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

Model No. EV47-A YS47-A □ **697.68601** □ Super Stars World's Leading Maker of Storage Buildings® CAUTION: SOME PARTS HAVE SHARP EDGES. CARE MUST BE TAKEN WHEN HANDLING THE VARIOUS PIECES TO AVOID A MISHAP. FOR SAFETY SAKE, PLEASE READ 707730904 SAFETY INFORMATION PROVIDED IN THIS MANUAL **BEFORE BEGINNING CONSTRUCTION, WEAR GLOVES** BUILDING DIMENSIONS \* Size rounded off to the nearest foot WHEN HANDLING METAL PARTS. **Exterior Dimensions Interior Dimensions** Door \*Approx. Foundation **Storage Area** (Roof Edge to Roof Edge) (Wall to Wall) Opening Sq. Ft. Cu. Ft. Depth Height Width Height Size Size Width Depth Height Width

49" 4' x 7' 50 1/2" x 80 1/4" 26 154 79 3/4" 82" 47 3/4" 77 1/2" 81 1/4" 38 1/2" 60 1/4" 1,2m x 2,0m 128cm x 204cm 2,4m<sup>2</sup> 4,4m<sup>3</sup> 124cm 203cm 208cm 121cm 197cm 206cm 98cm 153cm

## **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 correct results.

**Foundation and Anchoring:** Your storage building must be anchored to prevent wind damage. A foundation is also necessary as a base in order to construct a square and level building. Anchoring and foundation materials are not included with your building. We recommend the combined use of an **Arrow Floor Foundation 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 the foundation 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
 Route 50 East 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.

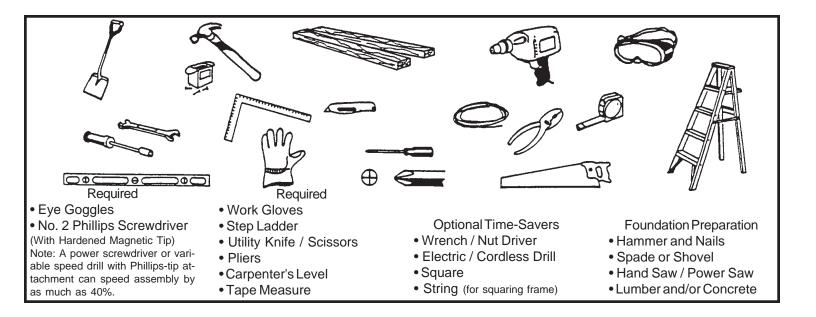
•Familiarize yourself with the hardware and fasteners for easier use during construction. These are packaged within the carton. Note that extra fasteners have been supplied for your convenience.

## 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 foundation 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.

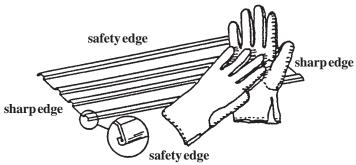
•Allow enough working space for ease of moving parts into position during assembly. Be sure there will be enough space at entrance for doors to open fully and enough space around the building to be able to fasten the panel screws from the outside.

•Before you begin the first steps in assembling your parts, a foundation 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.

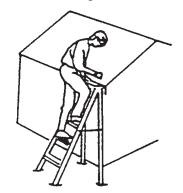
•Care must be taken when handling various pieces of your building since some contain sharp edges. Please wear work gloves, eye protection and long sleeves when assembling or performing any maintenance on your building.



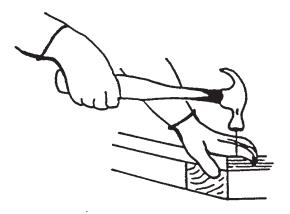
•Keep children and pets away from worksite to avoid distractions and any accidents which may occur.



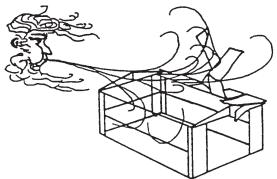
•Never concentrate your total weight on the roof of the building. When using a step ladder make sure that it is fully open and on even ground before climbing on it.



•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....

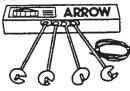
**ROOF STRENGTHENING (heavy snow load) KITS** Extra roof beams and gable braces designed for added protection against heavy snow accumulation. Increases the strength of your roof by 50%.

### ANCHOR KIT

#### Model No. AK4

A6 WEB

Anchor Kit contains heavy-duty steel augers, 60' (18m) 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', use 2 kits.



### FLOOR FOUNDATION KITS

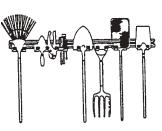


MODELS FB47410, FB5465, FB106-A FB109-A, FB1010 AND FB1014-A A simple new floor frame system made of heavy-duty, hot-dipped galvanized steel. Use as foundation for plywood, sand or stone.

## TOOL HANGING RACK

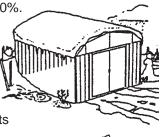
#### Model No. TH100

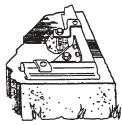
The perfect tool organizer. Twin 25 1/2" (65cm) steel channels plus five heavy-duty snap-in hangers and a small tool holder for screwdrivers, pliers, etc. Holders slide along channel for fully adjustable spacing. Great for garage, basement, or the back of any door. Fits all Arrow storage buildings.



### ANCHOR KIT 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.





### ATTIC KIT / WORKBENCH KIT

Heavy-duty galvanized steel bars that fit all 10' 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. (113kg) evenly distributed.

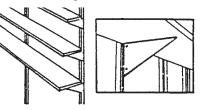


Model No.	Fits	Shipping Weight
AT101	10' Long, 250 lb. (113kg) load+ Fits all Arrow 10' wide buildings	( 0,

Must be drilled for use as workbench in Estator. + Even weight distribution.

### 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" (20-30cm) 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. (38kg) (even weight distribution)

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

## THIS

PAGE

WAS

LEFT

## BLANK

## INTENTIONALLY

## THIS

PAGE

WAS

LEFT

## BLANK

## INTENTIONALLY

## Foundation

BR9

## The Foundation For Your Building

### **OPTION 1: ARROW FLOOR FOUNDATION KIT:** (Order No. FB47410)

Arrow has the best base for your building in this simple kit. It keeps stored items above the ground. This foundation 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 FOUNDATION 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 foundation, be sure to select the appropriate materials.

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

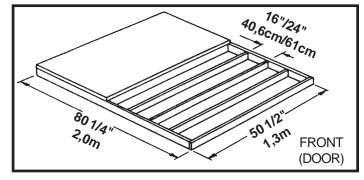
- 2 x 4's (5cm x 10cm) Pressure Treated Lumber 5/8" (1,5cm) 4 x 8 (122cm x 244cm) Plywood-exterior grade
- 10 & 4 penny Galvanized Nails 
  Concrete Blocks (optional)

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 foundation follow instructions and diagram.

Construct frame (using 10 penny galvanized nails) Measure 16"/24" (40,6cm/61cm) 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" (1,4cm) beyond floor frame on all four sides. Seal this 9/16" of wood with a roofing cement (not included), or bevel this 9/16" of concrete when pouring, for good water drainage.

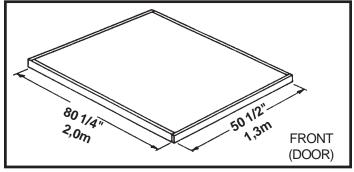
### **OPTION 3: Concrete Slab**

The slab should be at least 3" to 4" (8-10cm) thick. It must be level and flat to provide good support for the frame. The following are the recommended materials for your foundation.

- 1 x 4's (2,5cm x 10cm) (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 Foundation

- 1. Dig a square, 6" (15cm) deep into the ground (remove grass).
- 2. Fill up to 4" (10cm) 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 (2,5cm x 10cm) lumber.
- 5. Pour in concrete to fill in the hole and the frame giving a total of 4" (8-10cm) 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.



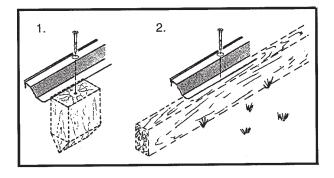
## Anchoring

## **Anchoring Down The Building**

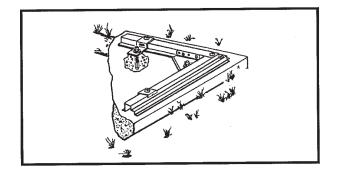
#### It is important that the entire floor frame be anchored after the building is erected. Below are recommended ways of anchoring.

Anchoring into Wood/Post:

Use 1/4" Wood Screws. There are 1/4" (0,63cm) dia. holes provided in the frames for proper anchoring.



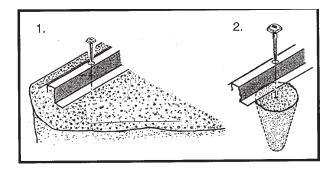
Arrow Anchoring Kit: (Model No. AK100 or 68383) Recommended for use with the **concrete** foundation. **Contains:** Corner gussets, perimeter clips, hardware, 1/4" masonary drill bit and installation instruction.



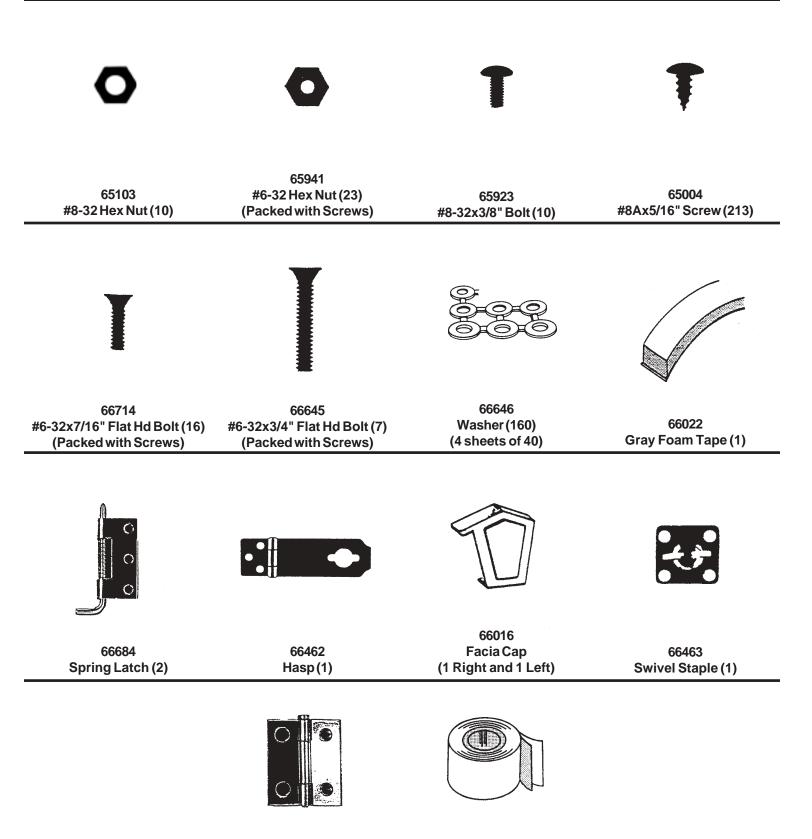
#### Anchoring into Concrete:

1. For poured concrete slab or footing or patio blocks: Use 1/4" x 2" Lag Screws.

2. For Anchor Post of Concrete poured after building is erected: Use 1/4" x 6" Lag Screws.



## Hardware



67293 Foil Tape (1)

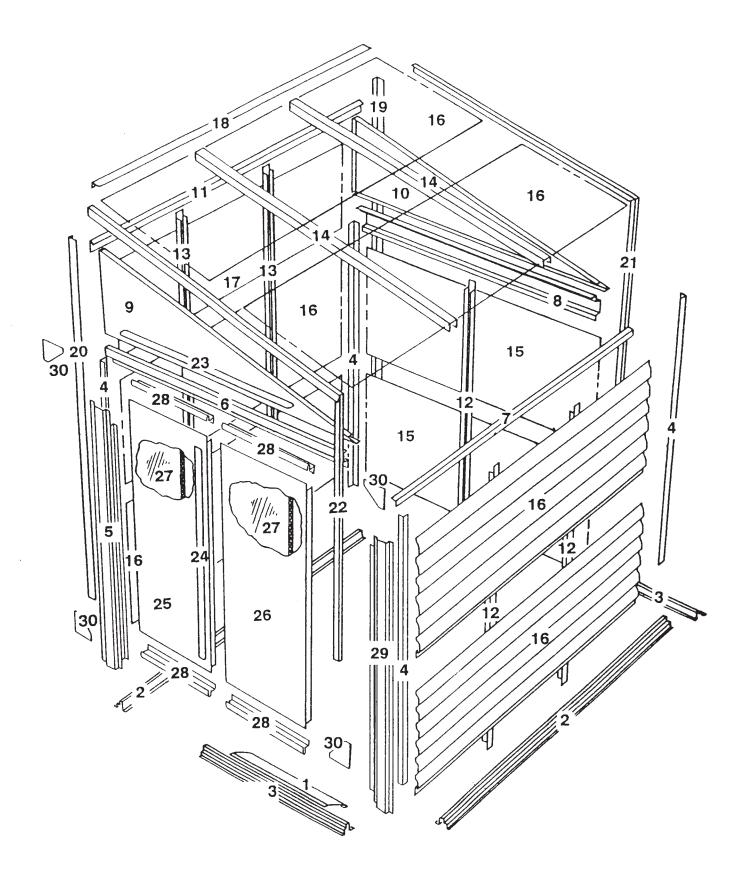
66604

Hinge(4)

## **Parts List**

Assembly	Part	Part	Quantity	Check
Key No.	Number	Description	in Carton	List
1	9796	Ramp	1	
2	8977	Side Floor Frame	2	
3	9795	Floor Frame	2	
4	9793	Corner Post	4	
5	9789	Left Door Jamb	1	
6	9791	Front Header	1	
7	8070	Side Eave Frame	1	
8	8062	Rear Header	1	
9	8061	Left Gable	1	
10	8060	Right Gable	1	
11	8069	Side Peak Frame	1	
12	8067	Siding Stud - Short	3	
13	8068	Siding Stud - Long	2	
14	8066	Roof Frame	2	
15	8075	Rear Siding - 6 Board	2	
16	8074	Side Siding - 6 Board	6	
17	8073	Top Siding - 5 Board	1	
18	8080	Peak Trim	1	
19	8078	Right Wall Trim	1	
20	8079	Left Wall Trim	1	
21	8076	Right Roof Trim	1	
22	8077	Left Roof Trim	1	
23	8082	Drip Cap	1	
24	9792	Door Stop	1	
25	9787	Left Door	1	
26	9788	Right Door	1	
27	67729	Foam Board	2	
28	9794	Horizontal Door Brace	4	
29	9790	Right Door Jamb	1	
30	6481	Gusset	4	

## Assembly by Key No.



- 9794 Horizontal Door Brace (4)
- 9788 Right Door (1)

**Door Assembly** 

Parts Needed For •

• 9787 Left Door (1)

• 67729 Foam Board (2)

**1** Position **hinges** on sides of **right & left door** panels as shown and fasten with **7**/16" flat head bolts outside and #6 hex nuts inside.

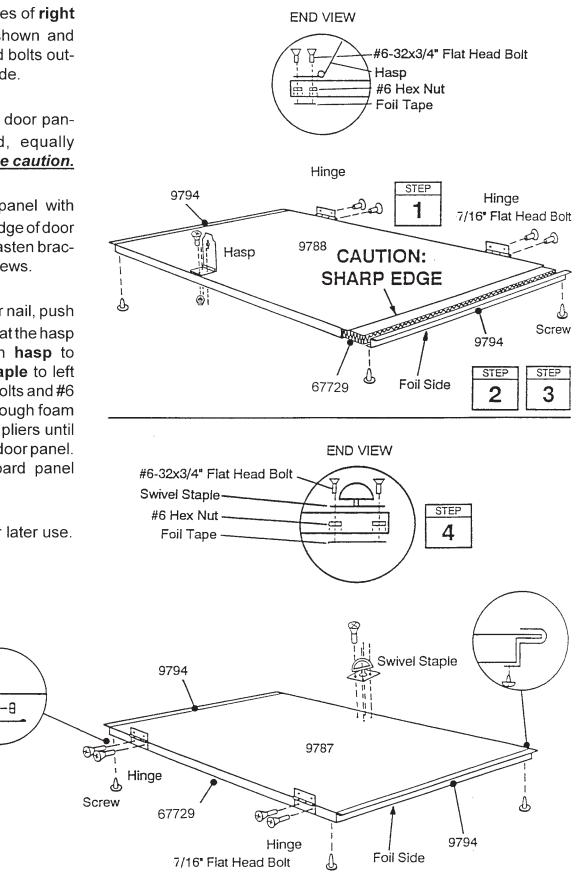
Step 1

**2** Slide **foam board** into door panels, foil facing outward, equally spaced on both sides. <u>See caution.</u>

**3** Cover ends of door panel with **horizontal door brace**. Edge of door panel slides into brace. Fasten braces to doors using two screws.

**4** Using an awl, ice pick or nail, push holes through foam board at the hasp and staple holes. Attach **hasp** to right door and **swivel staple** to left door using 3/4" flat head bolts and #6 hex nuts. Tighten nuts through foam board using needle nose pliers until they are against inside of door panel. Cover holes in foam board panel with a piece of foil tape.

**5** Set the doors aside for later use.



Step 2 Parts Needed For • • 9795 Floor Frame (2) **Floor Frame Assembly** • 8977 Side Floor Frame (2) RIGHT, REAR STEP **1** Center the ramp on top of the floor 897 frame. Note that the door can be 2 installed on either end. Join the frames by inserting four screws. 9795 STEP 1 **2** Assemble the four corners of the floor frame using two screws at each 9796 8977 corner as shown. 9795 **3** Measure the floor frame diagonally. When the diagonal measurements are equal, the floor frame is When Diagonal Measurements square. are Equal the Floor Frame is Square.

• 9796 Ramp (1)

### NOTE

If using a wood platform or concrete slab do not fasten the floor frames to your base at this time. You will anchor the building after it is erected.

### NOTE

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

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

STEP

3

Level

# Parts Needed For Corner Posts/Rear Siding

9793 Corner Post (2)
 8075 Rear Siding (1)

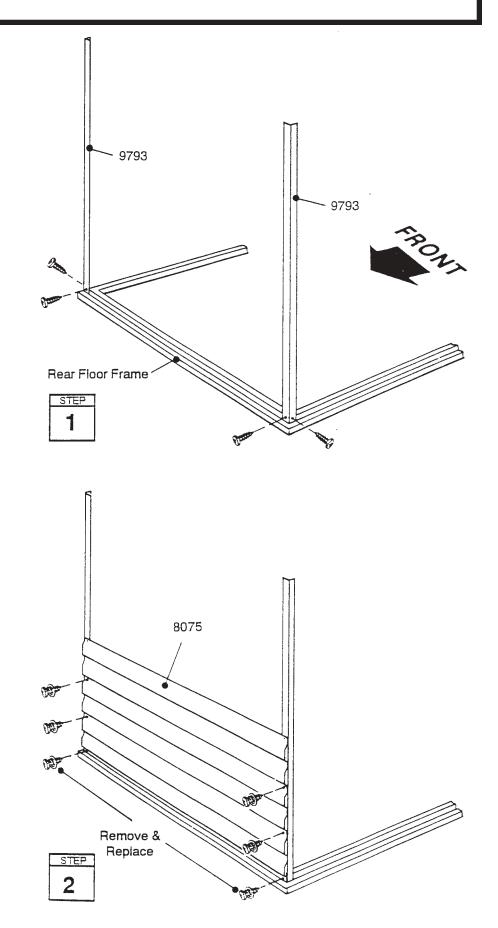
#### NOTE

The remainder of the building assembly requires many hours and more than one person. Do not continue beyond this point if you do not have enough time to complete the assembly today. A partially assembled building can be severely damaged by light winds.

**1** Fasten two **corner posts** to the rear corners of the floor frame assembly using four screws.

2 Position one rear siding, starting at rear frame, between corner posts and fasten with six screws. <u>Always</u> <u>use washers under the heads of</u> <u>fasteners where they are shown!</u>

Each siding panel has a bottom edge and a flat edge. The bottom edge always overlaps the flat edge. Keep the flat edge up. Do not fasten flat edge now.



# Parts Needed For Corner Posts/Side Siding

6481 Gusset (4)
9793 Corner Post (2)
8074 Side Siding (2)

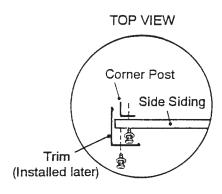
**1** Attach a **gusset** to each end of the two **corner posts** using one screw.

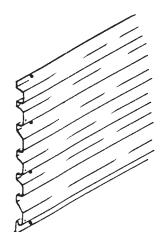
**2** Fasten one **corner post assembly** to the front corner of the floor frame assembly using two screws. *Caution!* Once corner post is attached, fasten one **side siding** to the corner posts with six screws. Do not fasten flat edge now.

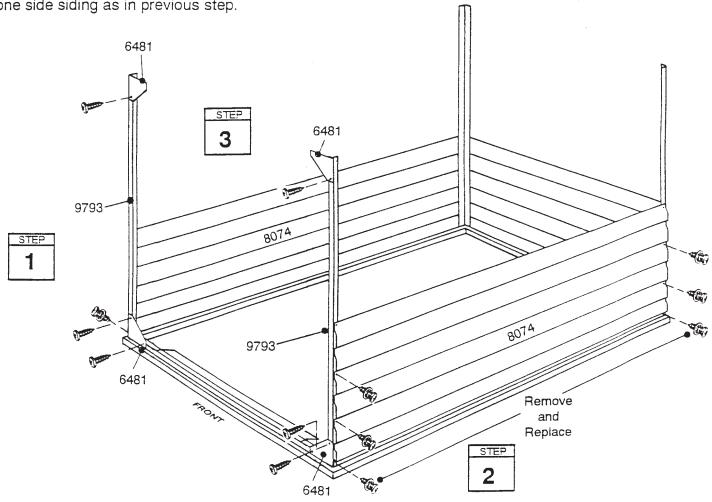
### IMPORTANT

Always use 2nd set of holes from end of siding panel when attaching to corner post

**3** Fasten remaining corner post and one side siding as in previous step.







### Parts Needed For Headers/Frame/Jambs

• 9791 Front Header (1)

- 8070 Side Eave Frame (1)
- 8062 Rear Header (1)
- 9789 Left Door Jamb (1)

• 9790 Right Door Jamb (1)

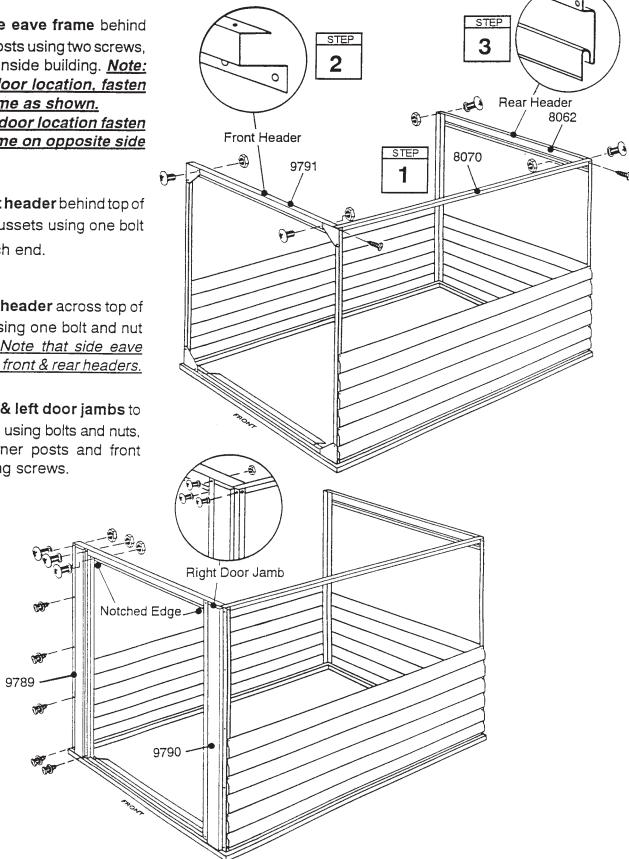
1 Fasten side eave frame behind top of corner posts using two screws, top leg facing inside building. Note: For left end door location, fasten side eave frame as shown. For right end door location fasten side eave frame on opposite side of building.

2 Fasten front header behind top of corner posts/gussets using one bolt and nut on each end.

3 Fasten rear header across top of corner posts using one bolt and nut on each end. Note that side eave frame overlaps front & rear headers.

4 Attach right & left door jambs to the front header using bolts and nuts, and to the corner posts and front floor frame using screws.

> STEP 4



## Parts Needed For Side/Rear Siding/Studs

8074 Side Siding (1)
8075 Rear Siding (1)
8067 Siding Stud (3)
8068 Siding Stud (2)

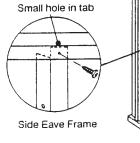
**1** Position the **side siding** (6 board) to corner posts, flat edge of siding upward and bottom resting on 1st side siding. See figure. Always follow this pattern. Fasten siding to corner posts using six screws. Do not fasten flat edge now. Position 2nd side siding on opposite side of building and fasten as before. <u>Always use</u> washers where they are shown!

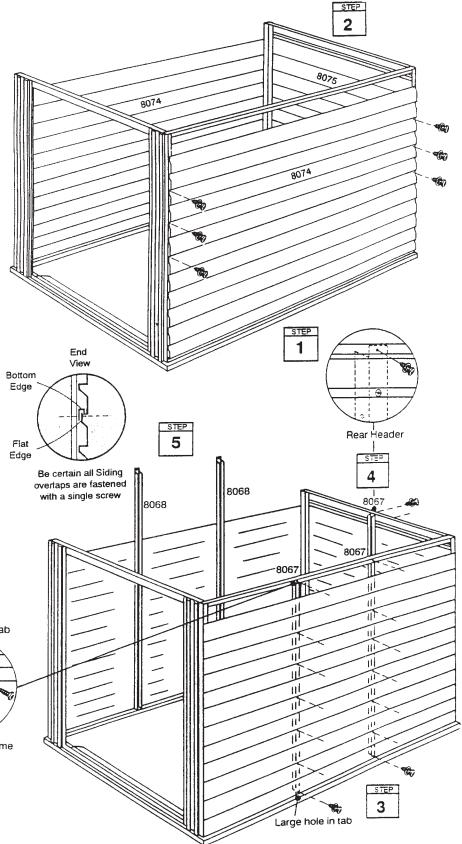
**2** Repeat procedure with **rear siding** panel. Fasten siding to rear header to complete rear siding.

**3** Position two short **siding studs** between corner posts, behind side eave frame, and fasten tab using a screw. Rest bottom tab of stud between siding and floor frame and fasten with a screw. Fasten siding to studs, as shown.

**4** Fasten one short siding stud to the rear of building between the corner posts in the same manner. Fasten top tab behind rear header.

**5** Position two long **siding studs** to the left side of building in the same manner using screws. Small hole in t





# Parts Needed For Gables/Peak/Roof Frames

8061 Left Gable (1)

#### 8060 Right Gable (1)

• 8069 Side Peak Frame (1)

8066 Roof Frame (2)

### NOTE

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

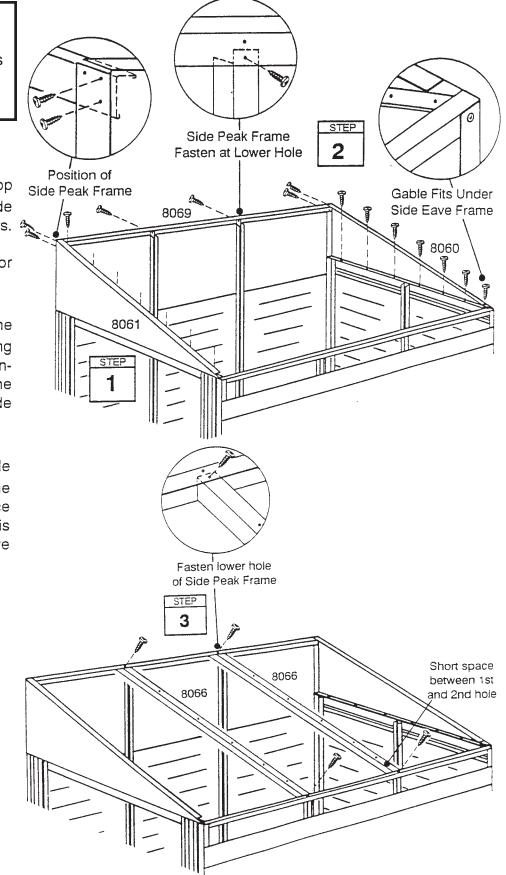
**1** Lift and fasten a **left gable** on top of header, with lower leg under side eave frame at corner, using screws.

Repeat Step 1 with **right gable** for the opposite side of building.

**2** Fasten **side peak frame** to the inside top corners of gables using two screws, top shorter leg facing inside building. Fasten top tab of the siding studs to the lower hole in side peak frame using screws.

**3** Position **roof frames** under side peak and eave frames. Be sure the end of frame with the shortest space between the 1st and 2nd hole is positioned at the lower side eave frame, and fasten using screws.

> 8060 Right End Door Location



### Parts Needed For Side Siding/Foam Tape

### Installing the siding to the roof is best done with a step ladder.

#### NOTE

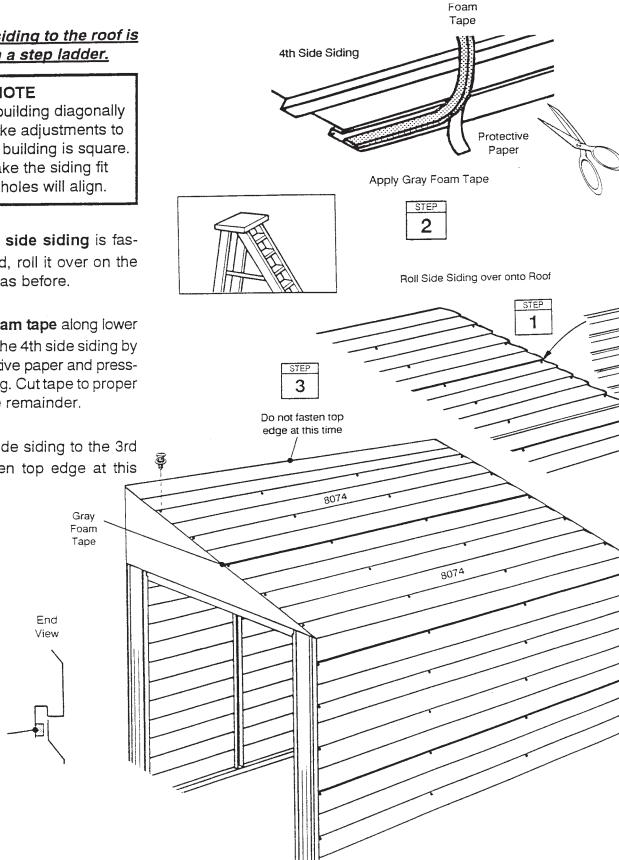
Measure the building diagonally again and make adjustments to make sure the building is square. This will make the siding fit better, and holes will align.

1 After the 3rd side siding is fastened to the 2nd, roll it over on the roof and fasten as before.

2 Apply gray foam tape along lower bottom edge of the 4th side siding by removing protective paper and pressing on edge of leg. Cut tape to proper length and save remainder.

**3** Fasten 4th side siding to the 3rd but do not fasten top edge at this time.

Foam Tape



# Parts Needed For Top Siding/Trim

8073 Top Siding (1)
8080 Peak Trim (1)
8078 Right Wall Trim (1)
8079 Left Wall Trim (1)
8076 Right Roof Trim (1)
8077 Left Roof Trim (1)

**1** Fasten remaining **top siding** (5 board), to the top side of building.

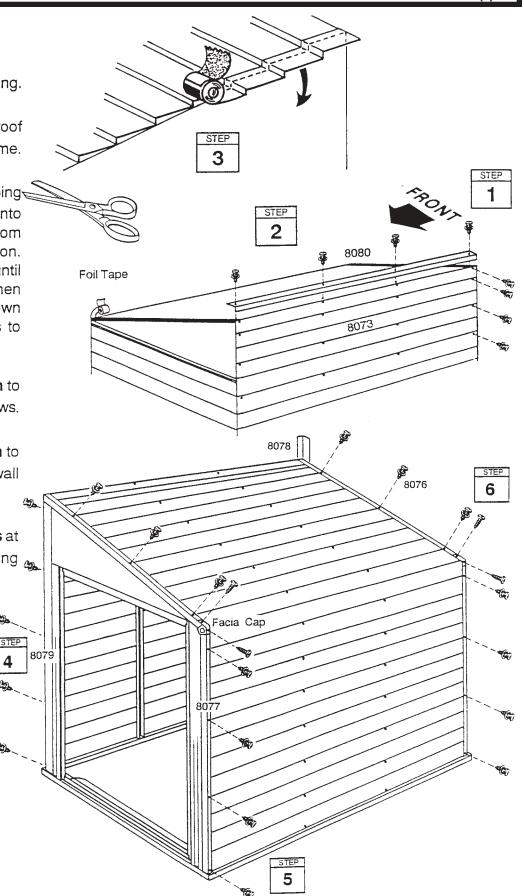
**2** Fasten **peak trim** to peak of roof using screws thru siding into frame.

**3** Apply **foil tape** by overlapping siding by 1/2", pressing firmly into contour of siding, from top to bottom of gables. Rub for good adhesion. Do not cut tape, let roll hang free until ready to use on next panel. When complete, press opposite side down to gable. The purpose of this is to seal out the weather.

**4** Fasten **right** and **left wall trim** to side corners of building using screws.

**5** Fasten **right** and **left roof trim** to the ends of roof, overlapping wall trim, using screws.

**6** Fasten right and left **facia caps** at the breaks in the roof trim, using <sub>mass</sub> screws.



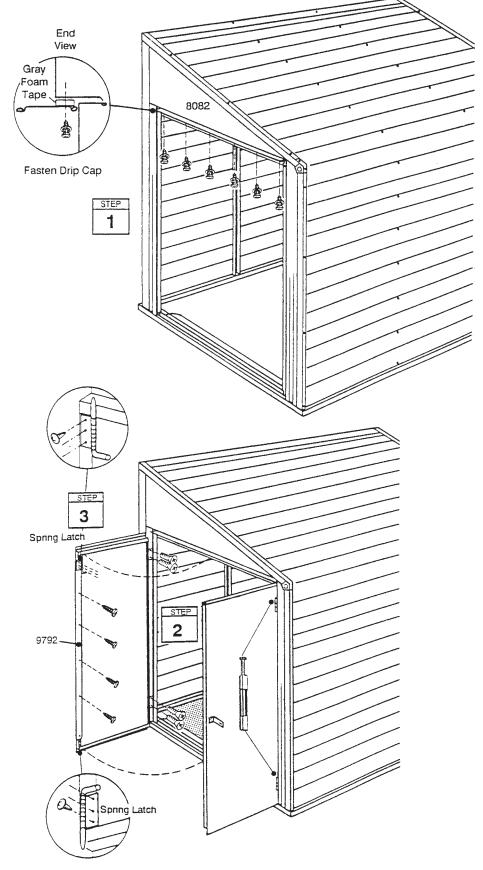
### • Parts Needed For • Drip Cap/Door Stop

8082 Drip Cap (1)
Right Door Assembly (1)
Left Door Assembly (1)
9792 Door Stop (1)

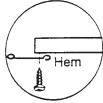
Apply remaining gray foam tape along edge of drip cap. Position drip cap, foam facing up, to the bottom of gable, at door opening, and fasten with screws.

**2** Position doors in corners of door opening as shown and fasten hinges with 7/16" flat head bolts and #6 hex nuts. <u>Be sure the heads on hinge pins are all installed toward top.</u>

**3** Position **door stop** to left door, with tapered end up and hems toward inside of building, and fasten using four screws. Fasten a **spring latch** at the top and bottom of door stop, using three screws. When spring latch is engaged with hole in header or ramp, these will hold left door closed when not in use. The hasp and staple can be used to keep doors closed, or used with a padlock (not supplied) to lock doors.







Fasten Door Stop



### 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.

BR24