These pieces are force-fitted, so you may have to press hard to join them together.

**1** Place the end of one roof beam inside a second roof beam so that the six holes in each piece align. Make four sets of roof beams by repeating this procedure. *Do not insert bolts yet.* 

**2** Take two of the pressed-together roof beams and join them as shown to form the main roof beam assembly. Hold the assembly together and fasten with 14 bolts. Build <u>only one</u> Doubled Beam Assembly.

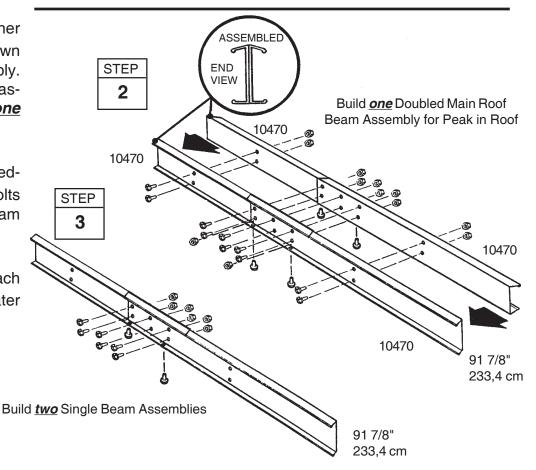
**3** Fasten the other two pressedtogether roof beams with eight bolts to make the left and right roof beam assemblies.

**4** Double check the length of each and set these pieces aside for later use.





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#### Step 4 A17hw

#### Parts Needed For ● **Door Track Assembly**

• 6403 Door Track Splice (1) • 9366 Door Track (2)

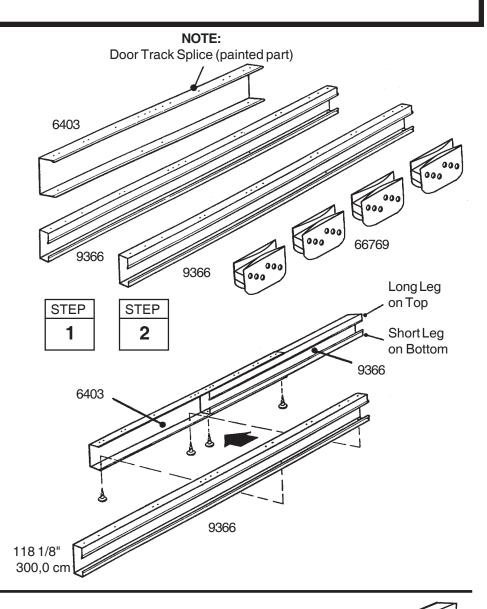


The door track assembly supports the sliding doors and reinforces the front wall. It is made up of three pieces.

1 Using the door track splice, (painted), join the door track (galvanized) pieces end-to-end as shown.

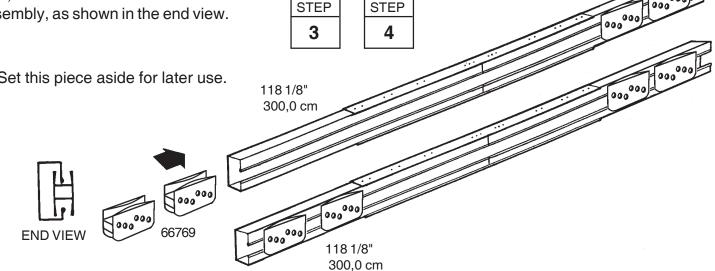
2 Insert four screws from the underside only.

Hint: The holes in the top side of the door track assembly are for fastening the gable to the top of the front wall in a later step.

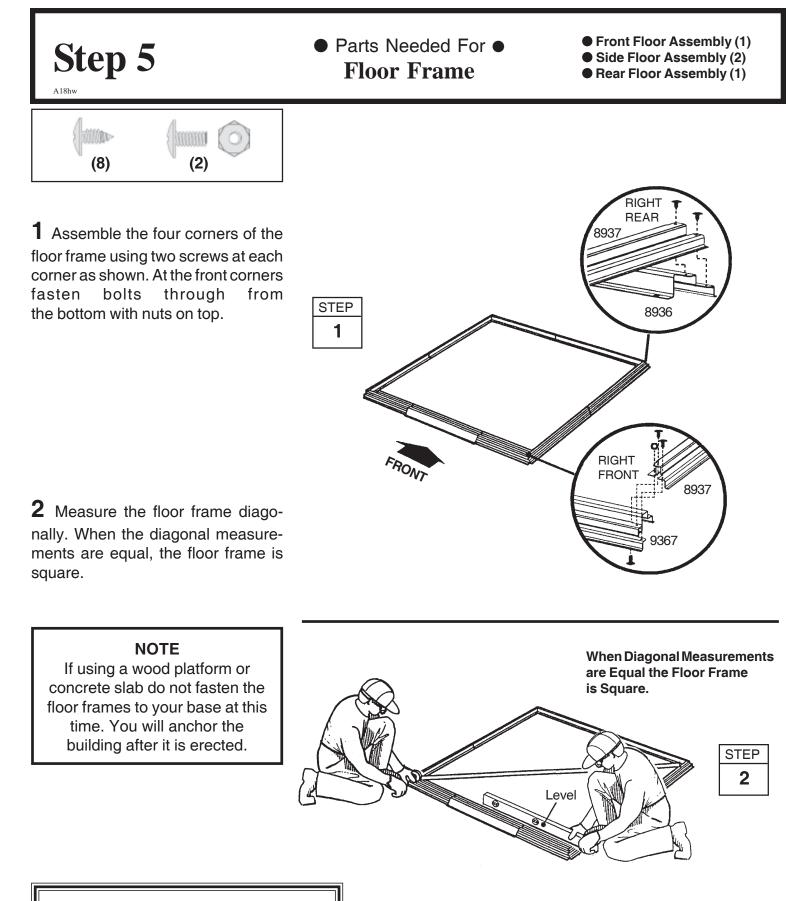


3 Position door slides onto the legs, from the end of door track assembly, as shown in the end view.

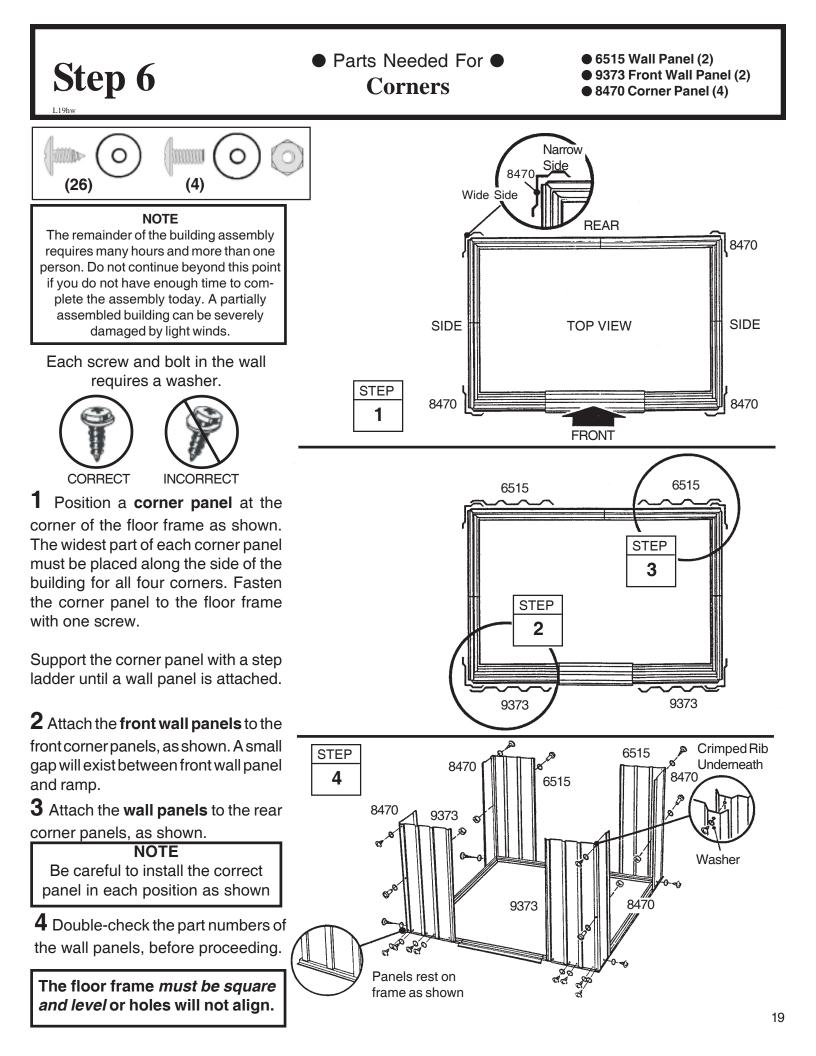
**4** Set this piece aside for later use.

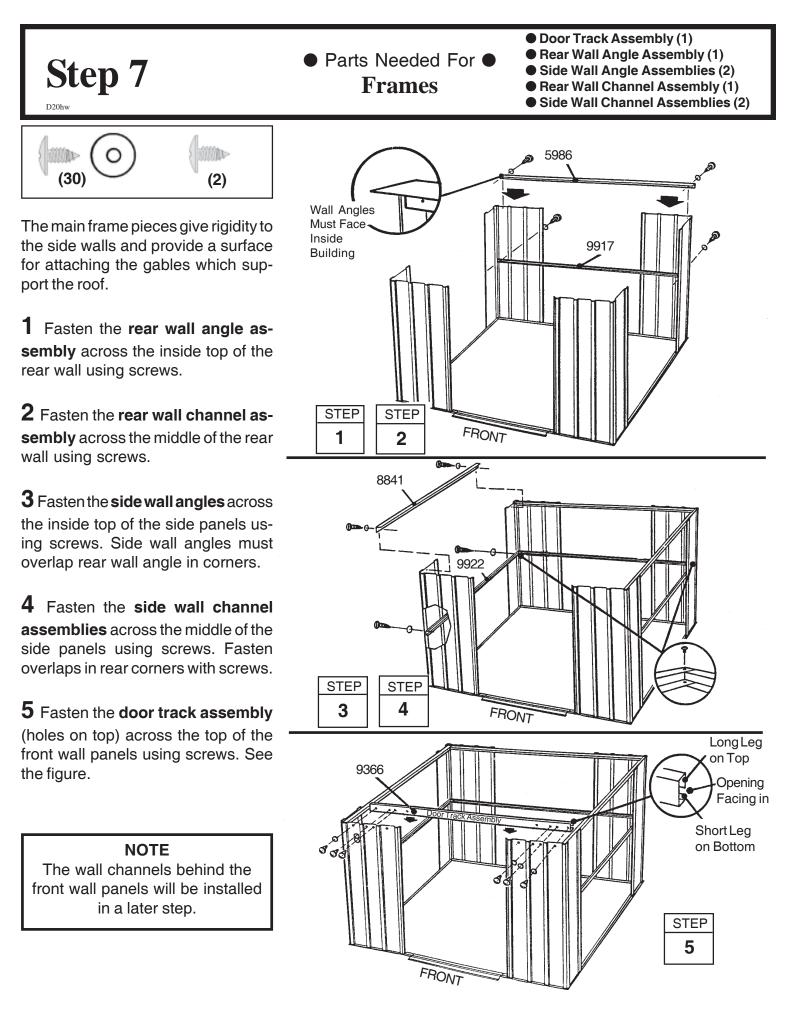


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The floor frame *must be square* and *level* or holes will not align.





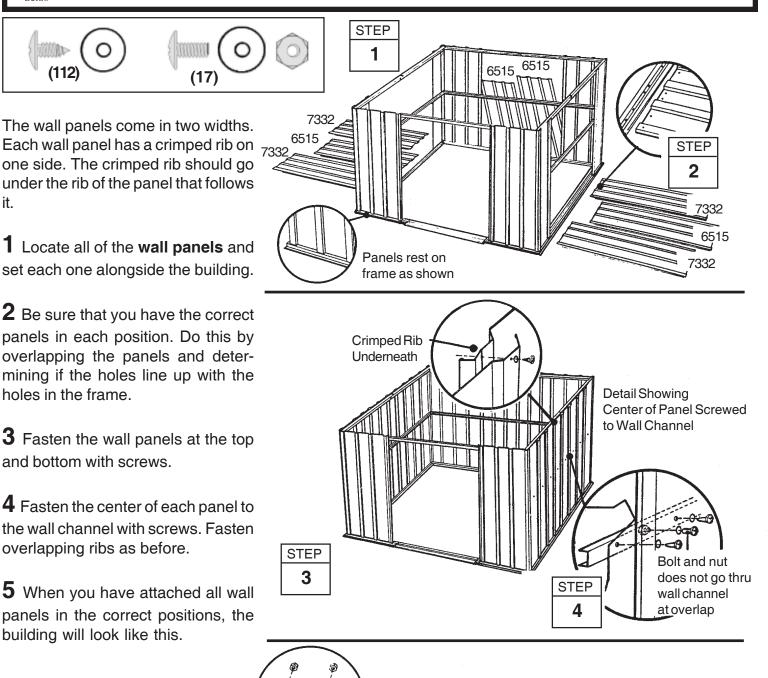
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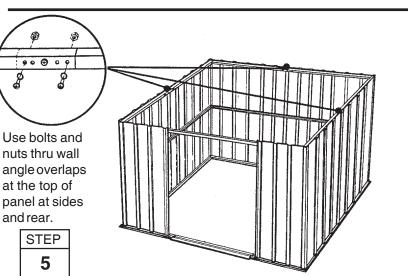
Step 8 D21hw

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it.

#### Parts Needed For Wall Panels

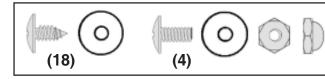




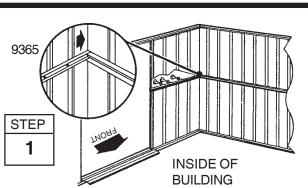


# Parts Needed For Front Channel/Door Jamb

9369 Door Jamb (2)
 9365 Front Wall Channel (2)



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



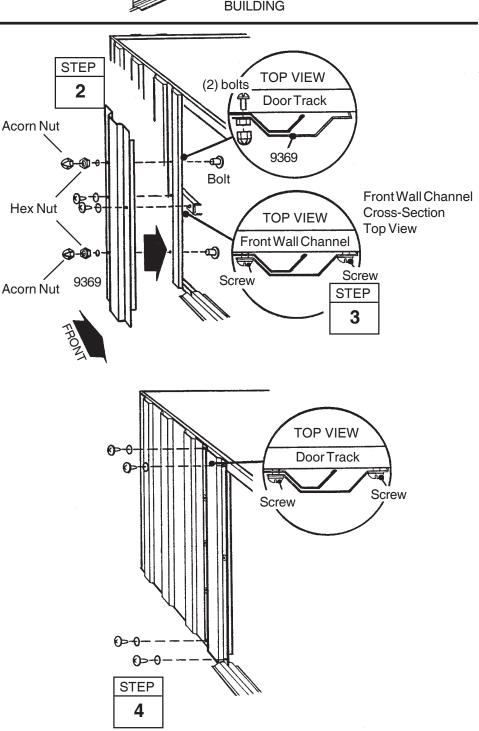
**1** Fasten the **front wall channels** in their positions between the end of the side wall channel and the corner panel using screws. Do not put a screw in the hole at the end behind the door opening at this time.

**2** Fasten a **door jamb** to the front panel with two bolts, nuts and acorn nuts, as shown.

**3** Fasten the center of the door jamb to the front wall panel and the front wall channel with two screws.

**4** Fasten the top of the door jamb to the door track with two screws. Do the same for the bottom into frame.

Repeat steps 2 through 4 for the *opposite* door jamb.

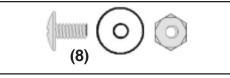


# **Step 10**

# Parts Needed For Gable Assemblies

8576 Right Gable (2)
 8577 Left Gable (2)

• 6635 Roof Beam Bracket (4)



The gables go on top of the front and rear walls to support the roof beams.

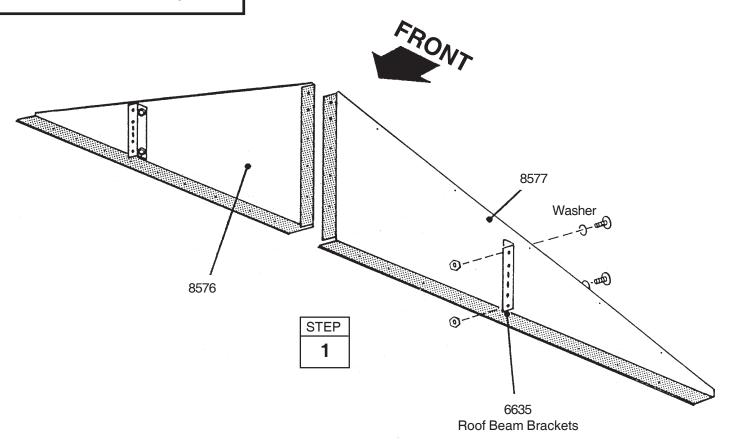
#### NOTE

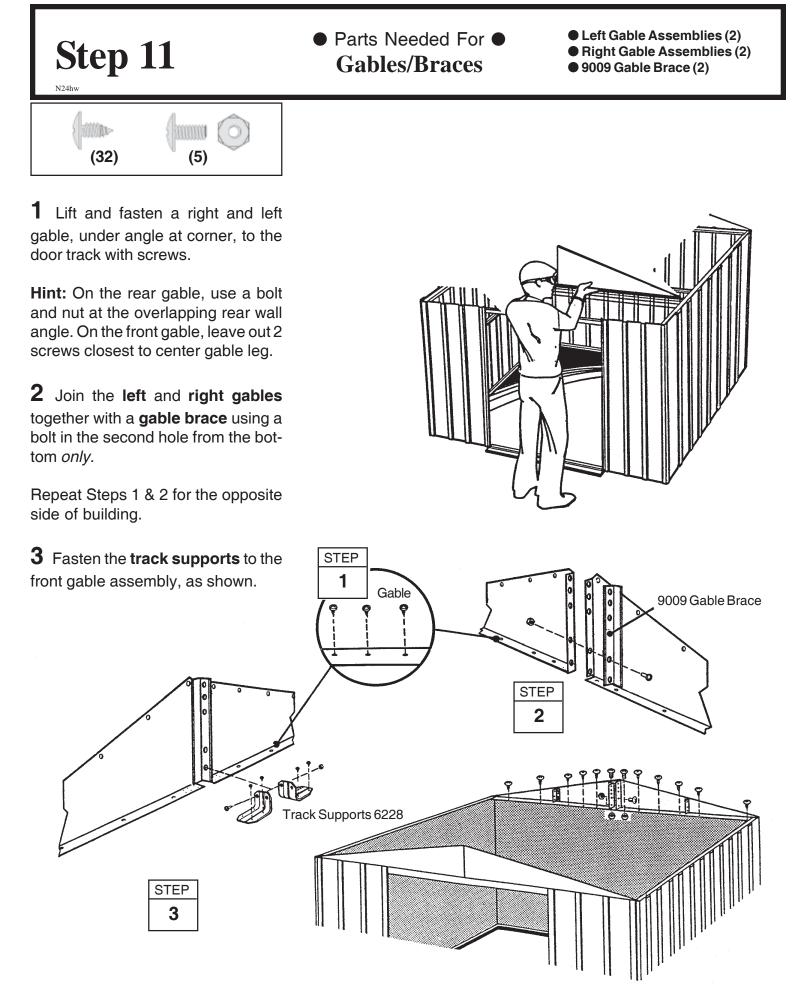
The gables are packed nested together and might be mistaken as one piece. Carefully separate them before continuing.

**1** Attach the four **roof beam brackets** to the gables using two bolts, washers and nuts.

#### NOTE

Mounting leg of bracket must face toward center of gable





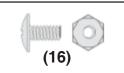
## Step 12

#### Parts Needed For **Roof Beam/Braces**

Main Roof Beam (1)

• Single Roof Beam (2)

9204 Roof Beam Brace (2)



1 Wrap the weather stripping tape around the two joined edges of the left and right gables. See diagram. Cut the weather stripping to length.

2 Spread the two halves of the main roof beam and fasten the roof beam to the gable brace of the front gable.

**3** Fasten the other end of the main roof beam to the gable brace of the rear gable.

**4** Fasten the single roof beam, small holes on top, as shown using bolts and nuts.

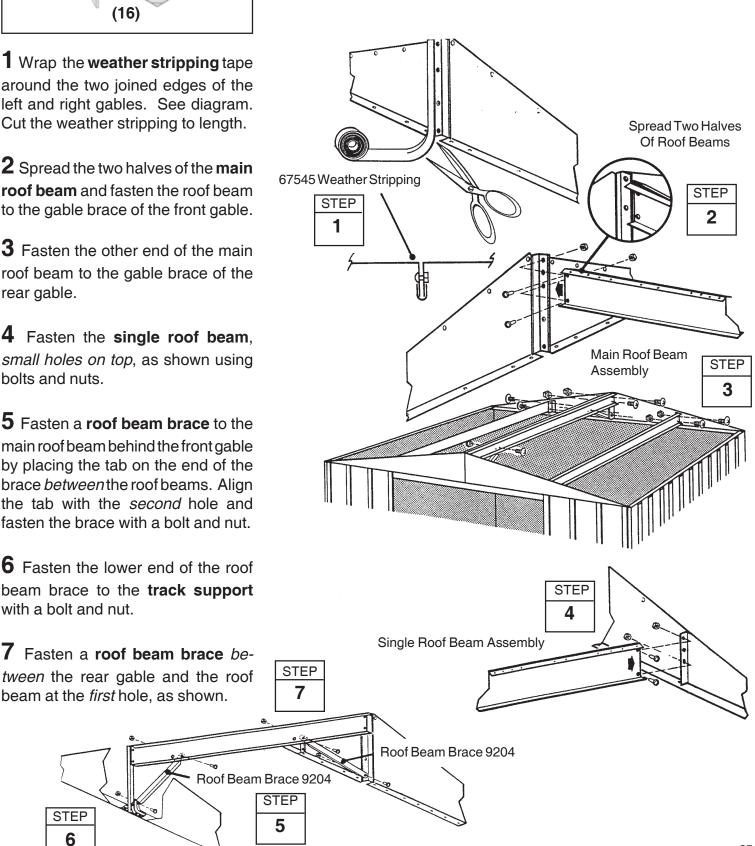
5 Fasten a roof beam brace to the main roof beam behind the front gable by placing the tab on the end of the brace between the roof beams. Align the tab with the second hole and fasten the brace with a bolt and nut.

6 Fasten the lower end of the roof beam brace to the track support with a bolt and nut.

beam at the *first* hole, as shown.

STEP

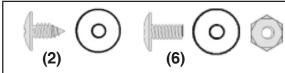
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## Parts Needed For Right Roof Panel

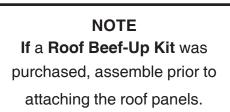
• 8578 Right Roof Panel (1)



Installing the roof panels is best done with a step ladder. Begin installing roof panels at the back right corner of the building. Each screw and bolt in the roof requires a washer.

#### NOTE

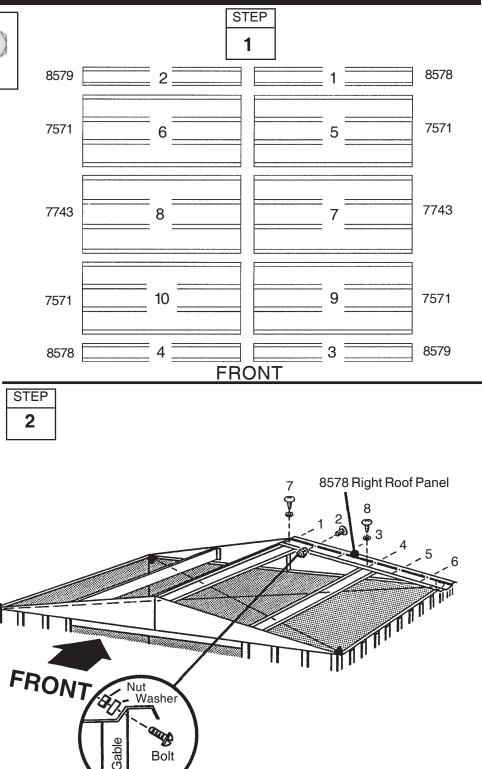
Measure the building diagonally again and make adjustments to make sure the building is square. This will make the roof panels fit better, and holes will align.

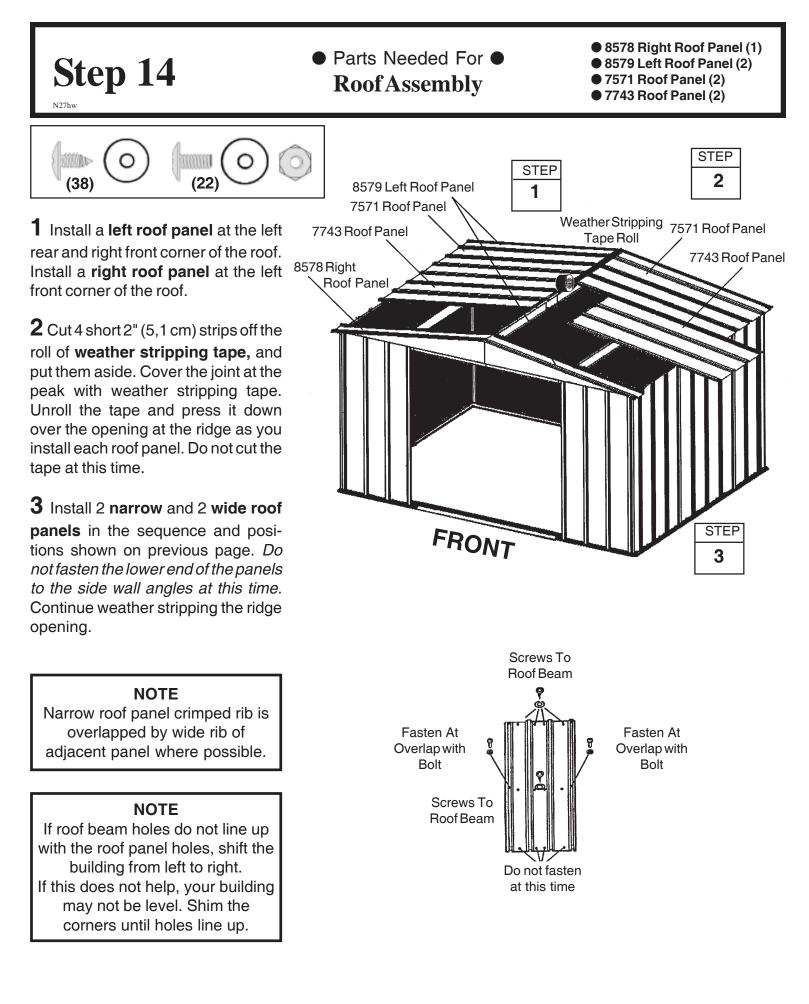


**1** Locate the roof panels by their numbers. *Note the sequence and position they are to be installed.* 

**2** Position the **right roof panel** at the back right corner and fasten to the gable with 6 bolts and nuts and roof beams using 2 screws. *Do not fasten the lower end of the panel to the side wall angle at this time.* 

**Hint:** Attach fasteners in order shown in diagram.



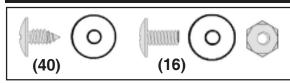




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# • Parts Needed For • Ridge Caps & Panels

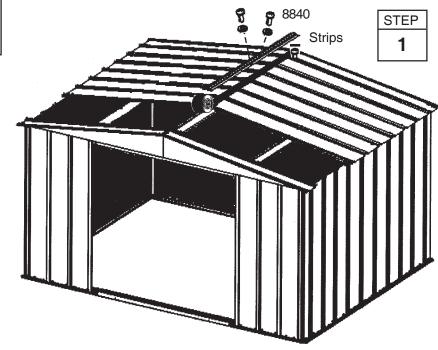
8840 Ridge Cap (1)
7571 Roof Panel (2)
8486 Ridge Cap (1)

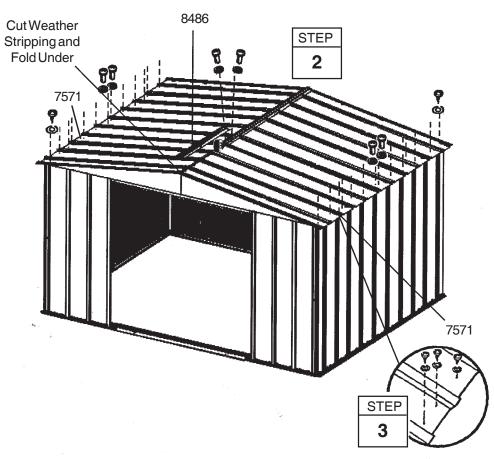


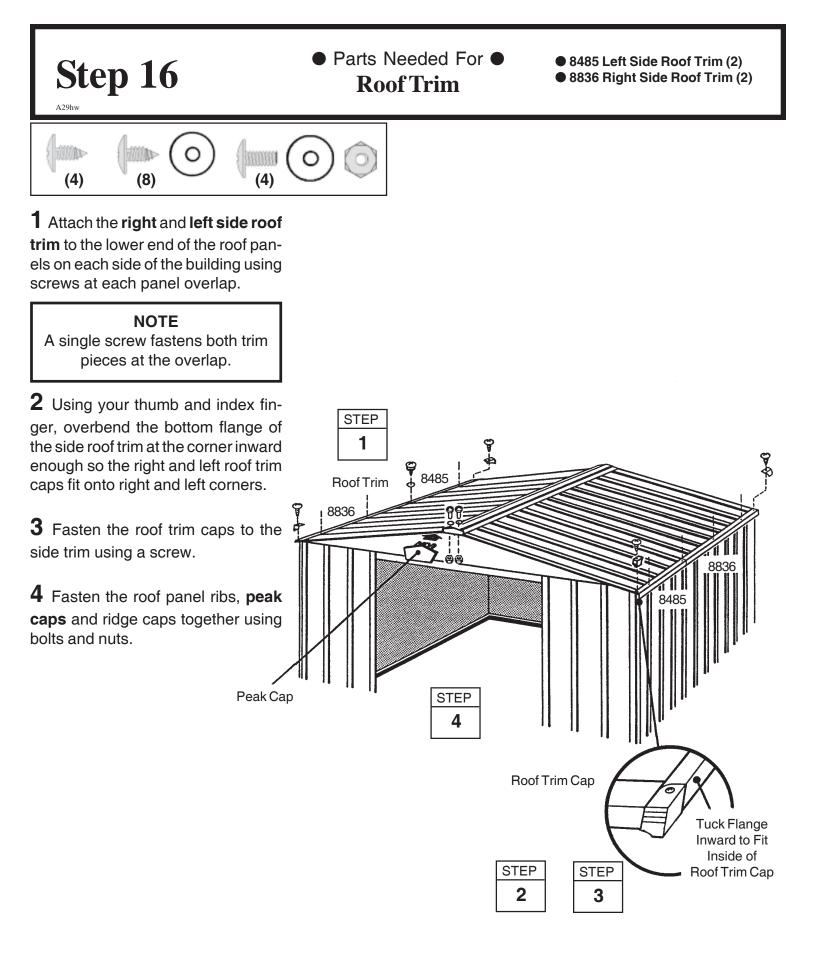
**1** Install the first **ridge cap** on the completed roof section using bolts and nuts. Fasten roof panel overlaps not used for ridge cap. Cover the head of bolt with the 2" (5,1 cm) piece of weather stripping tape. Do not fasten the ends of the ridge cap at this time.

**2** Install the second **ridge cap** overlapping the first ridge cap while installing the remaining narrow **roof panels**. Continue weather stripping the ridge.

**3** Fasten the lower end of the panels to the side wall angles using screws and washers. Use bolts and nuts through wall angle overlaps at the bottom of the panel.





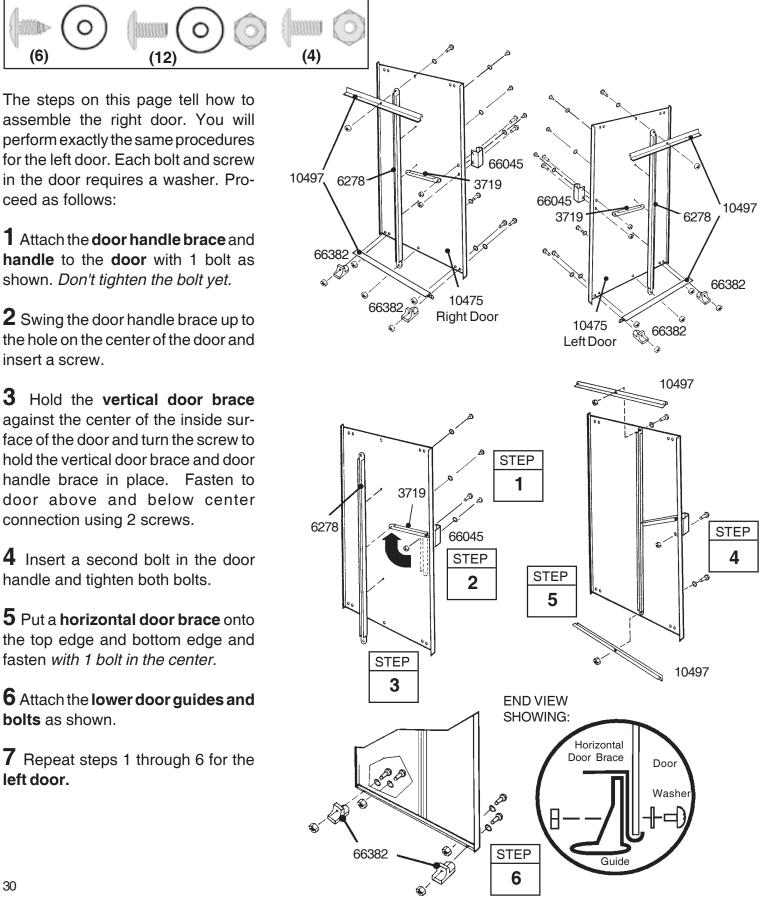




Parts Needed For **Door Assembly** 

• 3719 Door Handle Brace (2)

- 10475 Right and Left Doors (2) • 10497 Horizontal Door Brace (4)
- 6278 Vertical Door Brace (2)



# Step 18

# Parts Needed For Door Installation & Adjustment

Right Door Assembly (1)
 Left Door Assembly (1)



**1** From inside the building, put the bottom of the right door assembly (on your left when you are inside the building) behind door jamb into the front frame track.

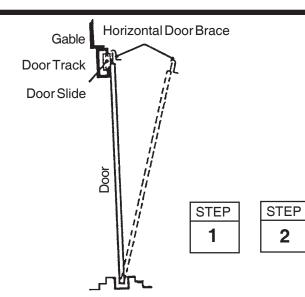
**2** Position the top of the door so that the holes in the door line up with the holes in the door slides.

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

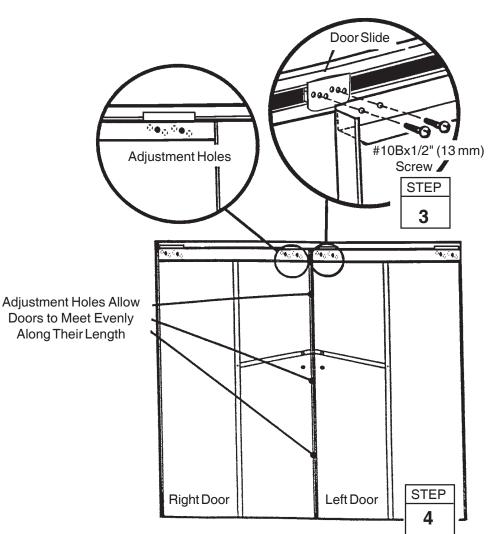
#### NOTE

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

**4** Repeat steps 1 through 3 for the left door.



Front Floor Frame Assembly



Keep this Owner's Manual and Assembly Instructions for future reference. 31

**AR108-A** 

### **CM108**

## **Anchoring and Floor Frame**

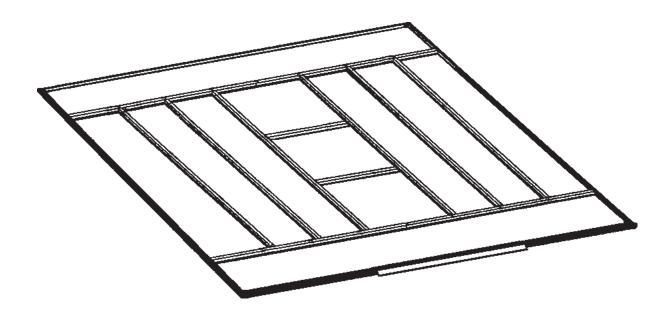
#### Anchoring

N32

Anchor your building at this time.

#### **Floor Frame**

If you have purchased a Floor Frame Kit you need to install it at this time.



#### 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.