

16656-L



Call Us First!
DO NOT RETURN TO STORE.

For immediate help with assembly or product information

call our toll free number:

1-800-577-9663

or email:

customerservice@backyardproductsllc.com

Our staff is ready to provide assistance
April through October M-F 8:00 AM to 4:30 PM EST
Saturday 8:30 AM to 4:30 PM EST
November through March M - F 8:00 AM to 5:00 PM EST



ASSEMBLY MANUAL

16656-L 07/12/2016

VALUE SERIES
RAINIER 10' x 10' (305 x 305 cm)
ACTUAL FLOOR SIZE IS 120 x 116-5/8" (305 x 296 cm)

KEEP THIS MANUAL FOR FUTURE REFERENCE

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! IMPORTANT! !

READ INSTRUCTIONS THOROUGHLY PRIOR TO BEGINNING ASSEMBLY.

BEFORE YOU BEGIN

- **BUILDING RESTRICTIONS AND APPROVALS**

Be sure to check with local building department and homeowners association for specific restrictions and/ or requirements before building

- **ENGINEERED DRAWINGS**

Contact our Customer Service Team if engineered drawings are needed to pull local permits.

- **SURFACE PREPARATION**

To ensure proper assembly you must build your shed on a level surface. Recommended methods and materials to level your shed are listed on page 8.

- **CHECK ALL PARTS**

Inventory all parts listed on pages 4 - 6. Contact our Customer Service Team if any parts are missing or damaged.

- **ADDITIONAL MATERIALS**

You will need additional materials to complete your shed. See page 3 for required and optional materials and quantities.



- CUSTOMER SERVICE -




Call: 1-800-577-9663 email: customerservice@backyardproductsllc.com

TOOLS

Required


Phillips Screwdriver 

Drill / Driver
 3/8" Drill Bit
 #2 Philips Drive Bit



Hammer 


Level 


Pencil 


Tape Measure 


Square 

Utility Knife 
 Shingle Blades 


Caulk Gun 


Paint Tools 


Safety Glasses 


Ladder 


Optional

Tool Belt/
Nail Pouch 

Tin Snips
(for drip edge) 

Chalk Line 

Nail Gun
• gun nails 

Gloves 

Safety! Always use approved safety glasses during assembly.

HELPFUL REMINDER SYMBOLS

Look for these symbols for helpful reminders throughout this manual.



= Assistance Required; two or more people.



= Ensure squareness.



= Important required step or operation.



= Helpful assembly hint.



= Mark part with pencil.



BEGIN = Beginning of steps for assembly or installation.



FINISH = You have finished the assembly or installation.

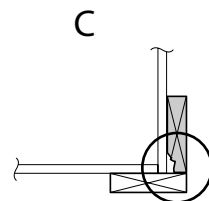
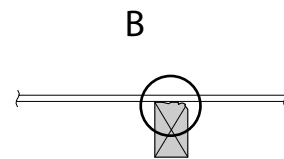
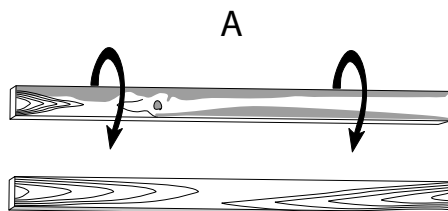


= Level

ORIENT LUMBER AND TRIM FOR BEST APPEARANCE

Framing lumber is graded for structural strength and not appearance. Exterior trim is graded for one good side.

Always install the material leaving the best edge and best surface visible. Please remember that these blemishes in no way negatively affect the strength or integrity of our product. (See Fig. A, B, C.)



ADDITIONAL MATERIALS

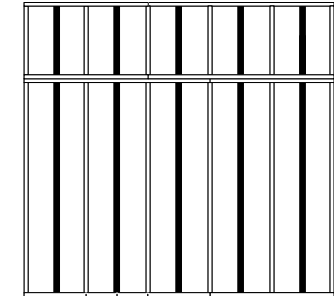
FOUNDATION OR FLOOR MATERIALS

- This shed kit includes a complete wood floor frame system. It does not include floor panels.
- It does not include ANY leveling materials.
- See the **FLOOR LEVELING** section on page 8 for recommended methods and suggested materials to properly level your floor, as this will vary depending on your specific site.

REINFORCED WOOD FLOOR FRAME (OPTIONAL)





IMPORTANT! The included floor has been designed for general use. Depending on your specific use you may want to construct a heavy duty floor frame by adding additional floor joists (shown below as shaded). Below is a list of additional materials (not included):

- x1** 2 x 4 x 10' (5 x 10 x 305 cm) Treated Lumber
Cut to (5) 2 x 4 x 21" (5 x 10 x 53,3 cm)
- x5** 2 x 4 x 8' (5 x 10 x 244 cm) Teated Lumber
Cut to (5) 2 x 4 x 89-1/2" (5 x 10 x 227 cm)
- x40** ea. 3" (7,6 cm) Hot Dipped Galvanized Nails




← Optional 12" (30,5 cm) spacing
 ← Standard 24" (61 cm) spacing

FLOOR PANELS (NOT INCLUDED)

- Floor Panels are all 3/4" (1,9 cm) thick.
- x2**  3/4 x 48 x 92-5/8" (1,9 x 113 x 235 cm)
 - x1**  3/4 x 23-7/8 x 23-7/8" (1,9 x 61 x 61 cm)
 - x1**  3/4 x 23-7/8 x 96" (1,9 x 61 x 244 cm)
 - x1**  3/4 x 23-7/8 x 92-5/8" (1,9 x 61 x 235 cm)

COMPLETING YOUR SHED

You will need these additional materials:

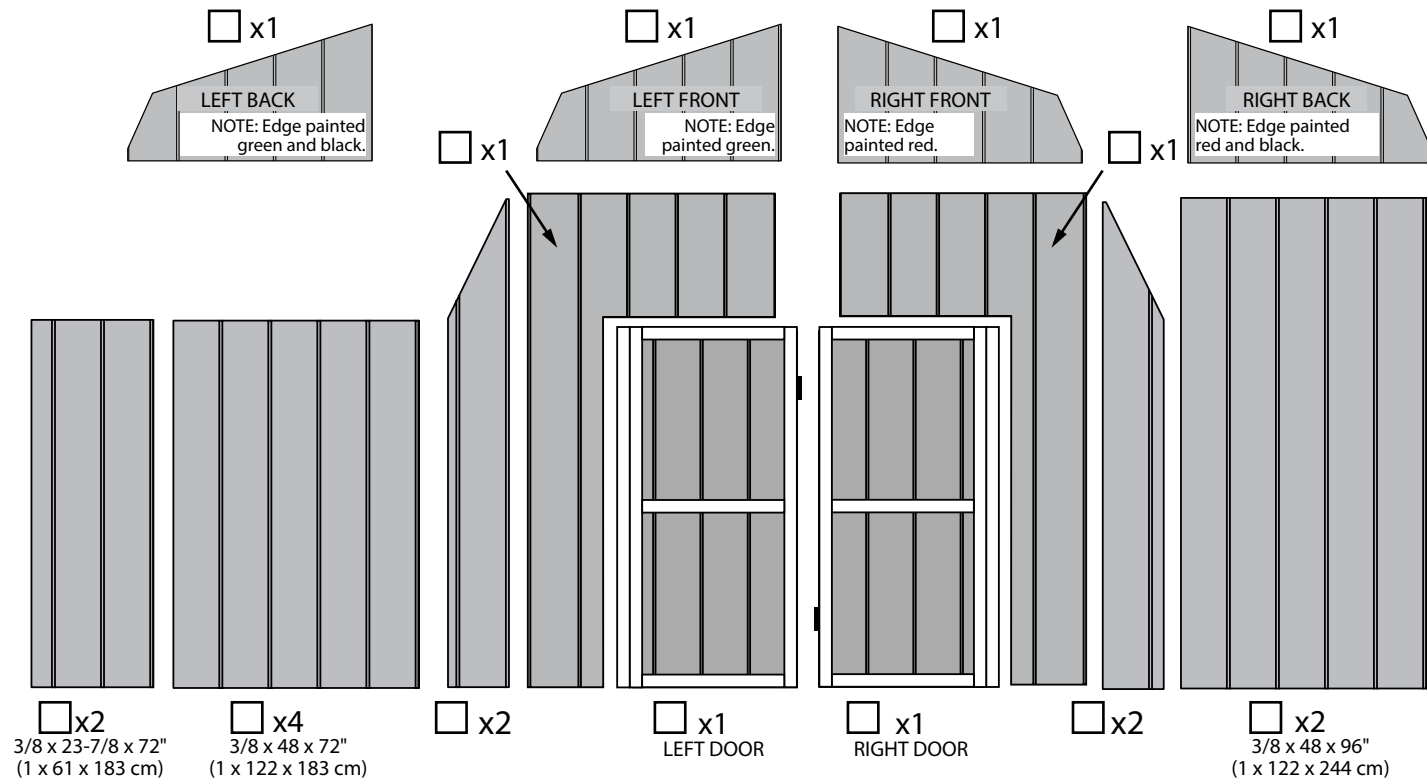
- 3-TAB SHINGLES** 6 Bundle s
- 1" GALVANIZED ROOFING NAILS**.... 3 Lbs
For shingles.
- PAINT FOR SIDING** 2 Gallons
Use 100% acrylic latex exterior paint. (2) coats r ecommended.
- PAINT FOR TRIM**1 Quart
Use 100% acrylic latex exterior paint.
- CAULK** 3 Tube s
Use acrylic latex exterior caulk that is paintable. 
- WOOD GLUE** Exterior Rated

OPTIONAL MATERIALS

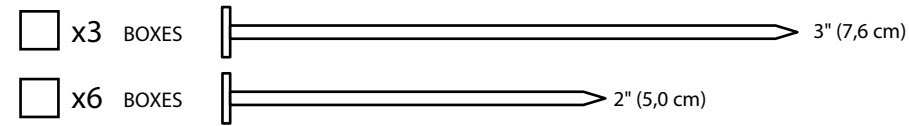
- DRIP EDGE** 30 Feet
- #15 ROOFING FELT**
To cover 145 Sq. Ft. of roof area.
- 1" GALVANIZED ROOFING NAILS**.....1/4 Lb
For roofing felt.

REFER TO THE BACK OF THIS MANUAL AND THE MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION OF SHINGLES, DRIP EDGE AND FELT.

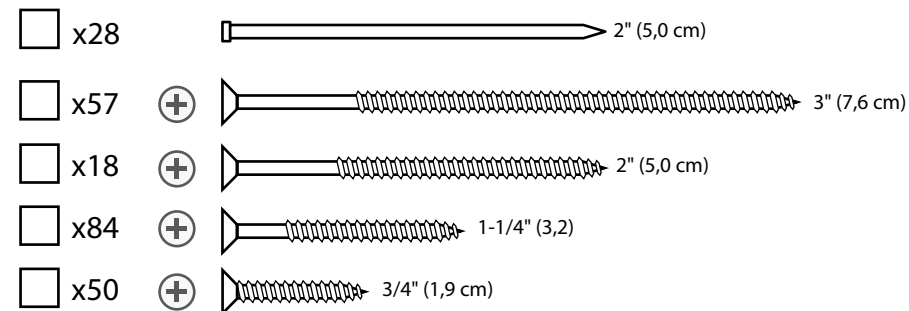
WALL PANEL & DOORS PARTS LIST



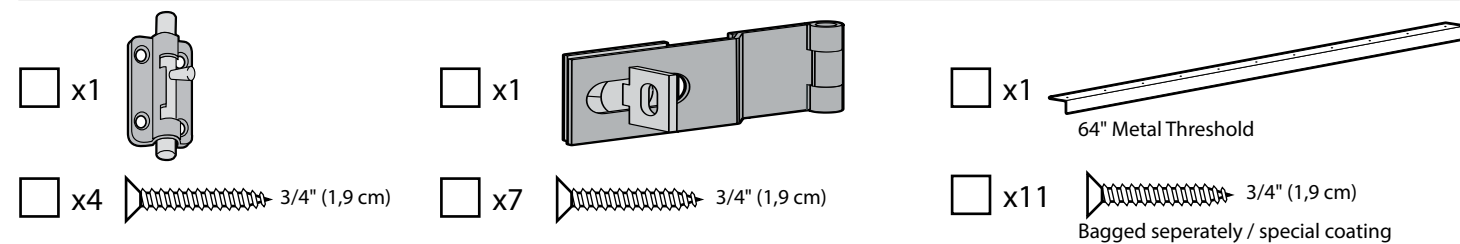
NAIL BOXES (Shown Actual Size)



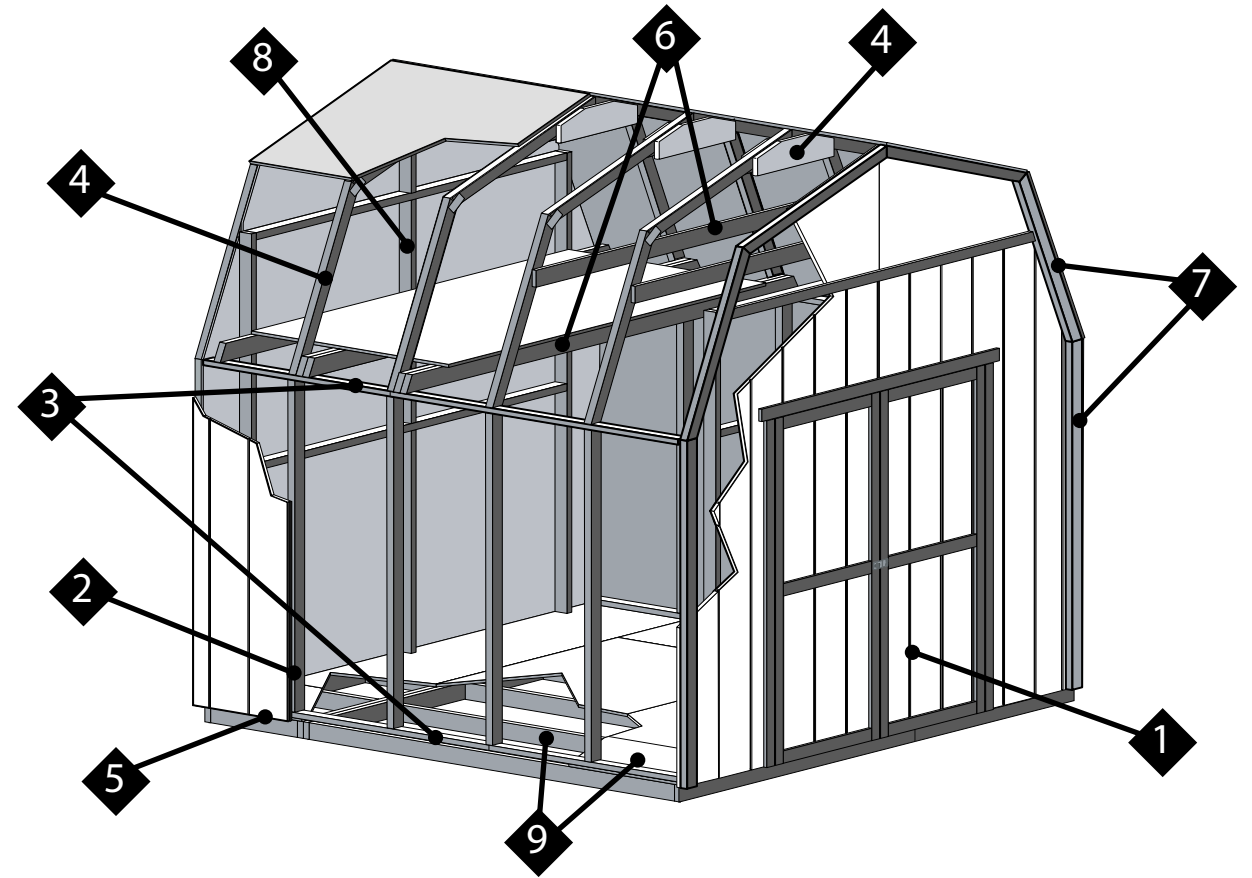
FASTENER/HARDWARE BAG (Shown Actual Size)



DOOR HARDWARE (Not Actual Size)



BUILDING ANATOMY



This building has been designed using our patented EZ Frame construction method. EZ Frame is a unique construction method which has been engineered to use fewer framing members. This reduces assembly time and cost by as much as 30% compared to conventional construction methods. EZ Frame patent no. 5,666,766

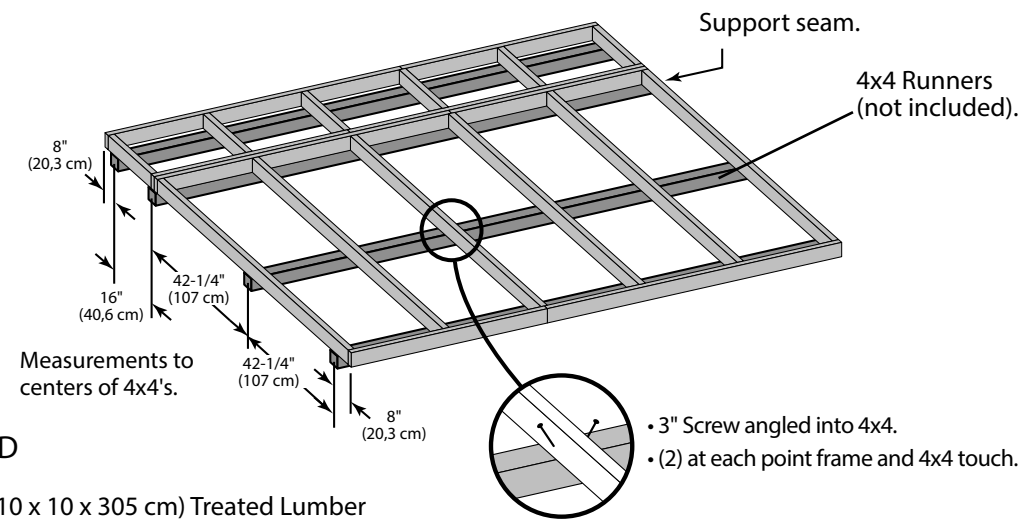
All of our buildings have been engineered to withstand demanding wind and snow loads. If you live in an area with extreme wind/snow load requirement, contact us and we can assist with engineering to meet your local codes.

- 1 Sub-assembled doors.
- 2 2x3 wall studs have been engineered to support roof load and to meet demanding wind loads.
- 3 Sidewall top and bottom plates tie wall studs together and provide nailing support for top and bottom edge of siding.
- 4 Rafters line up over wall studs to effectively transfer roof load to the floor and eliminate need for double top plate. Oversized wood gussets at peak provide a strong connection for rafter halves.
- 5 Treated siding overhangs the wall framing and floor to keep the elements out.
- 6 Collar ties and storage loft tie sidewalls together to prevent spreading under heavy roof loads.
- 7 Corner studs & end rafters are positioned to the outside of the siding where they serve the dual purpose of framing and trim.
- 8 The EZ Frame design transfers the roof load to the side walls allowing for reduced framing at the front and back wall.
- 9 Includes treated floor frame. Oriented Strand Board (OSB) floor deck not included.

FLOOR LEVELING OPTIONS

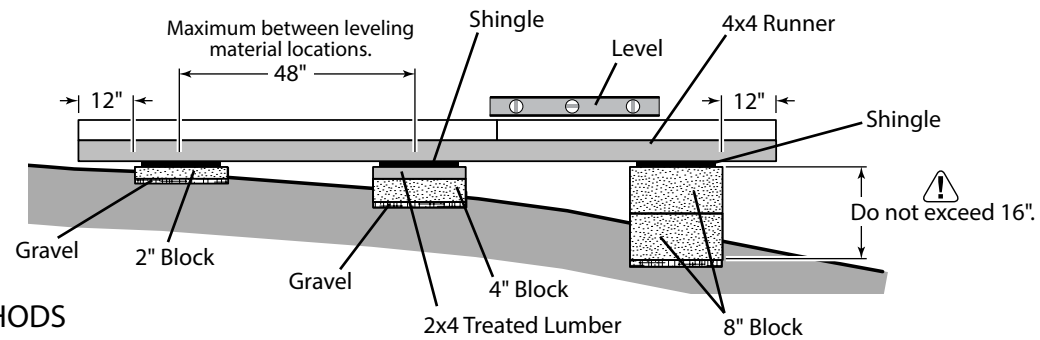
There are multiple ways to level your floor frame. Our recommended leveling method is shown below. Leveling materials are not included in this kit.

PREFERRED METHOD - 4x4 TREATED RUNNERS



MATERIAL REQUIRED

- x4 4" x 4" x 10' (10 x 10 x 305 cm) Treated Lumber
- Fasteners for Frame to 4" x 4" (3" Screws shown as one option.) Minimum (48) 3" screws / exterior grade.
- Use only wood treated for ground contact and fasteners approved for use with treated wood.
- Always support frame seams.



LEVELING METHODS

- Level under 4x4 runners only.
- Locate leveling material 12" from ends of runners and no more than 48" apart.
- Asphalt shingles should be used between 4x4 runners and blocks or treated lumber. Never use shingles in direct contact with ground.
- For best results and aiding in water drainage use gravel under each concrete block.

LEVELING MATERIALS

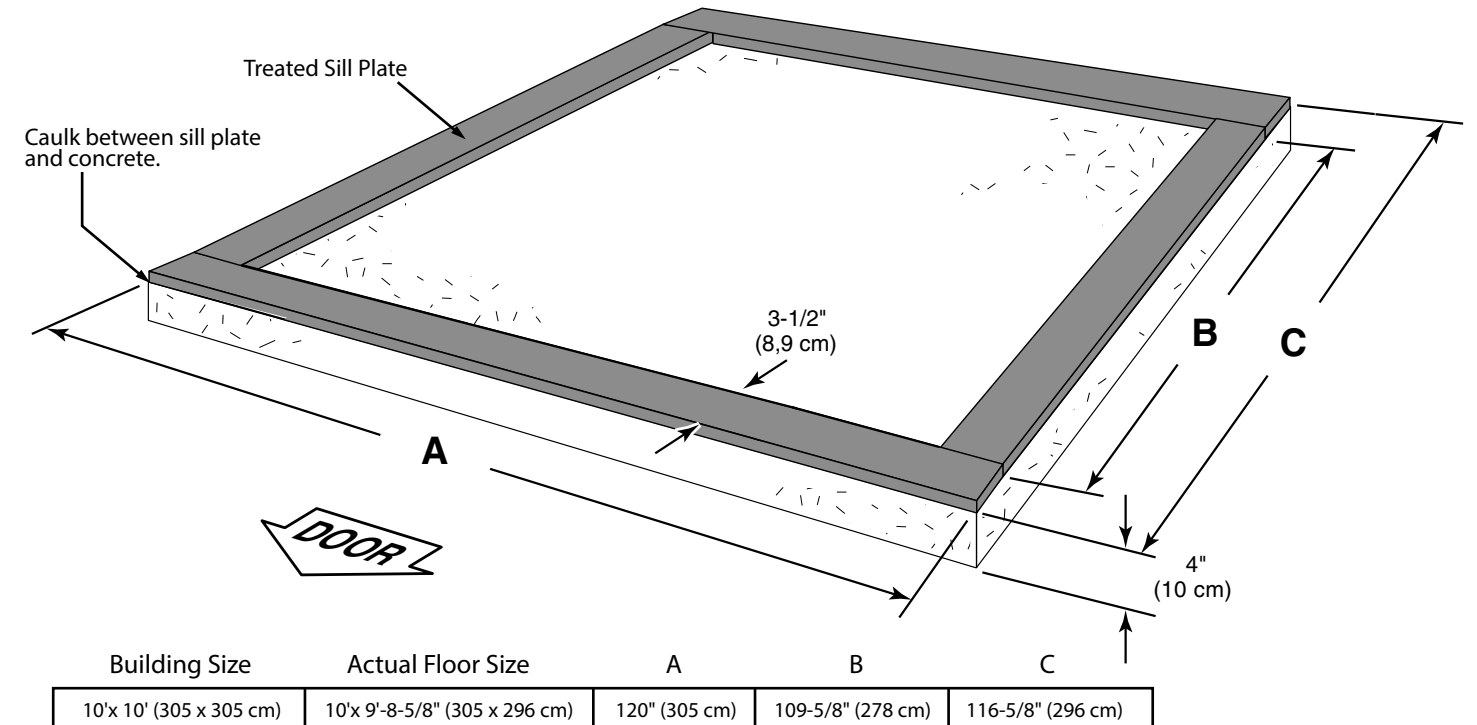
- Gravel
- Solid Masonry Blocks in 1", 2", 4" or 8" thickness
- 2x4 Treated Lumber
- Asphalt Shingles
- Leveling higher than 16" not recommended.

CONCRETE

- If you are building your shed on a concrete foundation see the following page.

CONCRETE FOUNDATION

Your kit contains all materials to construct a wooden floor. If you choose to install your kit on a concrete slab refer to the diagram below.



Requires:

- x4 2 x 4 x 10' (5 x 10 x 305 cm) MUST be treated lumber.
- x1 Caulk

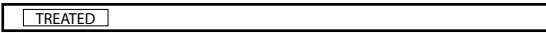
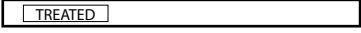

Allow new concrete slabs to cure for at least seven (7) days.

- A treated 2 x 4" (5 x 10 cm) sill plate is required when installing your shed on concrete. Hint: Use treated lumber in your kit or purchase full length treated lumber.
- Use a high quality exterior grade caulk beneath all sill plates.
- Fasten 2 x 4" (5 x 10 cm) sill plates to slab using approved concrete anchors (fasteners not included).
- Check local code for concrete foundation requirements.

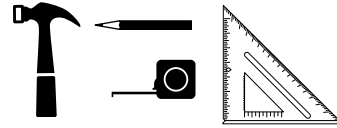
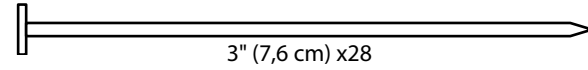
NOTES

FLOOR FRAME

PARTS REQUIRED:

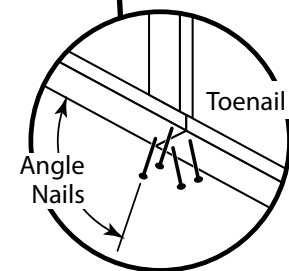
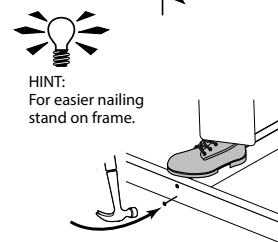
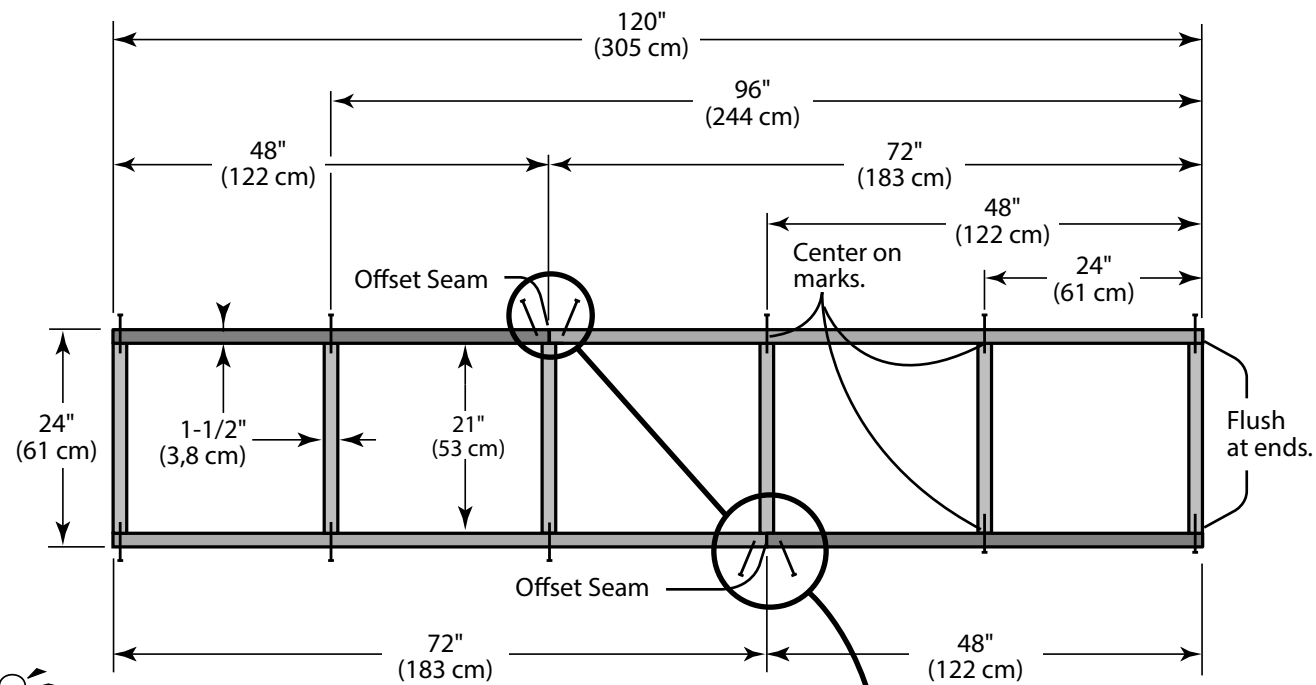
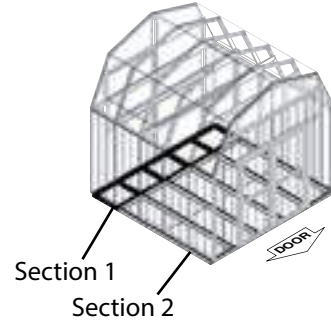
- x2  2 x 4 x 72" (5 x 10 x 183 cm)
- x2  2 x 4 x 48" (5 x 10 x 122 cm)
- x6  2 x 4 x 21" (5 x 10 x 53 cm)

NOTE: Look for **TREATED** p.




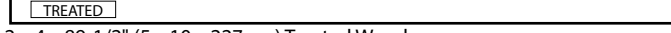

BEGIN ⚠ You will build two floor sections.

- 1 Orient parts as shown on fl at surface. Measure and mark each dimension from end of boards.
- 2 Use two 3" nails at each mark.

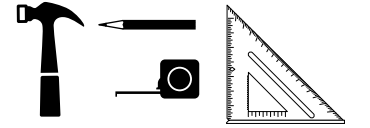
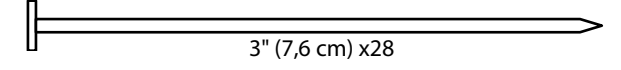


FLOOR FRAME

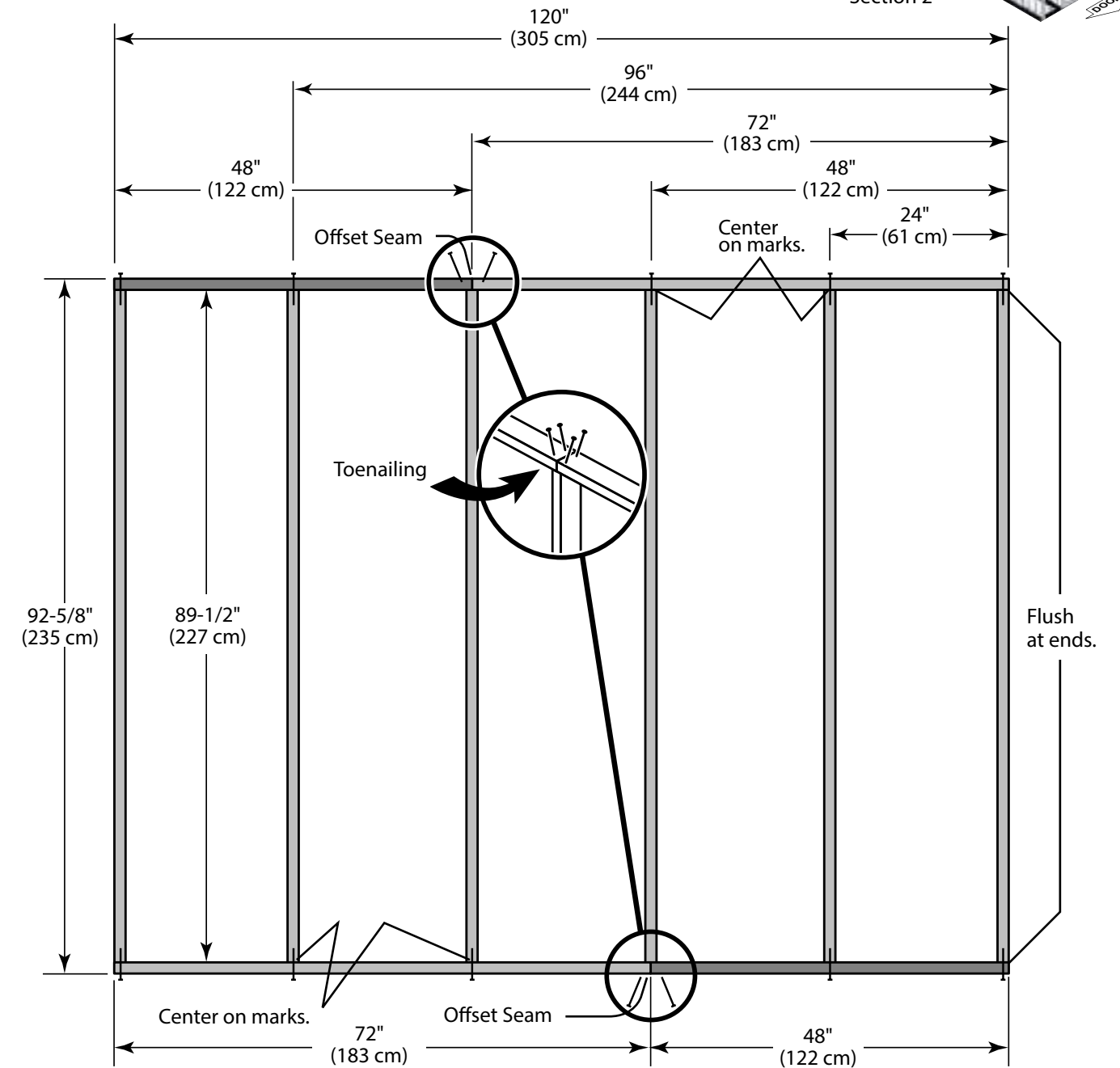
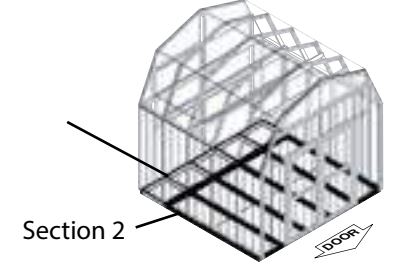
PARTS REQUIRED:

- x2  2 x 4 x 72" (5 x 10 x 183 cm) Treated Wood
- x6  2 x 4 x 89-1/2" (5 x 10 x 227 cm) Treated Wood
- x2  2 x 4 x 48" (5 x 10 x 122 cm) Treated Wood

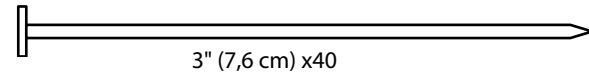
NOTE: Look for **TREATED** p.



- 3 Orient parts as shown on fl at surface. Measure and mark from end of boards.
- 4 Use two 3" nails at each mark.



FLOOR FRAME



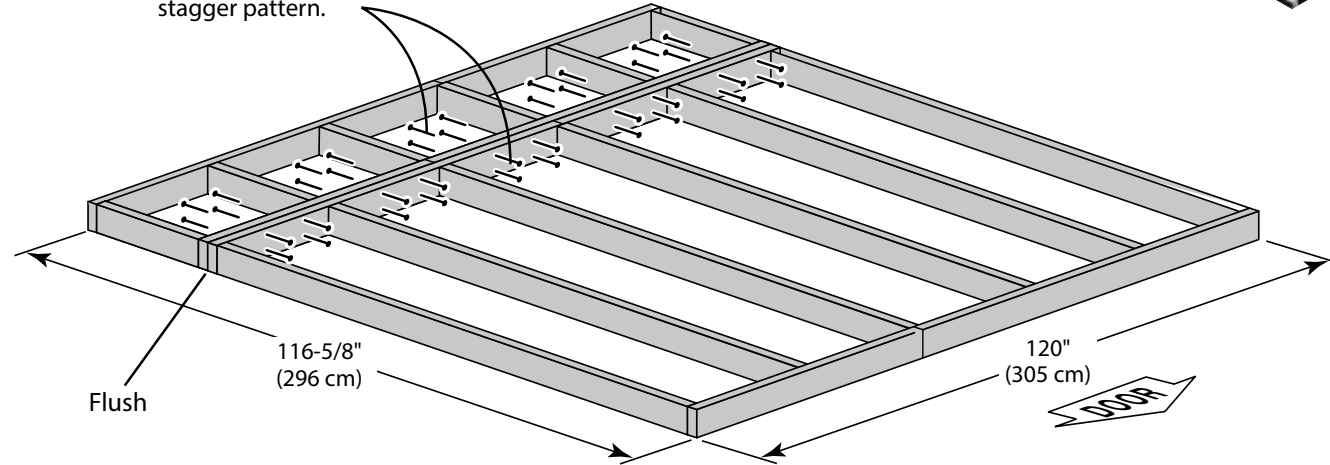
- 5** Put both floor sections together and attach as shown using 3" nails.



- 6** You have finished your floor frame. Proceed to level and square frame.



(4) Nails per side, stagger pattern.



STOP!



LEVEL AND SQUARE FLOOR FRAME



STOP!

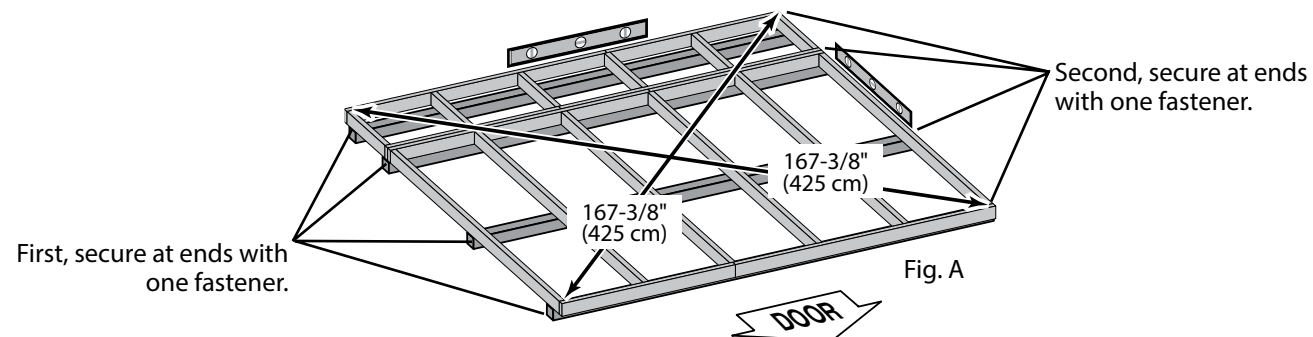
Before attaching floor decking, it is important to level and square the floor frame. A level and square floor frame is required to correctly construct your shed.

BEGIN

- 1 See page 8 for the preferred floor leveling method.
- 2 Use level and check the frame is level before applying floor panels.
- 3 Check for frame squareness by measuring diagonally across corners. If the measurements are the same, the frame is square. The diagonal measurement will be approximately 167-3/8" (425 cm).
- 4 When the frame is level and square secure one side of frame to the 4x4 runners using one fastener at ends of each runner. At the opposite end of the frame, secure the frame to 4x4 runners with one fastener at ends of each runner making sure the frame remains square (Fig. A).

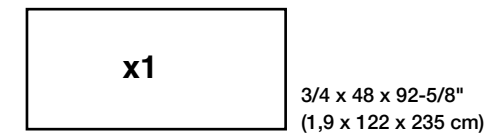


- 5** Once the floor frame is level and square fasten the frame at each point the frame contacts the 4x4 runners.

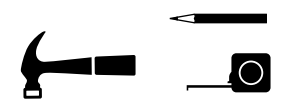
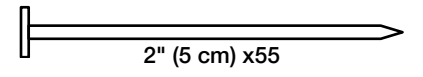


FLOOR PANELS (NOT INCLUDED)

PARTS REQUIRED:



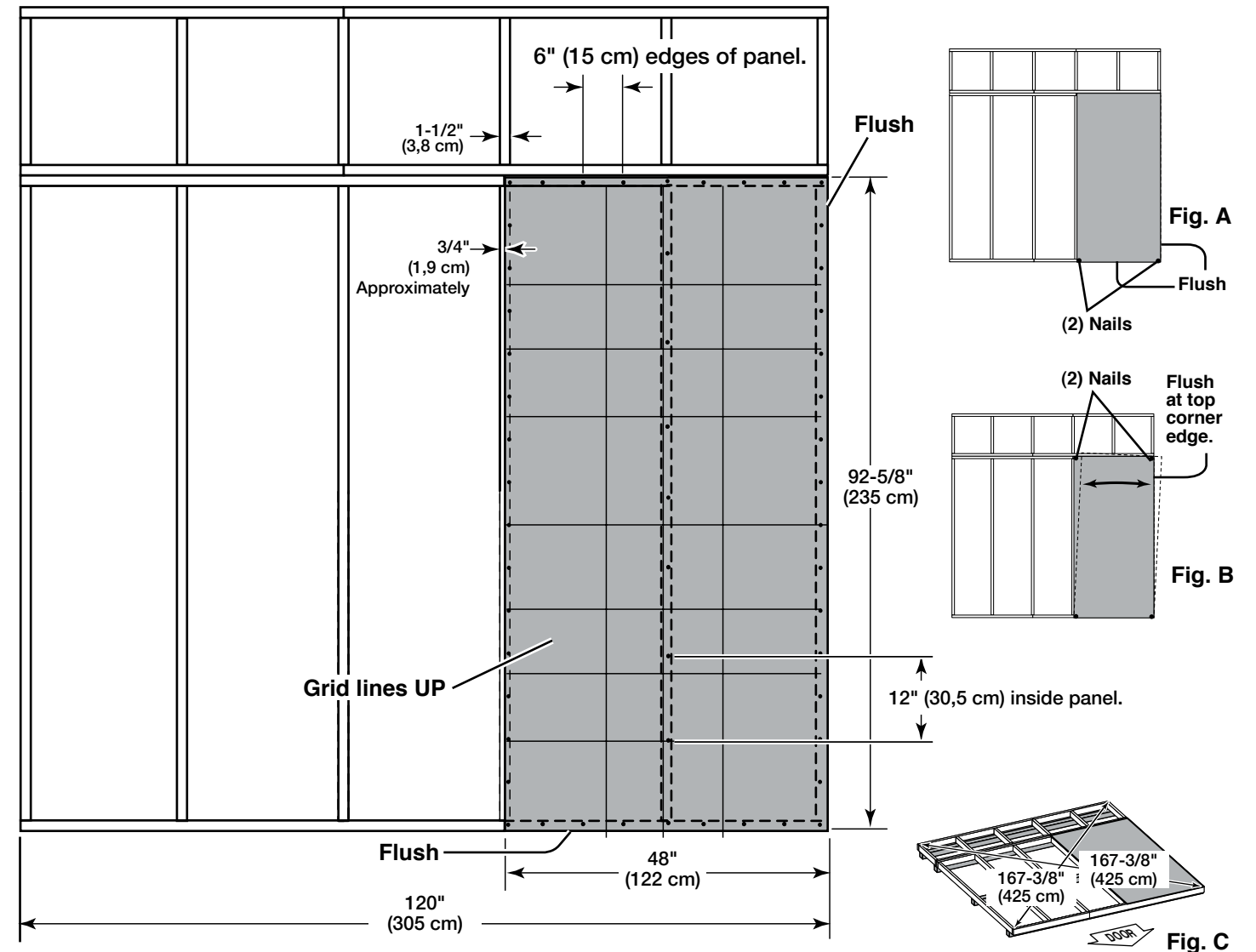
Warning!
Floor Panels not included
See page 3 for panel sizes
and quantities.



Warning! Ensure your floor frame is square by installing one panel and squaring frame.

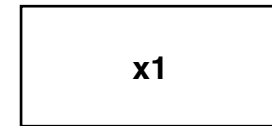
BEGIN

- 1 Attach the 3/4 x 48 x 92-5/8" panel with the rough side up (painted-grid lines side) with the 48" edge and corner flush to the floor frame (Fig. A). Secure panel with two 2" nails in the corners.
- 2 Move to the opposite end. Using the long edge of the panel as a lever move the panel side-to-side until the top corner is flush to the floor frame (Fig. B). Secure panel with two 2" nails in the corners.
- 3 Check the floor frame is square by measuring diagonally across the frame corners. If the measurements are the same your floor frame is square. The measurement will be approximately 167-3/8" (425 cm) (Fig. C).
- 4 Continue attaching the panel using 2" nails 6" apart on edges and 12" apart inside panel. Use a chalk line or use pre-painted grid lines to nail into joists under panel.

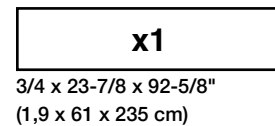


FLOOR PANELS (NOT INCLUDED)

PARTS REQUIRED:



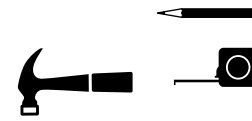
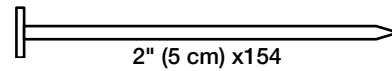
3/4 x 48 x 92-5/8"
(1,9 x 122 x 235 cm)



3/4 x 23-7/8 x 92-5/8"
(1,9 x 61 x 235 cm)

x1 3/4 x 23-7/8 x 23-7/8"
(1,9 x 61 x 61 cm)

x1 3/4 x 23-7/8 x 96"
(1,9 x 61 x 244 cm)

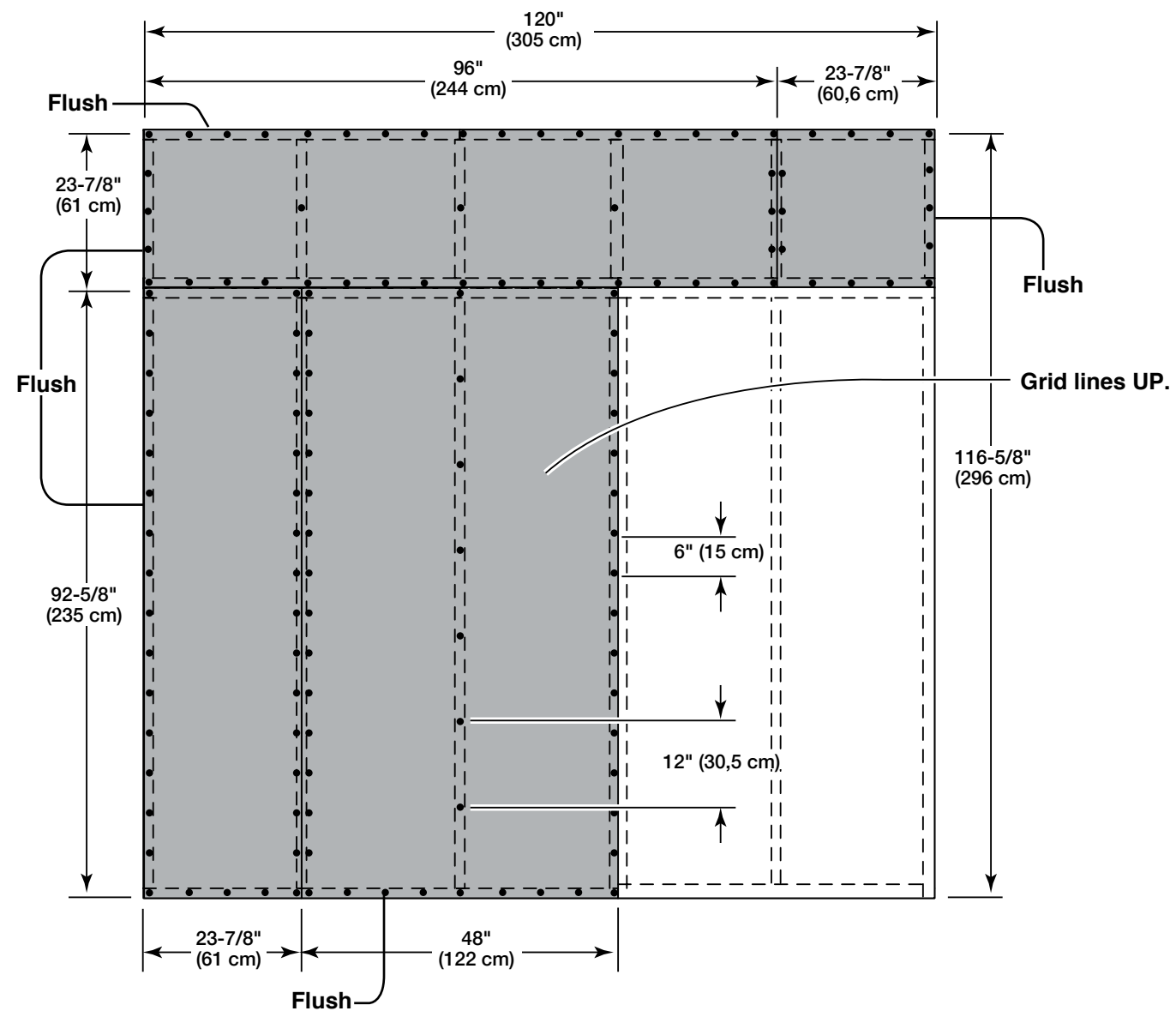


4 Continue installing panels with rough side up (painted grid lines).

5 Use a chalk line or grid lines on panels for 2" nails 6" apart on edges and 12" apart inside panel.



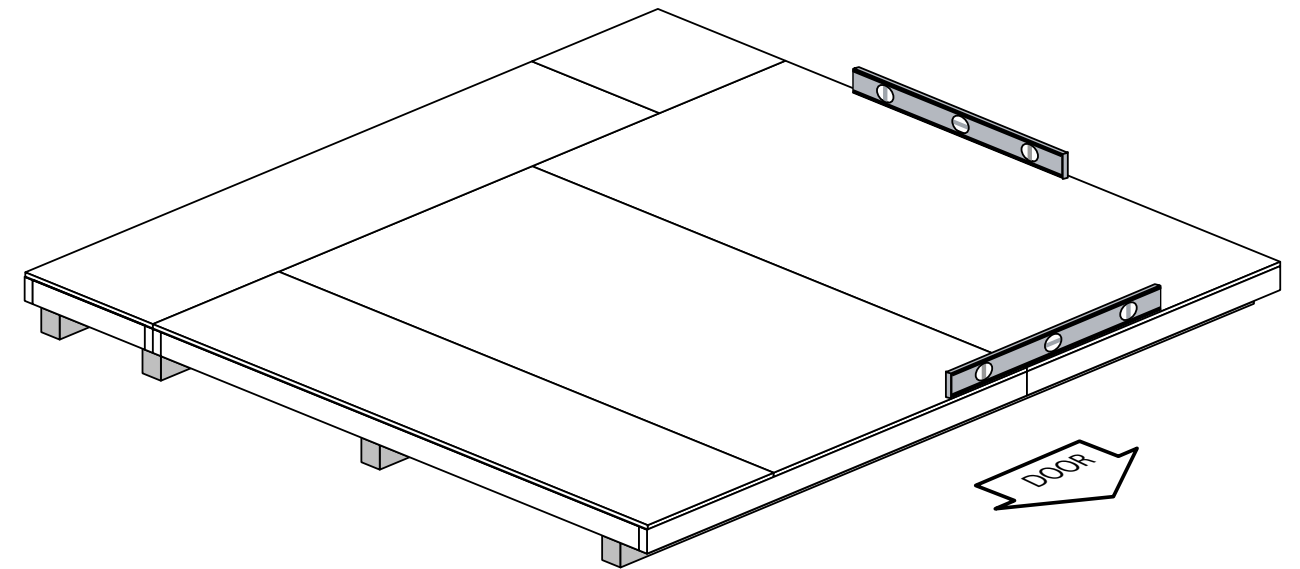
6 You have finished installing your floor panels.



! IMPORTANT!

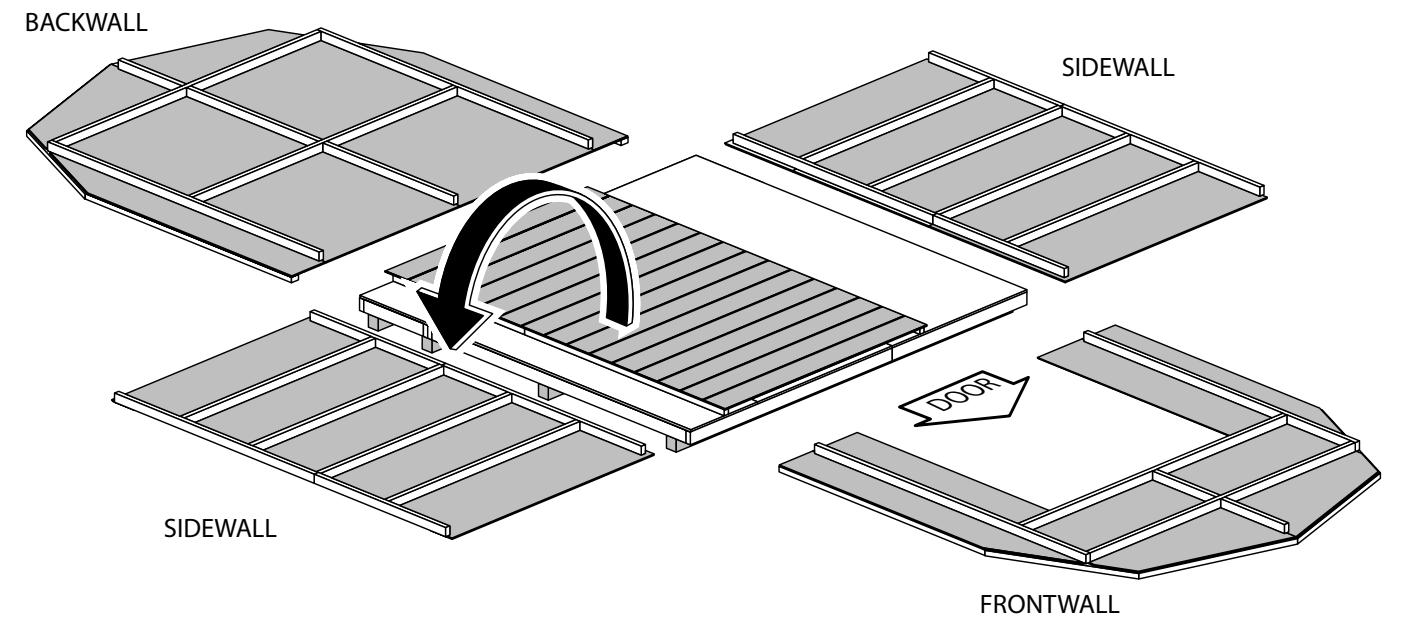


STOP! Check the floor frame is level after installing floor panels. Re-level if needed.



The floor should be used as a level work surface for wall construction.

HINT: Organize your wall sections during subassembly to avoid over-handling of the walls.



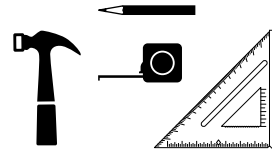
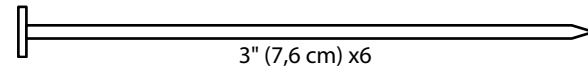
BACK WALL FRAME

PARTS REQUIRED:

x1 **NK**
2 x 3 x 48" (5 x 7,6 x 122 cm)

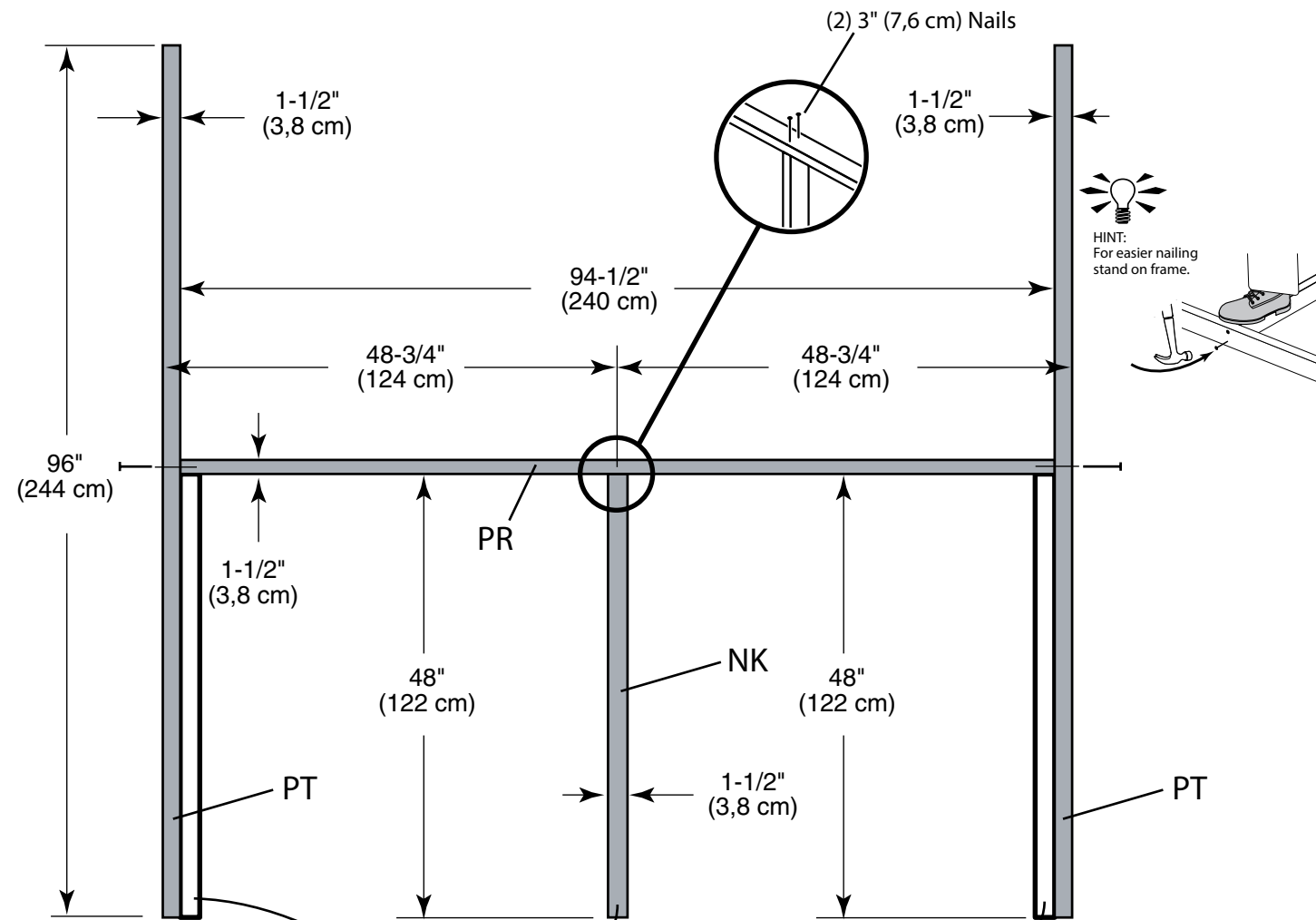
x1 **PR**
2 x 3 x 94-1/2" (5 x 7,6 x 240 cm)

x2 **PT**
2 x 3 x 96" (5 x 7,6 x 244 cm)



✓ BEGIN

- 1 Orient parts on edge on floor as shown.
- 2 Nail using two 3" nails at each connection.



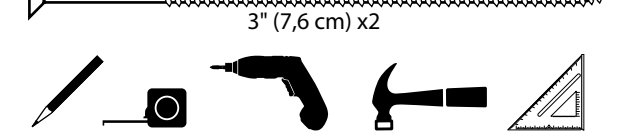
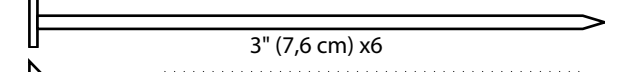
Use NK as a guide to locate PR. (Do not nail.)

BACK WALL FRAME

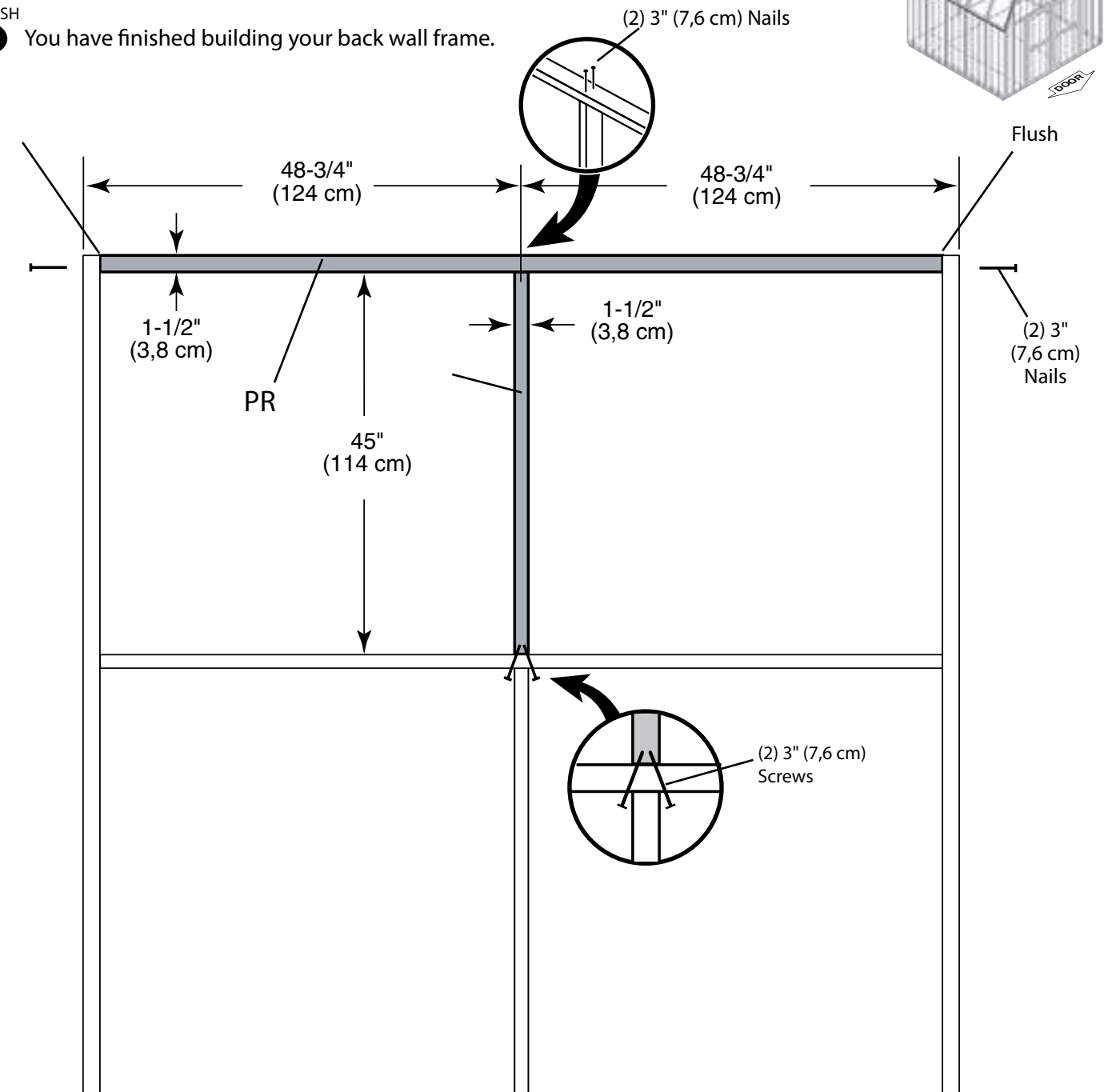
PARTS REQUIRED:

x1 **NC**
2 x 3 x 45" (5 x 7,6 x 114,3 cm)

x1 **PR**
2 x 3 x 94-1/2" (5 x 7,6 x 240 cm)

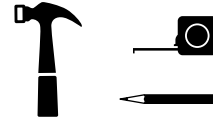
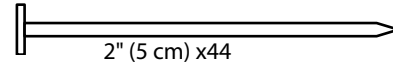


- 3 Orient parts on edge on floor as shown.
- 4 Nail using two 3" nails at each connection and two 3" screws at middle connection.
- 5 You have finished building your back wall frame.



BACK WALL PANELS

PARTS REQUIRED:

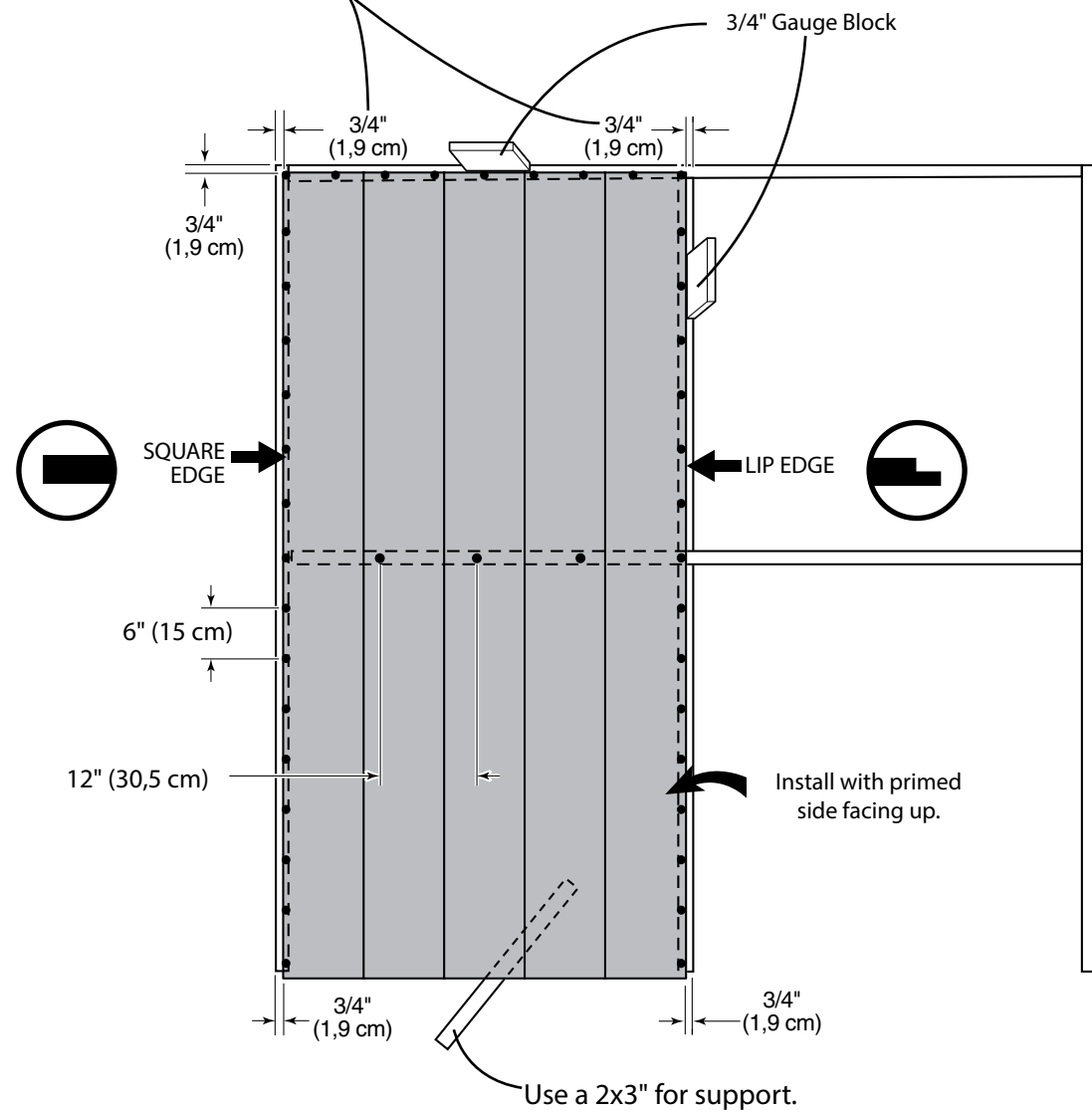


✓ BEGIN

- 1 Place panel on back frame as shown with primed side facing up. Note: Orient square and lip edges as shown.
- 2 Use a 3/4" gauge block at edges of panel.
- 3 Nail using 2" nails 6" apart on edges and 12" apart inside panel.

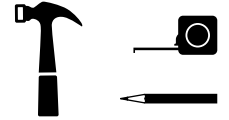
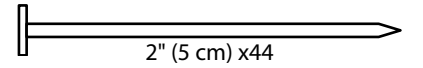


For squareness maintain 3/4" measurement along panel edges.

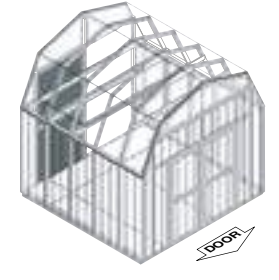
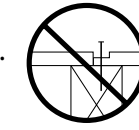


BACK WALL PANELS

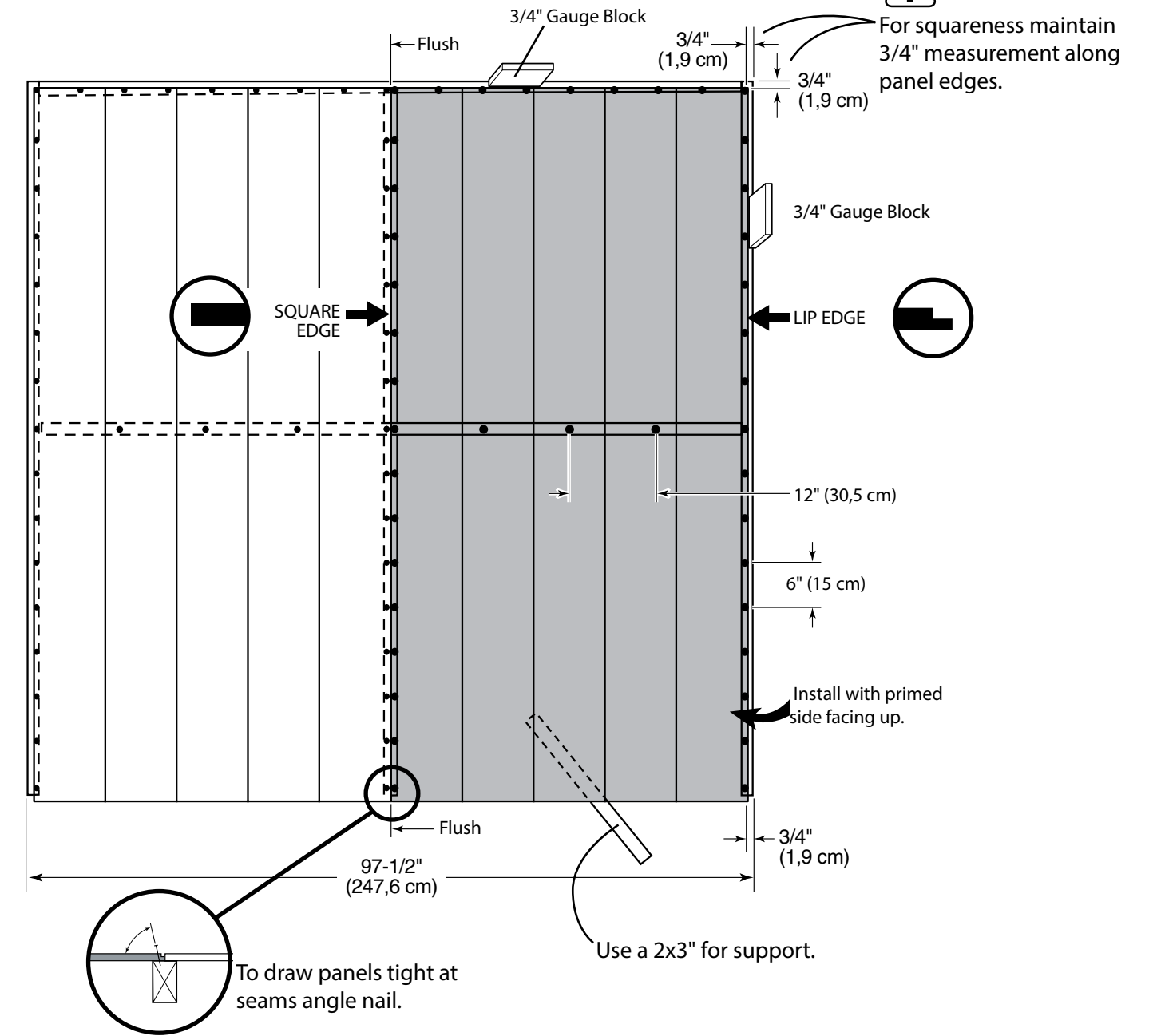
PARTS REQUIRED:



- 4 Place panel on back frame as shown with primed side facing up. Note: Orient square and lip edges as shown.
- 5 Use a 3/4" gauge block at edges of panel.
- 6 Nail using 2" nails 6" apart on edges and 12" apart inside panel.
- 7 Proceed to building your wing wall panels.



For squareness maintain 3/4" measurement along panel edges.

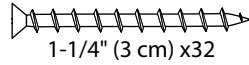


WING WALL PANELS

PARTS REQUIRED:

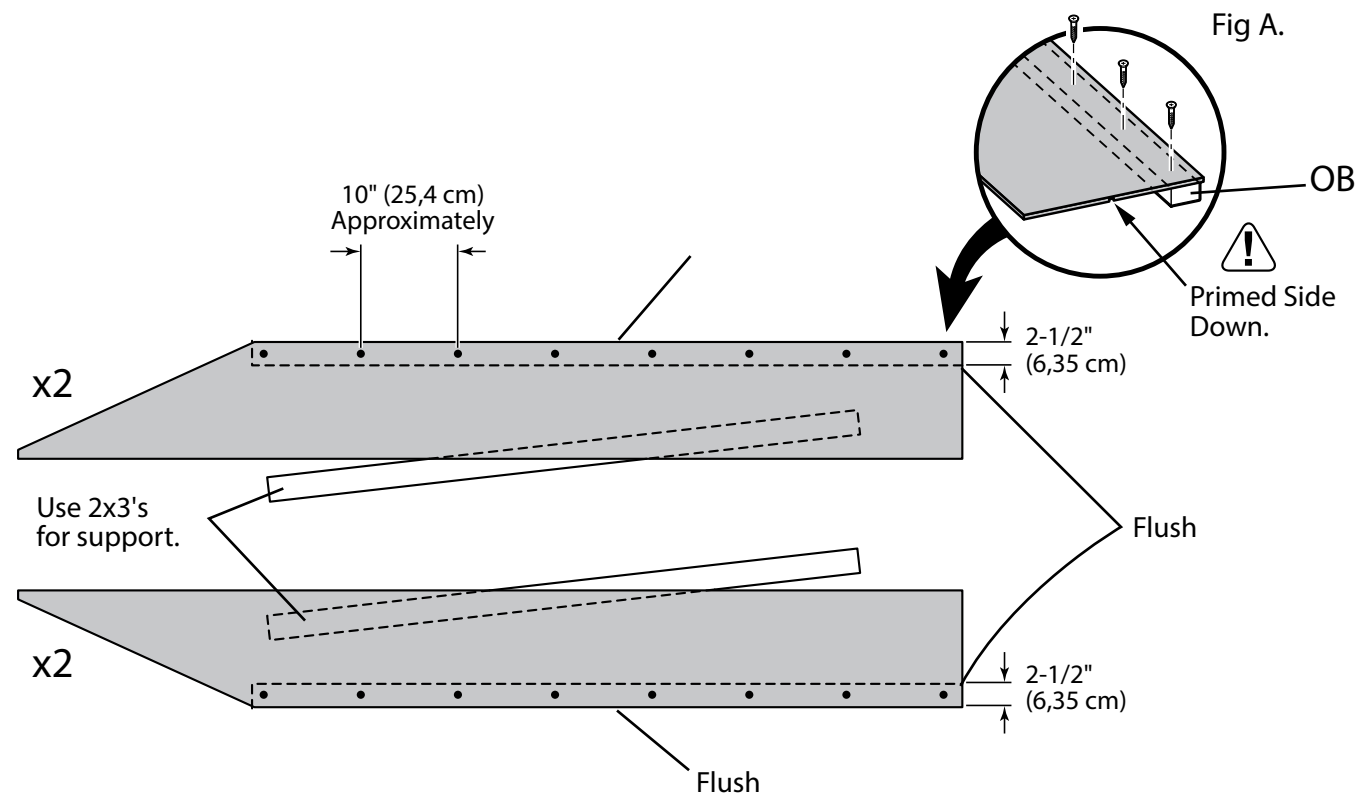
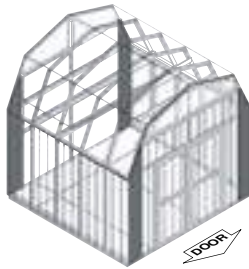
- x2 LEFT
- x2 RIGHT

- x4 OB
2 x 3 x 72-5/8" (5 x 7,6 x 184,5 cm)



✓ BEGIN

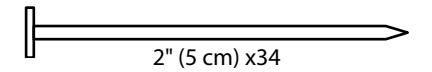
- 1 You will assemble TWO RIGHT and TWO LEFT wing walls.
- 2 Place OB on floor. Place a wing wall panel primed side down onto OB (Fig.A).
- 3 Secure flush to edges using eight 1-1/4 screws 10" apart.
- 4 You have finished building two sets of wing wall assemblies. Set and aside. Continue building your back wall.



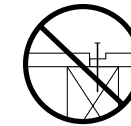
BACK WALL

PARTS REQUIRED:

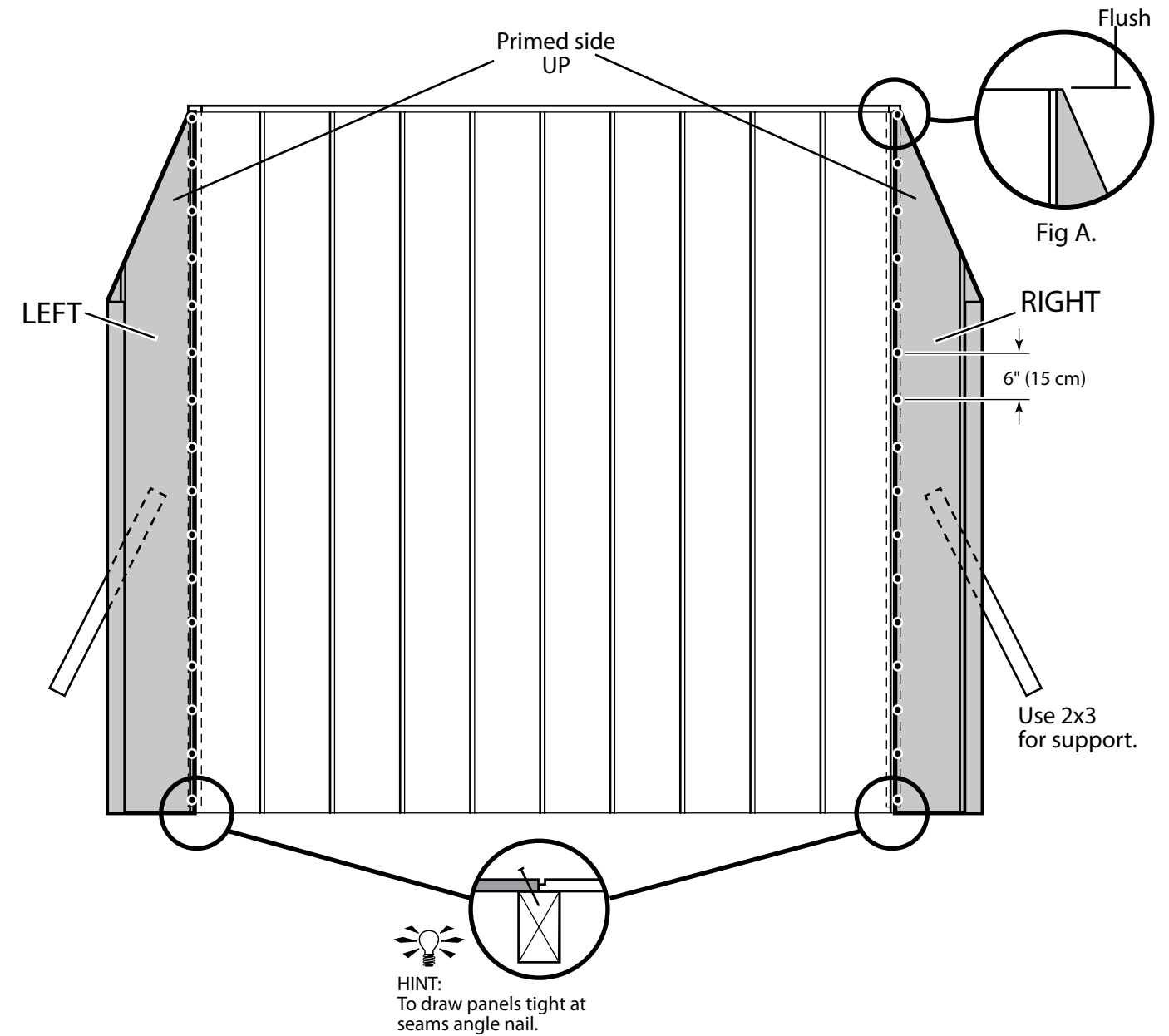
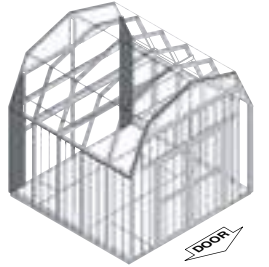
- x1 LEFT Pre-assembled
- x1 RIGHT Pre-assembled



- 5 Place wing wall assemblies onto frame with top of panels flush (Fig.A).
- 6 Nail left and right wing wall assemblies onto back wall frame using 2" nails 6" apart. Do not nail in groove.
- 7 You have finished attaching your wing walls.



Do not nail in groove.



BACK GABLE PANELS AND TRIM

PARTS REQUIRED:

x4 PD 2 x 3 x 45-1/8" (5 x 7,6 x 115 cm)

1-1/4" (3 cm) x24

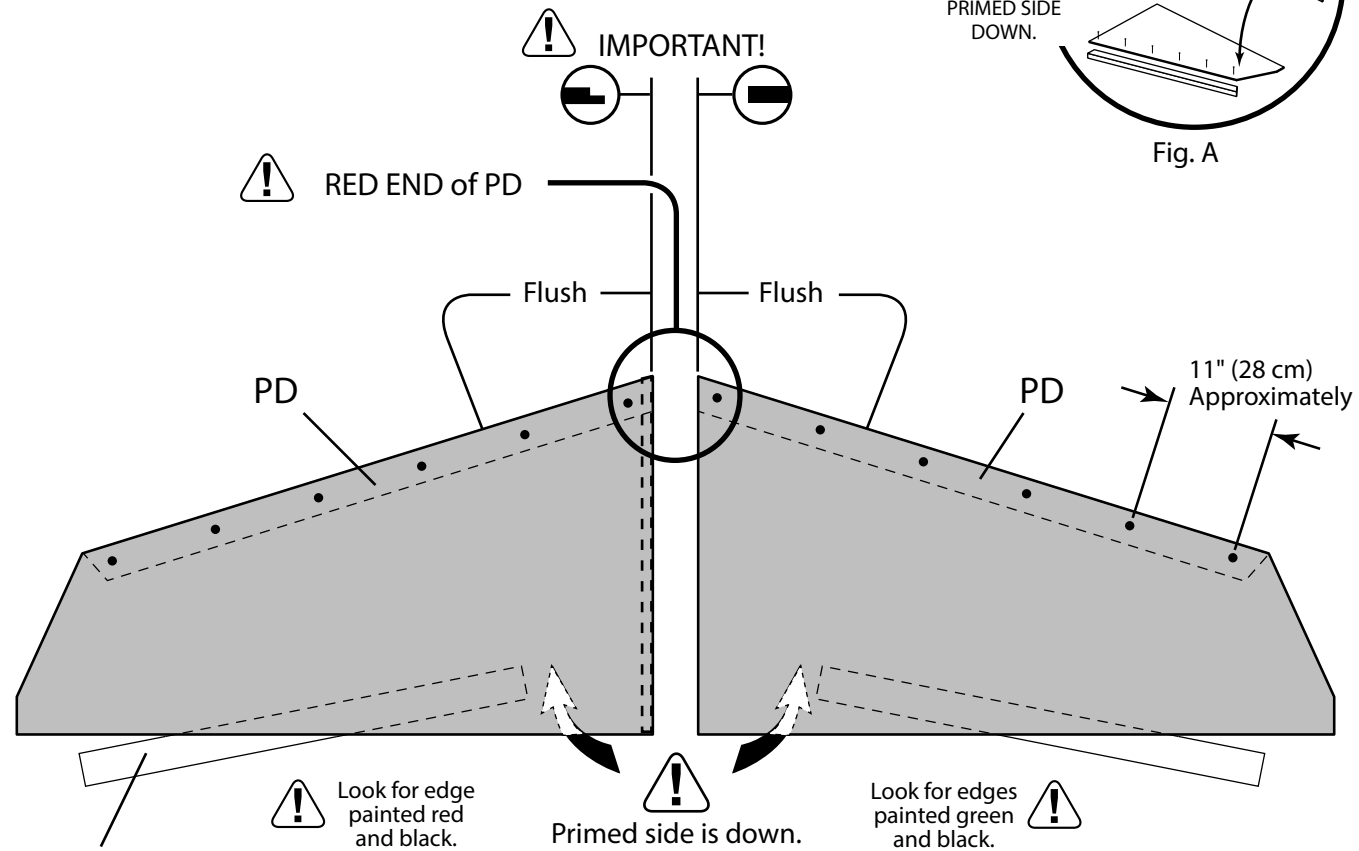
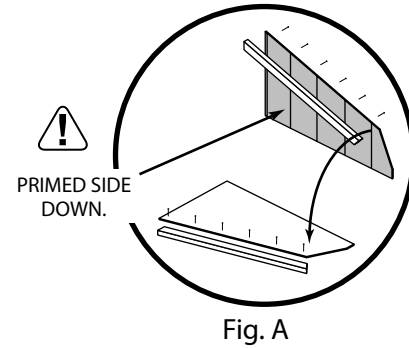
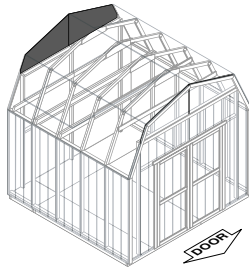


BEGIN

- 1 You will be attaching trim PD from the backside of the gable panels (Fig. A). You will assemble a RIGHT and a LEFT assembly.
- 2 Place trim PD on floor. Rent red ends as shown.
- 3 Place a left or right gable panel onto trim primed side down (Fig.A). Verify the square and lip edges.
- 4 Locate trim PD flush to edges and secure with six 1-1/4" screws 11" apart.

FINISH

- 5 You have finished building the back gable panel assemblies. Continue building your backwall.



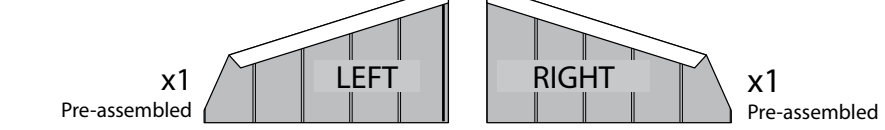
BACK WALL GABLE PANELS

PARTS REQUIRED:

x1 CO 2 x 3 x 25" (5 x 7,6 x 63,5 cm)

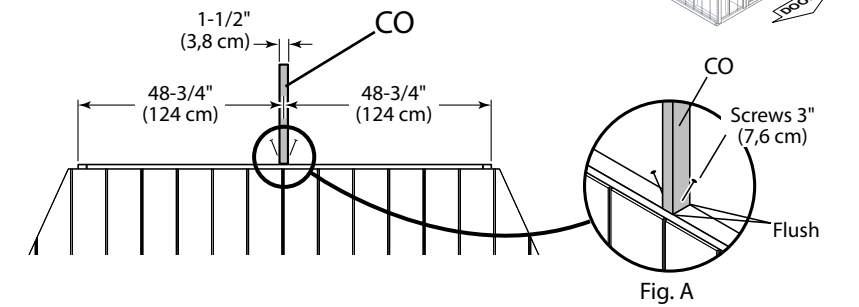
2" (5 cm) x24

3" (7,6 cm) x2

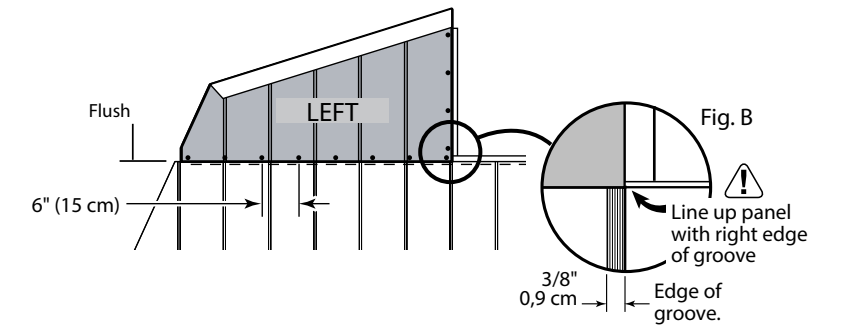


BEGIN

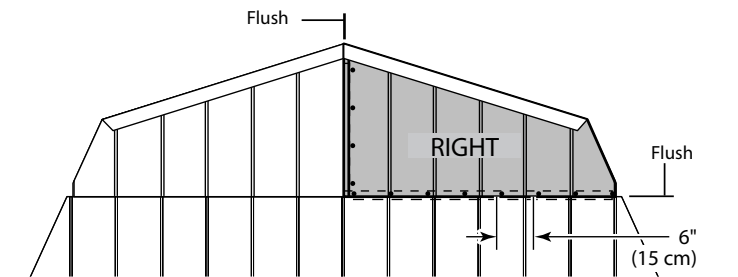
- 1 Center CO on edge onto wall frame and secure using two 3" screws (Fig. A).



- 2 Place the left gable panel onto wall frame primed side up and onto CO. Make sure edge of panel lines up with right edge of groove (Fig B). Nail with 2" nails 6" apart.

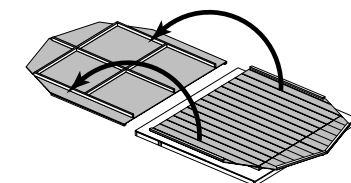


- 3 Place right gable panel onto wall frame primed side up and onto CO and flush to left gable panel. Nail with 2" nails 6" apart.



FINISH

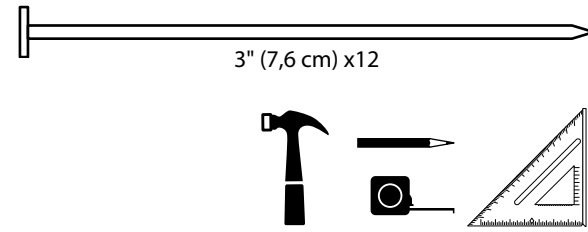
- 4 You have finished building your backwall. Carefully flip the back wall off the floor.



FRONT WALL FRAME

PARTS REQUIRED:

- x1 **LV**
2 x 3 x 22-1/2" (5 x 7,6 x 57 cm)
- x2 **PR**
2 x 3 x 94-1/2" (5 x 7,6 x 240 cm)
- x2 **PT**
2 x 3 x 96" (5 x 7,6 x 244 cm)



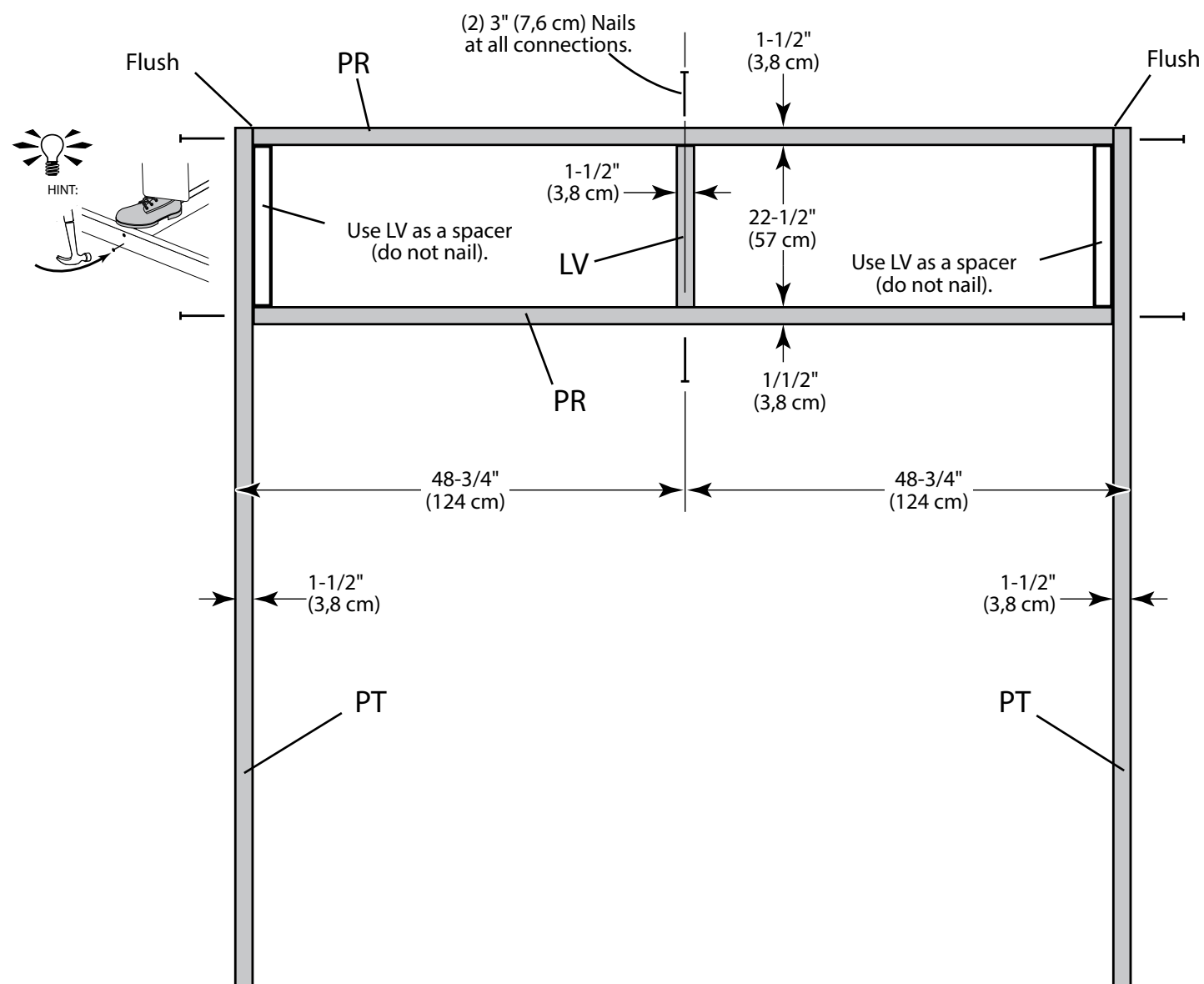
BEGIN

- 1 Lay out two PR, two PT and one LV on edge on floor.
- 2 Nail upper PR first, then place lower PR against LV and nail PR in place with two 3" nails at each end.
- 3 Ensure LV is centered with PR and nail in place with four 3" nails.



FINISH

- 4 You have finished building your Front Wall Frame.



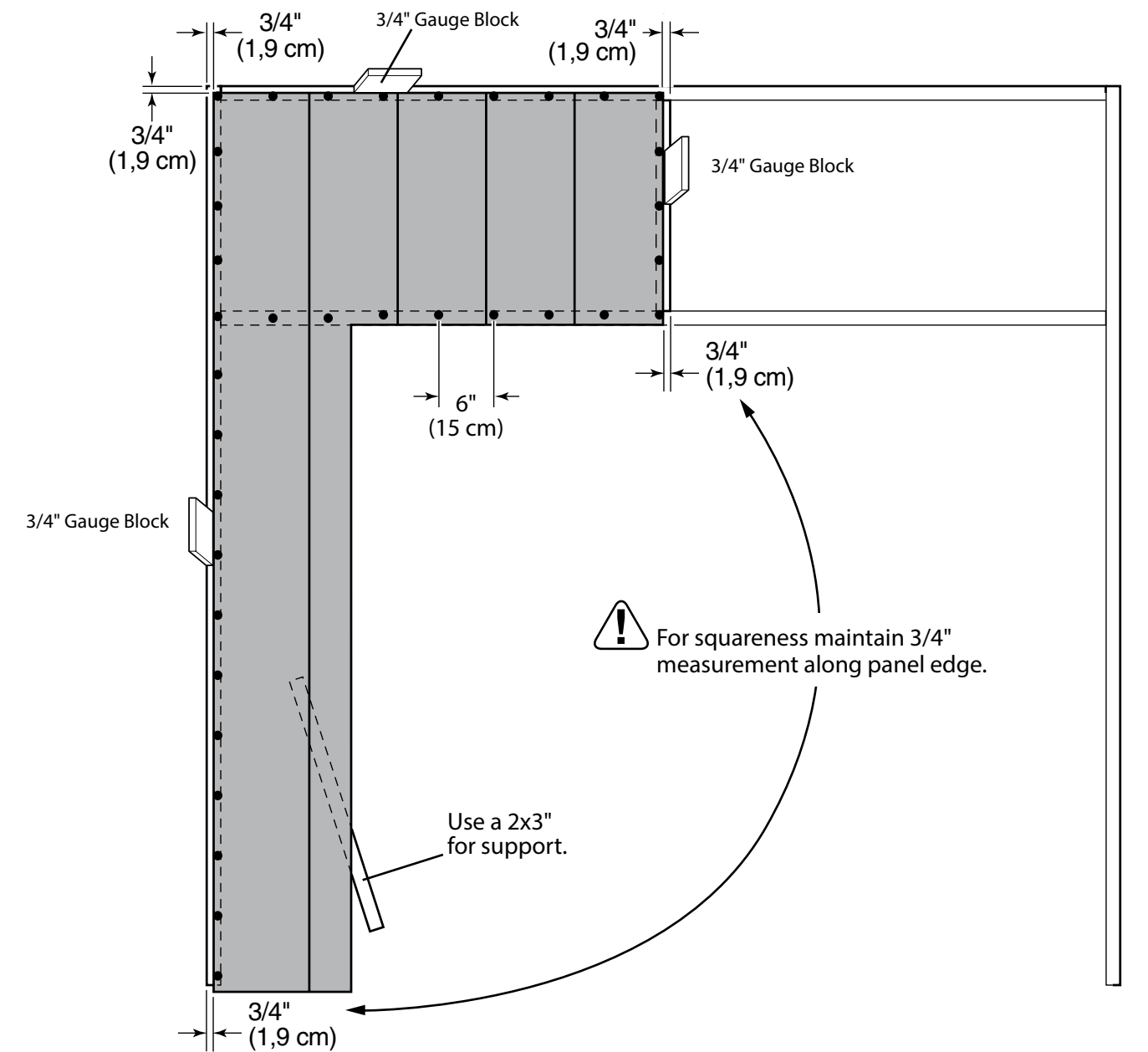
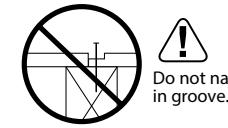
FRONT WALL PANELS

PARTS REQUIRED:

- x1 **LEFT**
- 3/4" GAUGE BLOCK**
- 2" (5 cm) x 36

BEGIN

- 1 Place LEFT panel on front frame as shown with primed side facing up.
- 2 Use a 3/4" gauge block on edges of panel.
- 3 Nail panel to frame with 2" nails 6" apart.

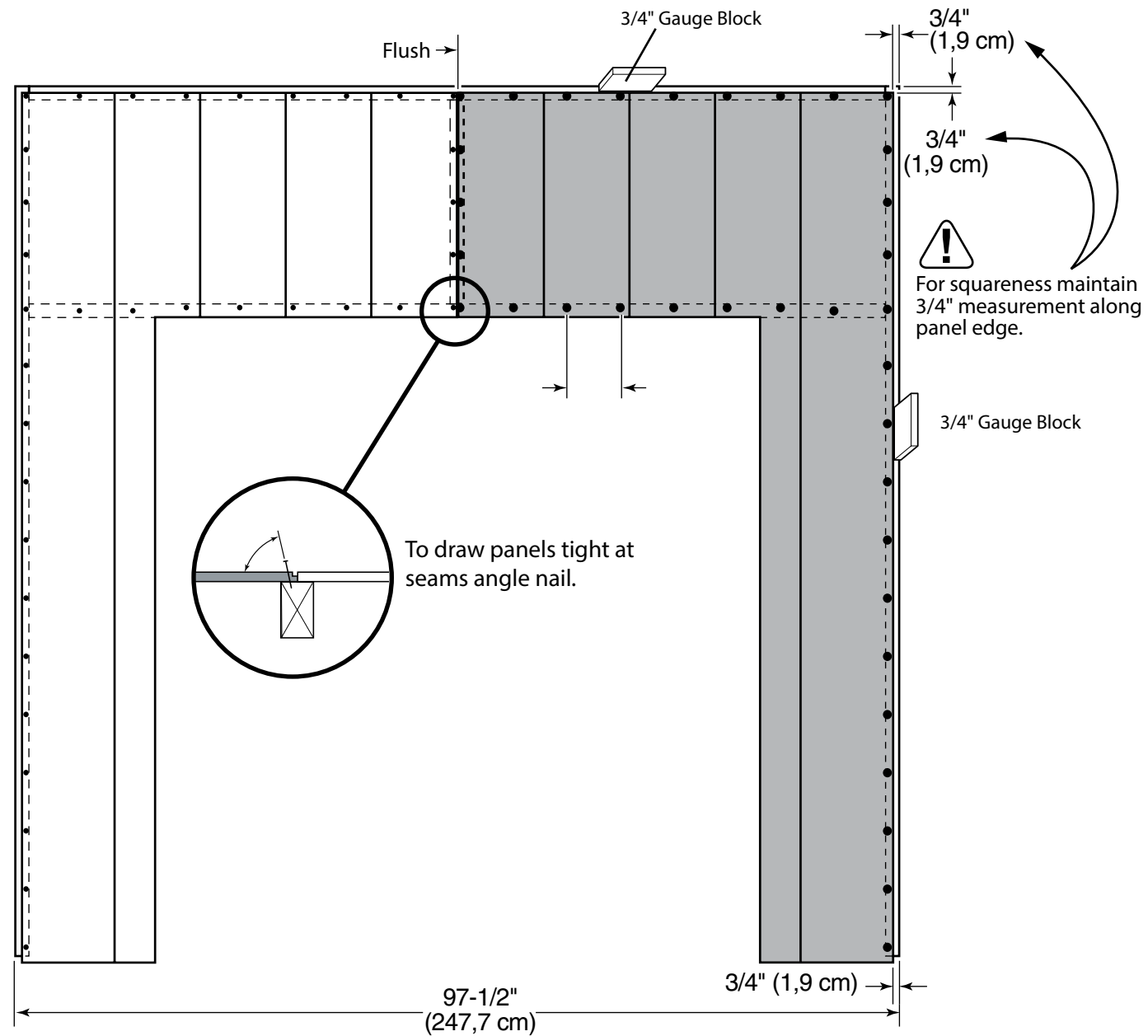


FRONT WALL PANELS

PARTS REQUIRED:



- 3 Place RIGHT panel on front frame.
- 4 Use a 3/4" gauge block on edges of panel.
- 5 Nail panel to frame with 2" nails 6" apart.

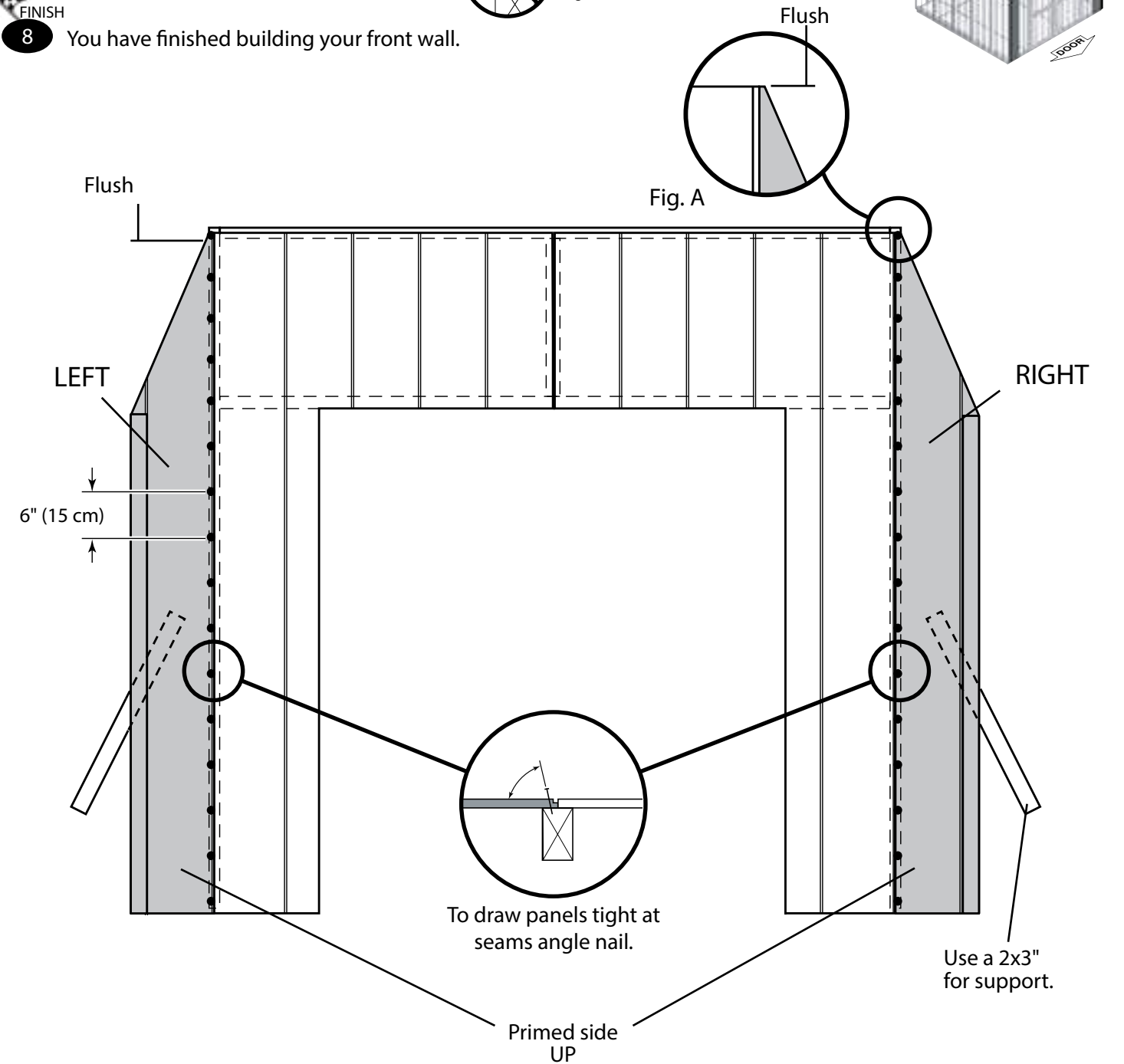
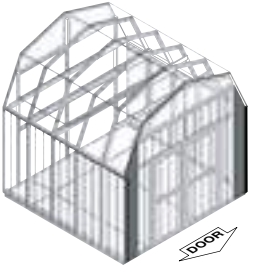
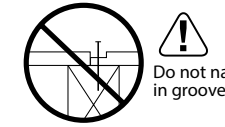


FRONT WALL PANELS

PARTS REQUIRED:



- 6 Place wing wall panels onto frame with top of panels (Fig. A).
- 7 Nail left and right wing wall assemblies using 2" nails 6" apart.
- 8 You have finished building your front wall.



FRONT GABLE PANELS AND TRIM

PARTS REQUIRED:

x4 PD 2 x 3 x 45-1/8" (5 x 7,6 x 115 cm)

1-1/4" (3 cm) x24

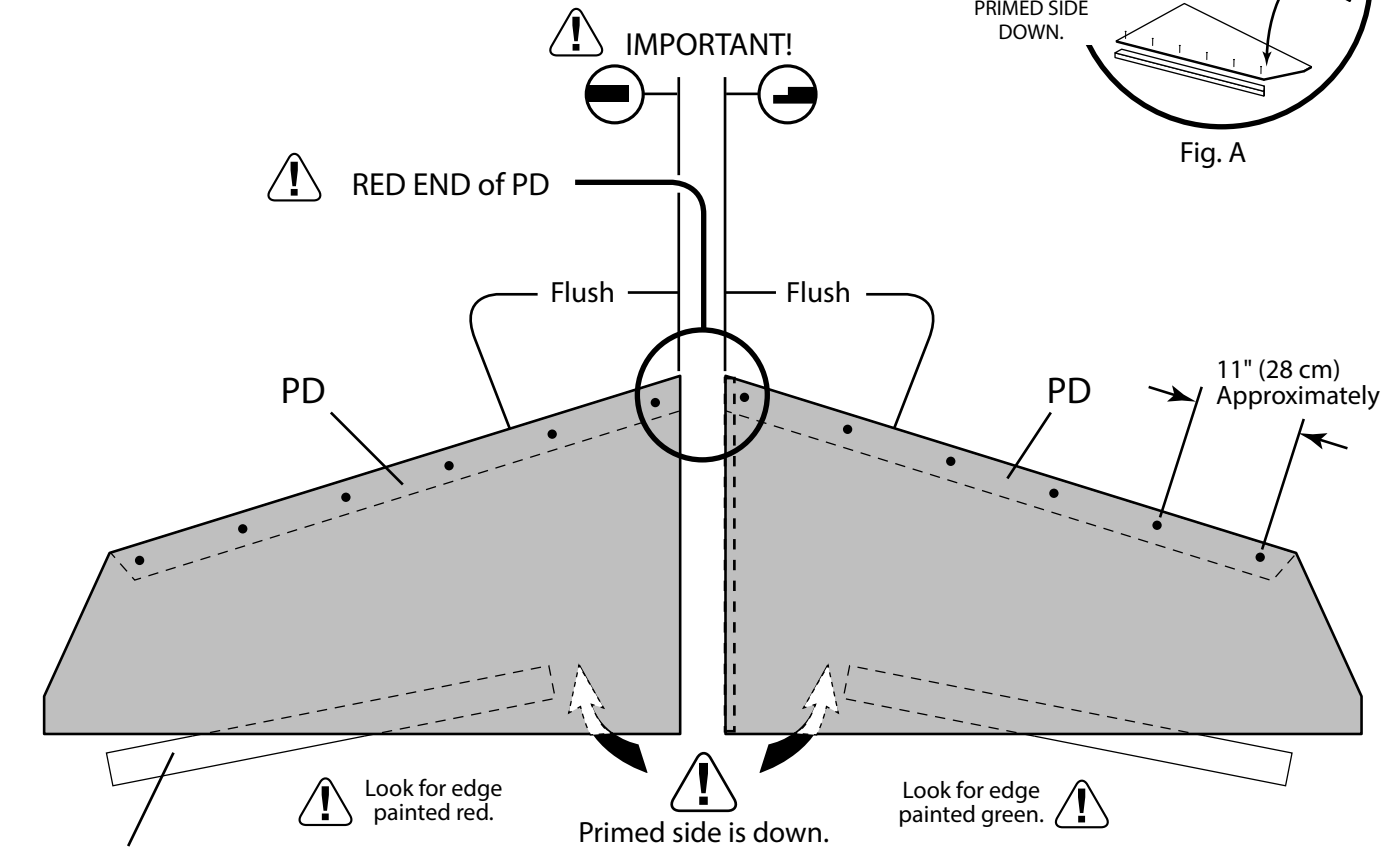
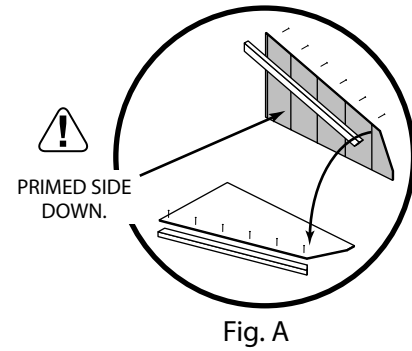
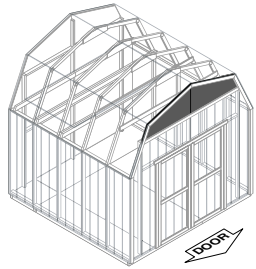


✓ BEGIN

- 1 You will be attaching trim PD from the backside of the gable panels (Fig. A). You will assemble a RIGHT and a LEFT assembly.
- 2 Place trim PD on floor. Orient red ends as shown.
- 3 Place a left or right gable panel onto trim primed side down (Fig.A). Verify the square and lip edges.
- 4 Locate trim PD flush to edges and secure with six 1-1/4" screws 11" apart.

FINISH

- 5 You have finished building the front gable panel assemblies. Continue building your frontwall.



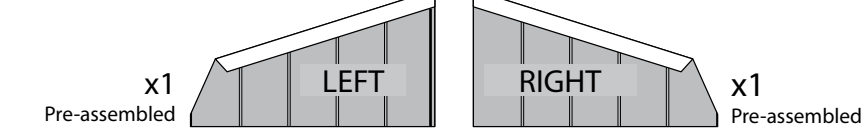
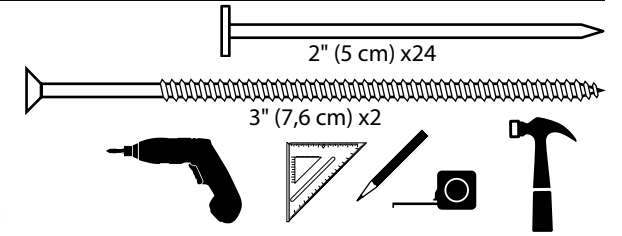
Use a 2x3 on flat for support.

FRONT WALL GABLE PANELS

PARTS REQUIRED:

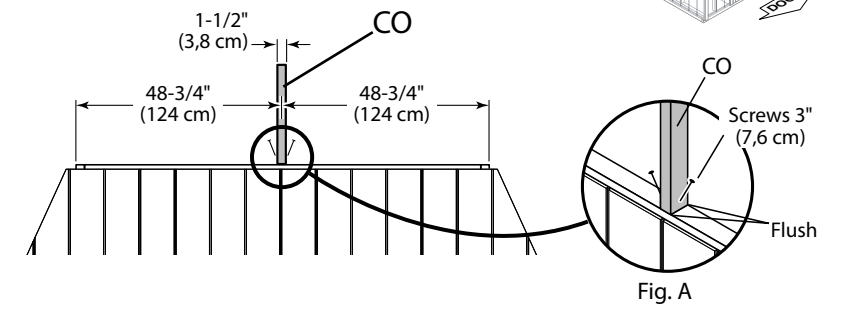
x1 CO 2 x 3 x 25" (5 x 7,6 x 63,5 cm)

2" (5 cm) x24



✓ BEGIN

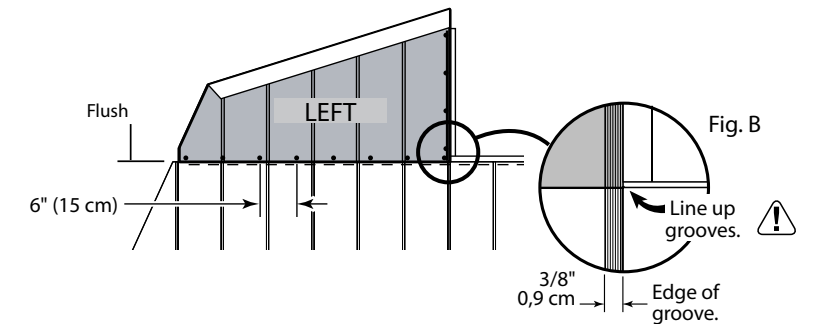
- 1 Center CO on edge onto wall frame and secure using two 3" screws (Fig. A).



- 2 Place the left gable panel onto wall frame primed side up and onto CO.

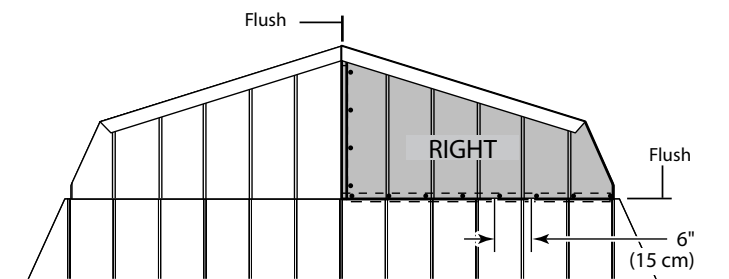
Make sure lip of panel lines up with groove of panel below (Fig B).

Nail with 2" nails 6" apart.



- 3 Place right gable panel onto wall frame primed side up and onto CO and flush to left gable panel.

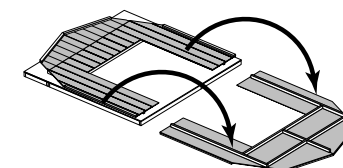
Nail with 2" nails 6" apart.



FINISH

- 4 You have finished building your frontwall.

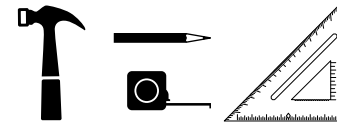
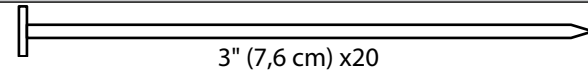
Carefully flip the frontwall off the floor.



SIDE WALL FRAMES

PARTS REQUIRED:

- x4 **NH**
2" x 3" x 46-1/4" (5 x 7,6 x 117 cm)
- x8 **OU**
2" x 3" x 68-3/4" (5 x 7,6 x 174,6 cm)
- x4 **OZ**
2" x 3" x 70-1/4" (5 x 7,6 x 178 cm)



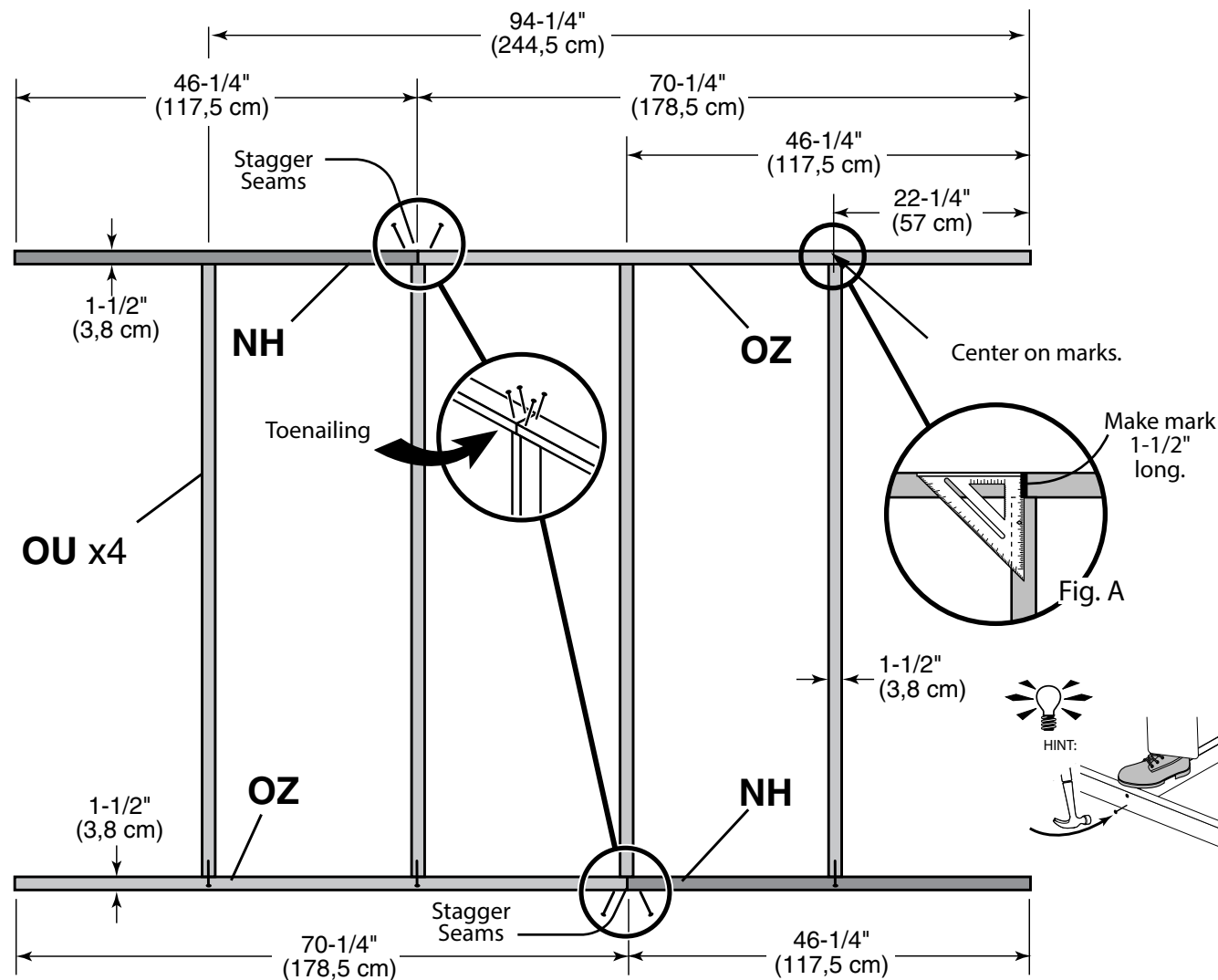
BEGIN

1 Orient parts on edge on floor. Measure and mark from end of boards. Make marks 1-1/2" long. They will be used later (FIG. A).

IMPORTANT! You will build two walls the same.

2 Use two 3" nails at each mark.

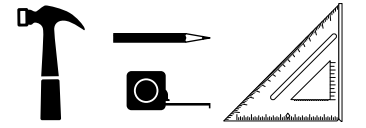
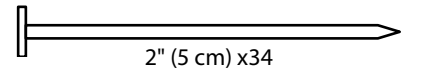
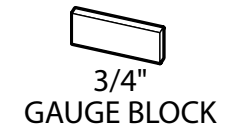
3 You have finished building one side wall frame. Proceed to attach wall panels.



SIDE WALL PANELS

PARTS REQUIRED:

- x2 **3/8 x 48 x 72"**
(1 x 122 x 183 cm)



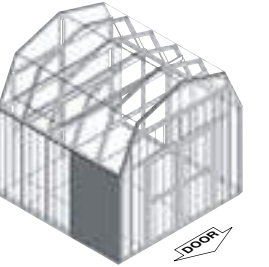
4 Ensure your wall frame is square by installing one panel and squaring frame.

4 Place the 48 x 72" panel onto wall frame with primed side up as shown. Note the lip and square edges.

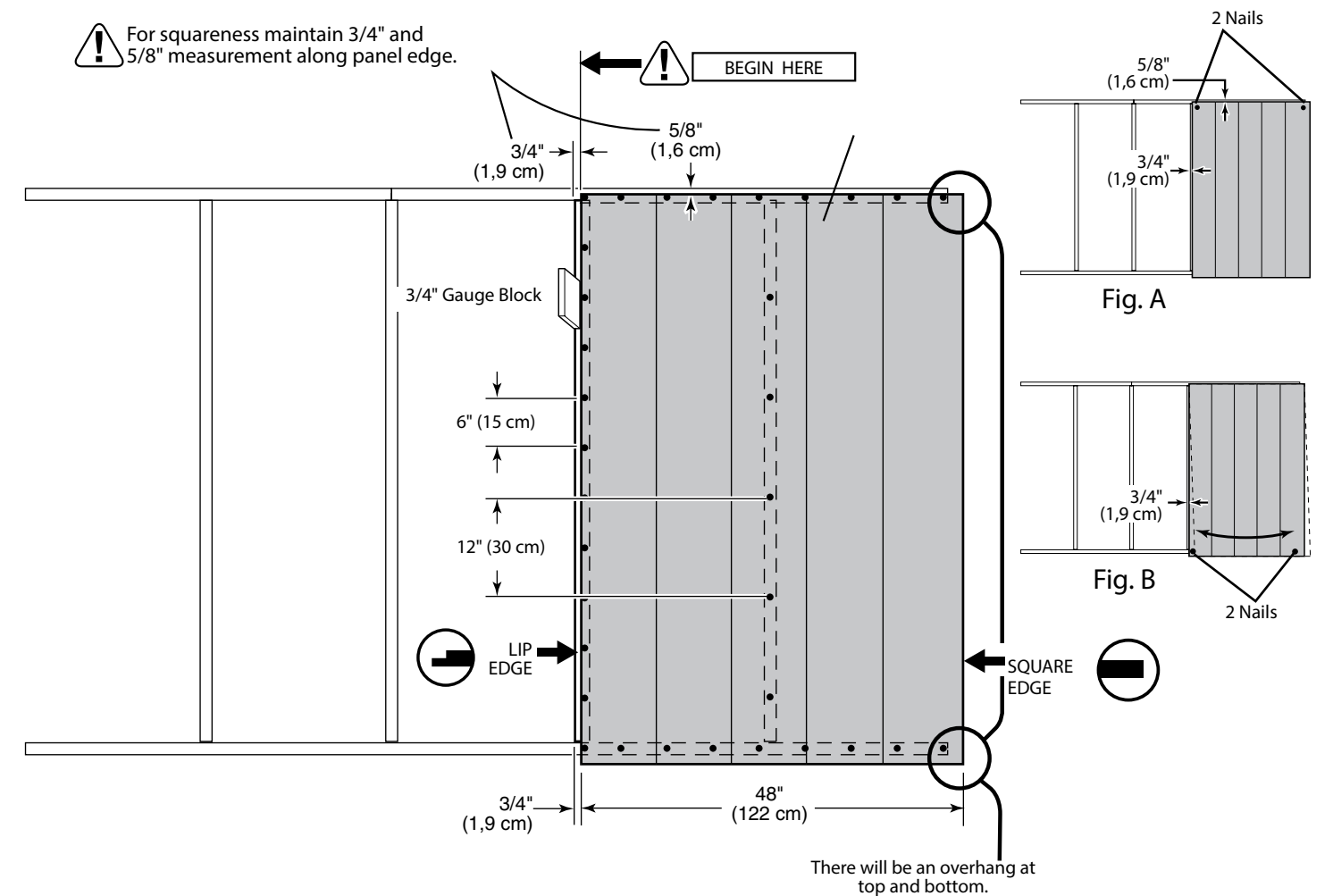
Use the gauge block to mark the 3/4" measurement on the wall stud. Locate the panel 5/8" down on the top plate. Secure panel with two 2" nails in the corners (Fig. A).

5 Move to the opposite end. Using the long edge of the panel as a lever move the panel side-to-side until you have a 3/4" measurement on the wall stud. Secure corner with two 2" nails.

6 Nail the panel using 2" nails 6" apart on edges and 12" apart inside panel.

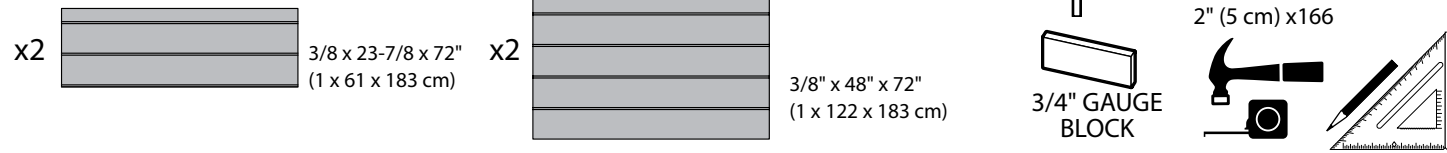



For squareness maintain 3/4" and 5/8" measurement along panel edge.




SIDE WALL PANELS

PARTS REQUIRED:

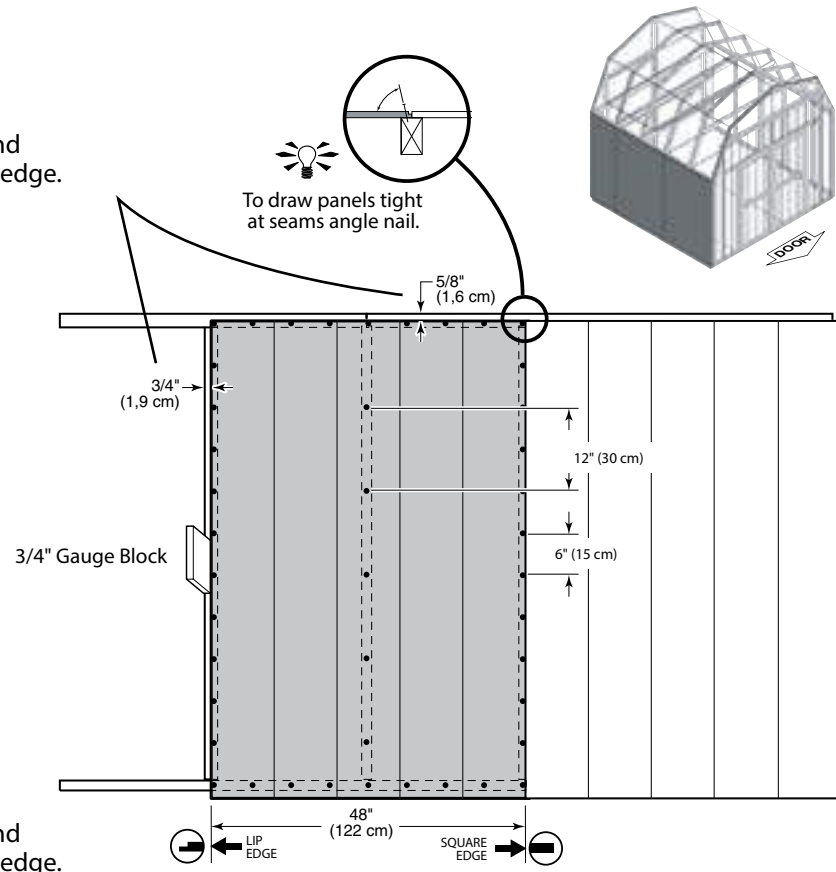



 For squareness maintain 3/4" and 5/8" measurement along panel edge.

 To draw panels tight at seams angle nail.

7 Place 48" panel on frame as shown with primed side facing up.

Nail using 2" nails 6" apart on edges and 12" apart inside panel.

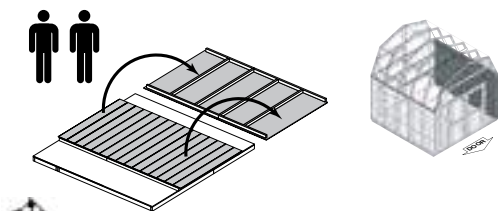


 For squareness maintain 3/4" and 5/8" measurement along panel edge.

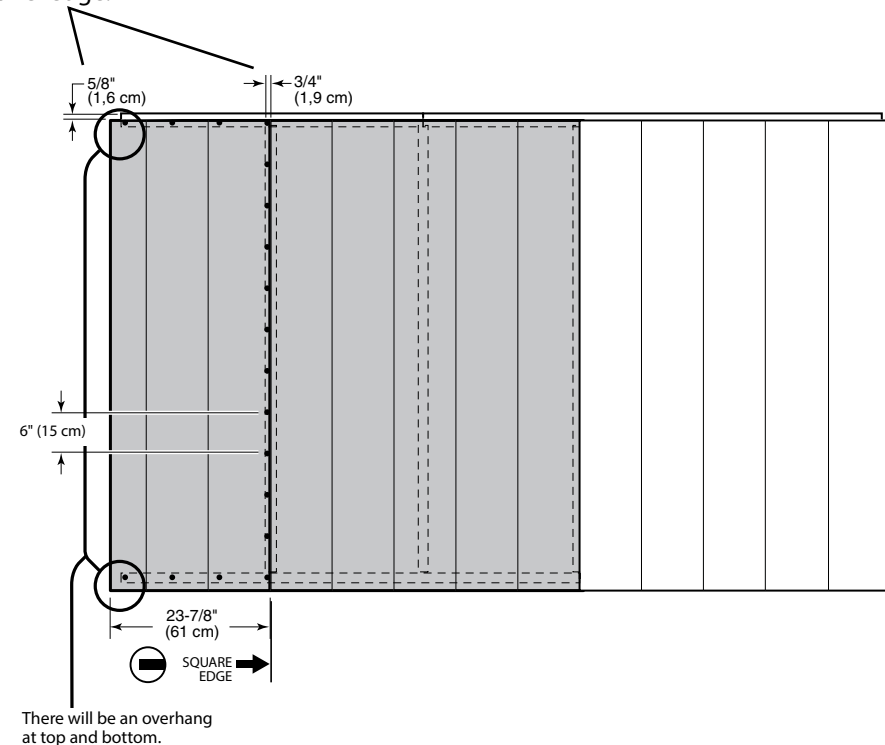
8 Place 23-7/8" panel on frame as shown with primed side facing up. NOTE THE SQUARE AND LIP EDGES.

Nail using 2" nails 6" apart on edges.

Carefully flip your sidewall over. Repeat STEPS 1-8 to assemble your second side wall.

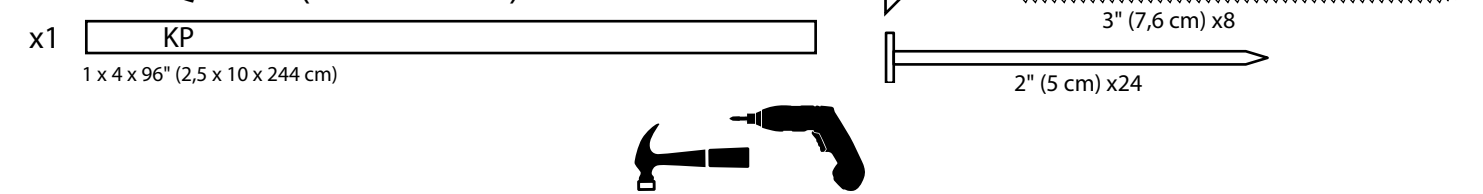


9 You have finished building both of your side walls.



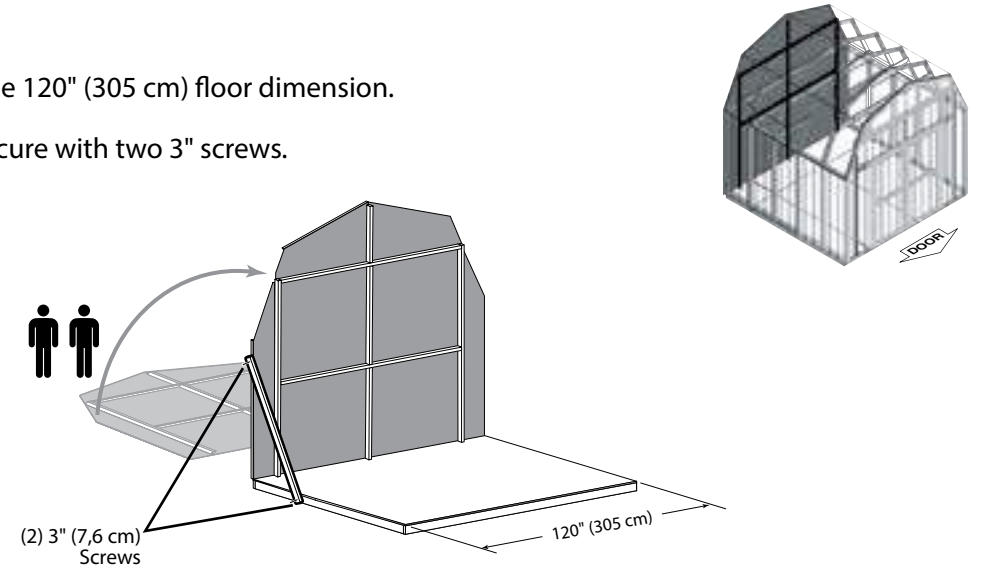
BACK WALL INSTALLATION

PARTS REQUIRED (TEMPORARY):



BEGIN

- Center back wall assembly on the 120" (305 cm) floor dimension.
- Use KP as a temporary brace. Secure with two 3" screws.

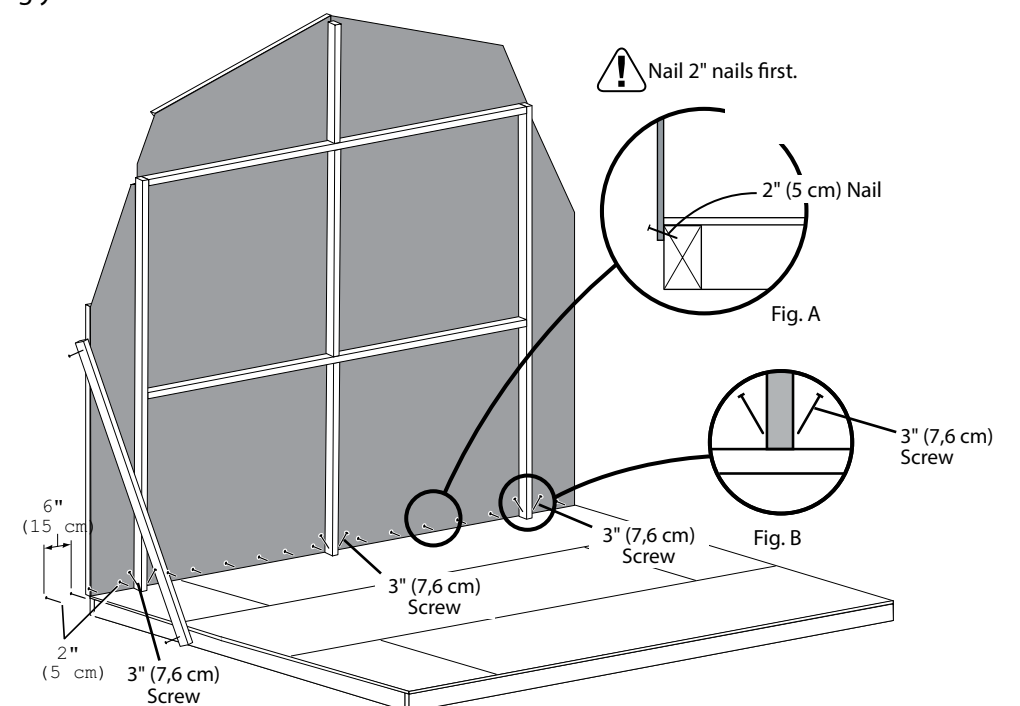


- First, nail lower edge of panel to floor frame using 2" nails 6" apart. Angle nail to hit floor frame (Fig. A).
- Screw back wall uprights to floor using two 3" Screws (Fig. B).

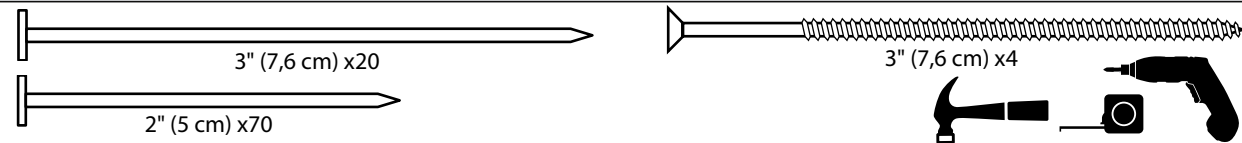


FINISH

- You have finished standing your back wall.



SIDE WALLS INSTALLATION



✓ BEGIN

Stand right sidewall on floor.

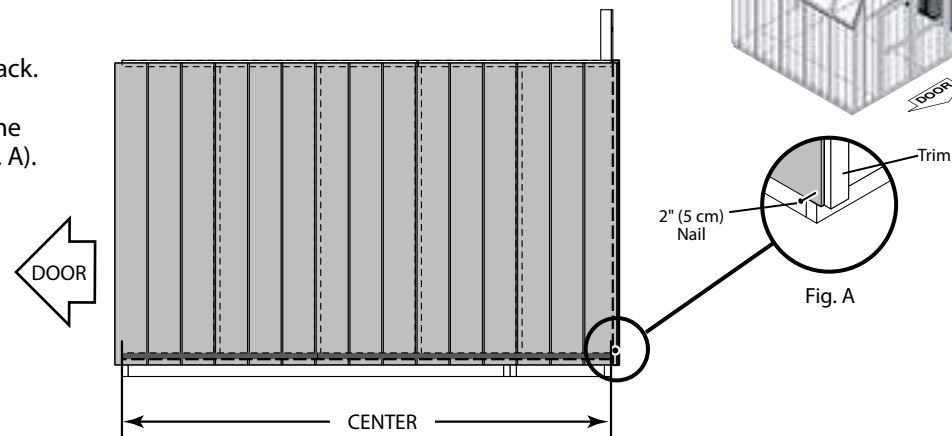


⚠ It is important to secure the sidewall in the following order.



- 1 Center sidewall on floor front to back.

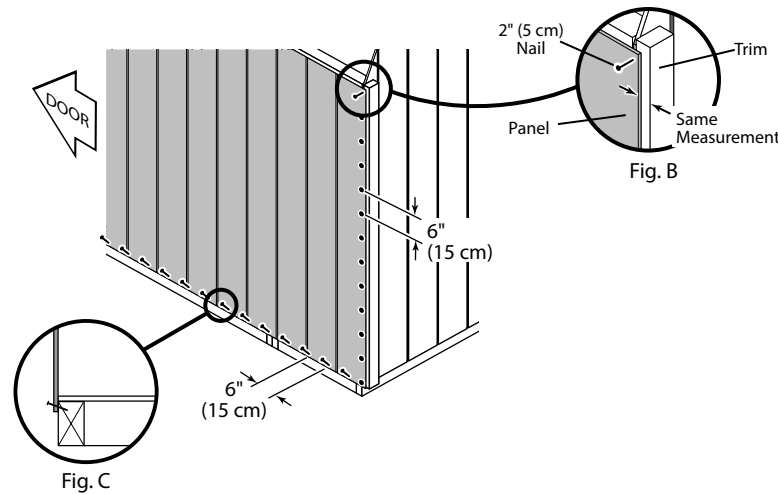
Nail the lower sidewall corner to the backwall trim with one 2" nail (Fig. A).



- 2 Be sure the measurement between the panel edge and the trim is the same along the entire length. Then secure with one 2" nail in the upper corner (Fig. B).

Nail along the panel edge into the trim using 2" nails spaced 6" apart.

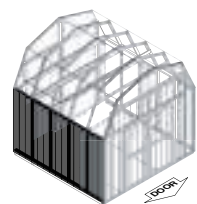
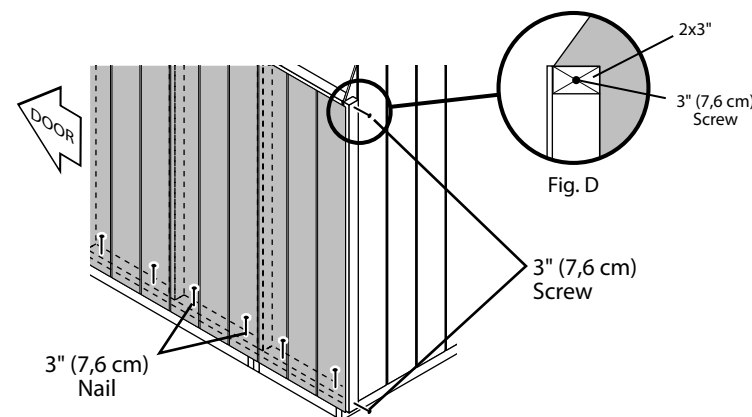
Nail along bottom of panel using 2" nails 6" apart. Angle nail to hit floor frame (Fig. C).



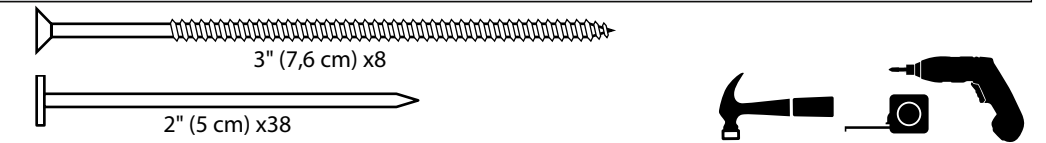
- 3 Nail down the bottom plate using two 3" nails between the wall studs.

Screw through the backwall trim into the top and bottom plates using one 3" screw (Fig. D).

Remove temporary brace.
Repeat process to secure the left sidewall.



FRONT WALL INSTALLATION

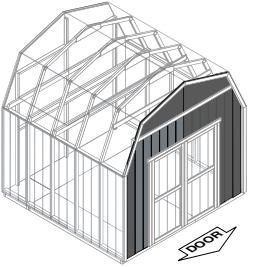


✓ BEGIN

Stand frontwall on floor.



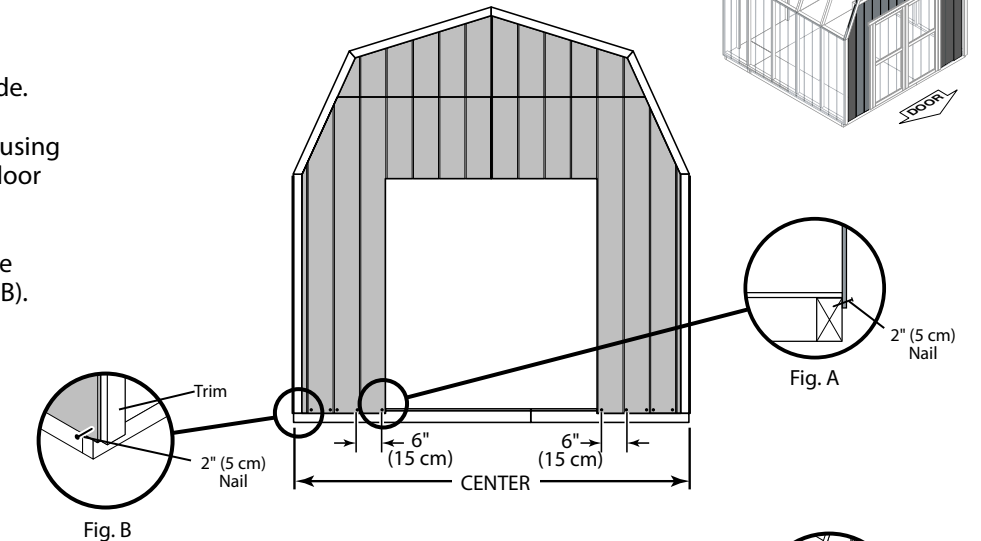
⚠ It is important to secure the frontwall in the following order.



- 1 Center frontwall on floor side-to-side.

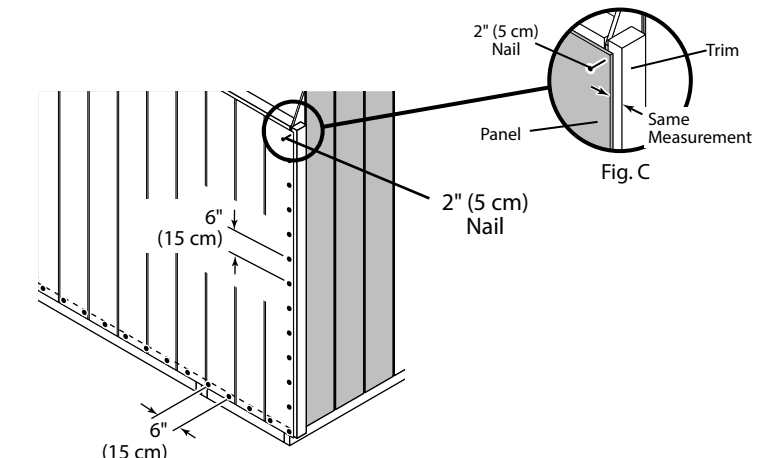
Nail the frontwall flush to the floor using 2" nails 6" apart. Angle nails to hit floor frame (Fig. A).

Nail the lower sidewall corner to the frontwall trim with one 2" nail (Fig. B).



- 2 Be sure the measurement between the panel edge and the trim is the same along the entire length. Then secure with one 2" nail in the upper corner (Fig. C).

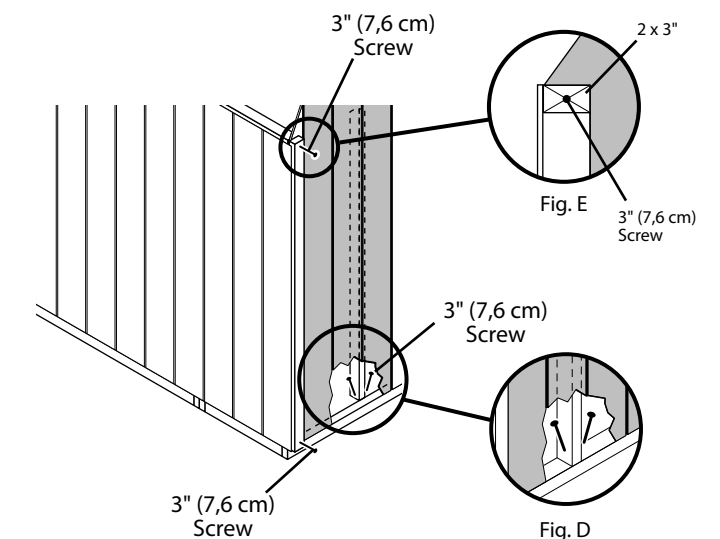
Nail along the panel edge into the trim using 2" nails spaced 6" apart.



- 3 Secure the frontwall frame using two 3" screws (Fig. D).

Screw through the frontwall trim into the top and bottom plates using one 3" screw (Fig. E).

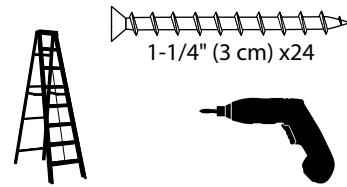
Repeat process to secure the right side of the frontwall.



GABLE TRIM

PARTS REQUIRED:

x4 PF 2 x 3 x 41" (5 x 7,6 x 104 cm)

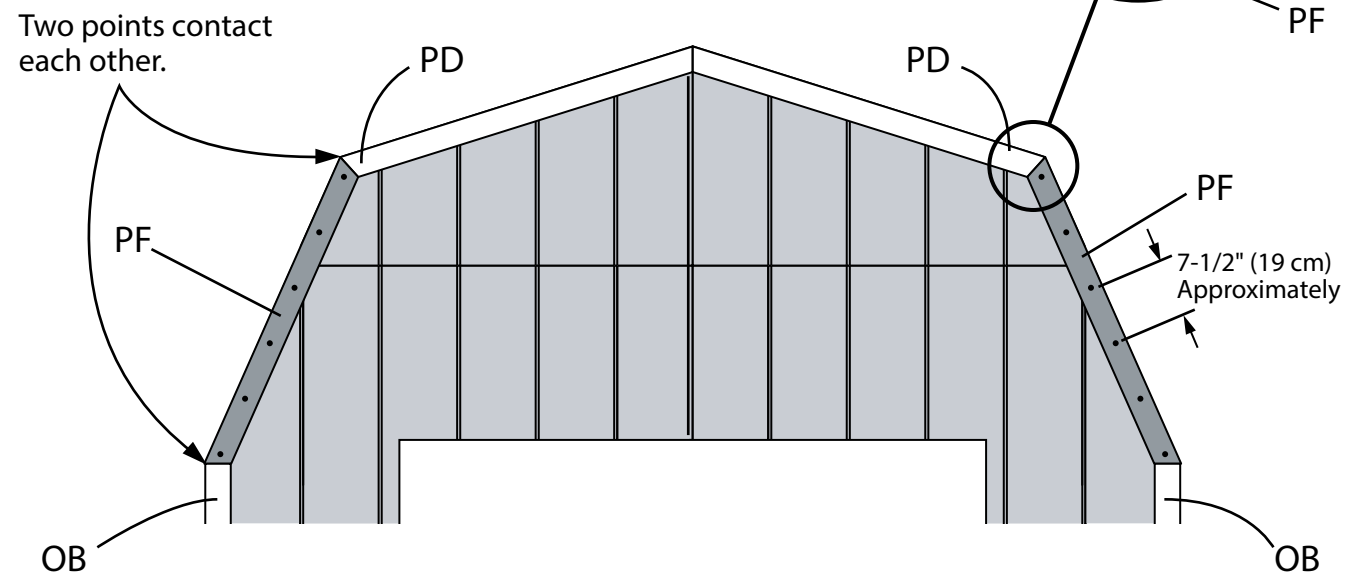
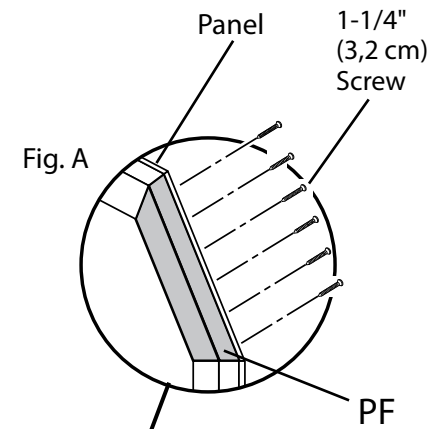
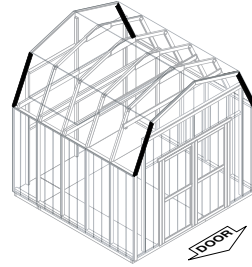


✓ BEGIN

- 1 Install front lower gable trim PF so two points contact PD and corner trim OB as shown.
- 2 Secure PF to wall using six 1-1/4" screws 7-1/2" apart. Screw through panels into PF (Fig A).
- 3 Repeat above steps to secure the back wall lower gable trim.



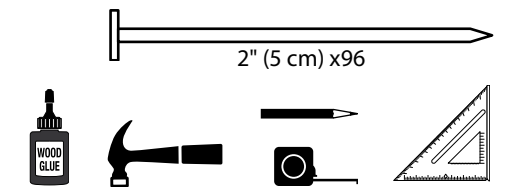
- 4 You have finished installing your lower gable trim.



RAFTERS

PARTS REQUIRED:

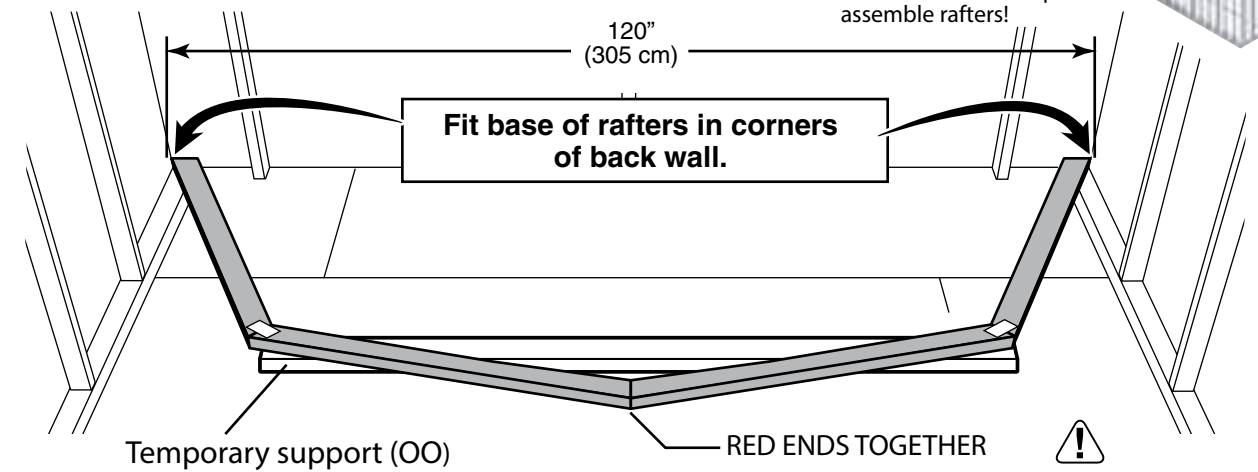
x8 RAFTER-HALF (Pre-assembled)
x8 GUSSET



✓ BEGIN

- 1 You will build FOUR assemblies; Place two rafter-halves in the corner of back and side walls. The RED ENDS identify the ends to be connected at the center.

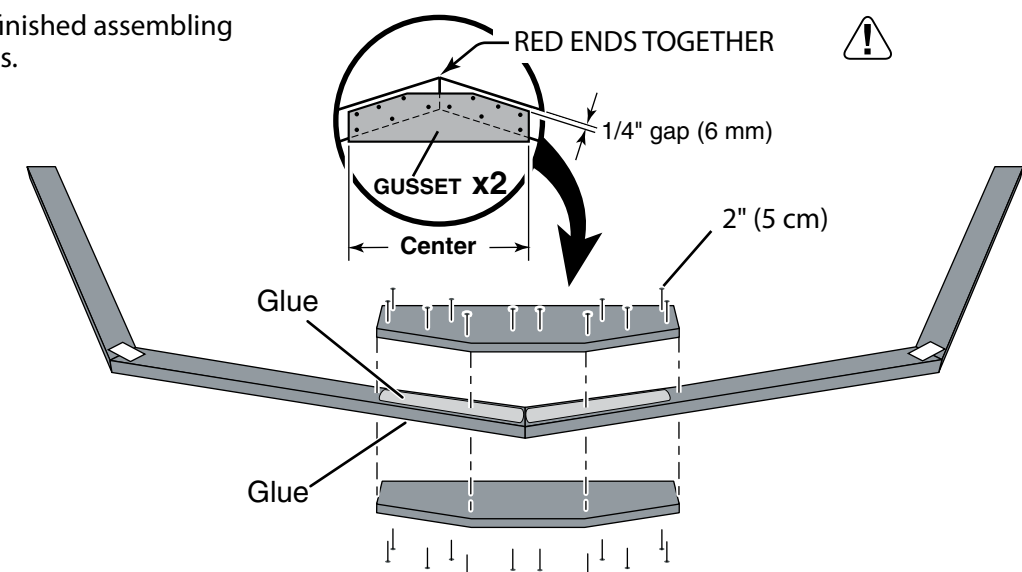
HINT:
Use floor and walls to help assemble rafters!



- 2 Apply glue to rafters where the gusset will fit.
- 3 RED ENDS of Rafters must touch together at the peak. Nail gusset to rafters using twelve 2" nails in pattern shown.
- 4 Flip over rafter assembly and repeat STEPS 2-3 to attach second gusset to other side.
- 5 Repeat STEPS 1-4 to build THREE additional rafter assemblies.

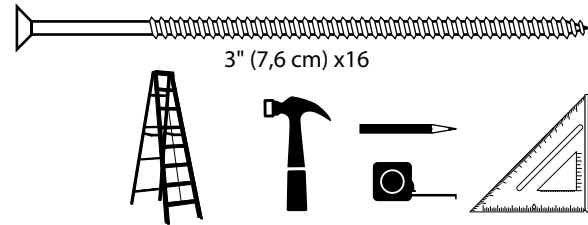
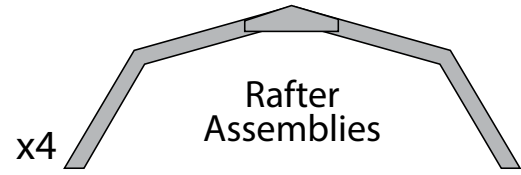


- 6 You have finished assembling your rafters.



RAFTERS

PARTS REQUIRED:



✓ BEGIN

- 1 Arrange four rafters centered on the mark you made for locating the wall studs. (Fig. A). The rafters also line up directly over the wall studs.

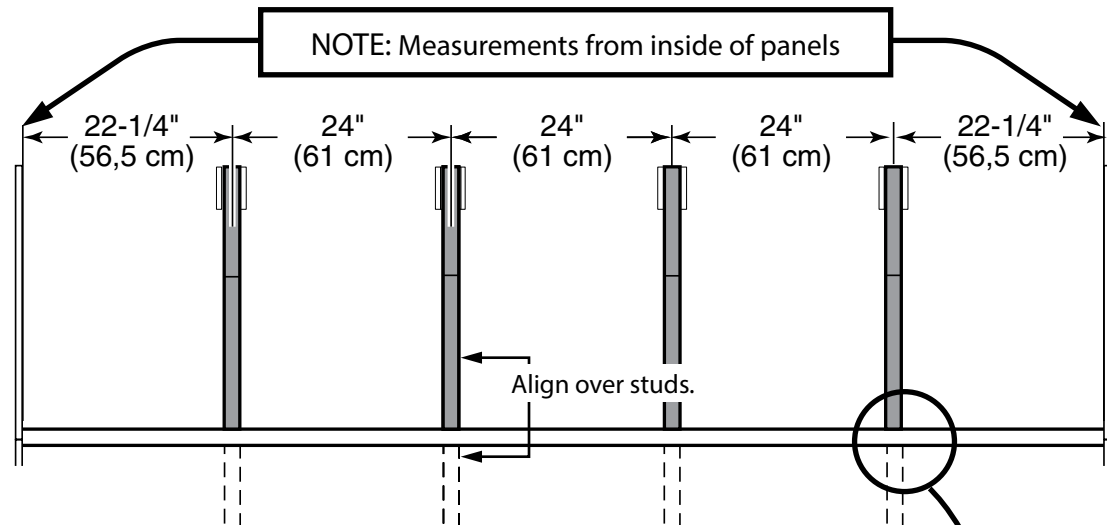
Check you have the measurements shown.

Attach with two 3" screws at each end (Fig. A).

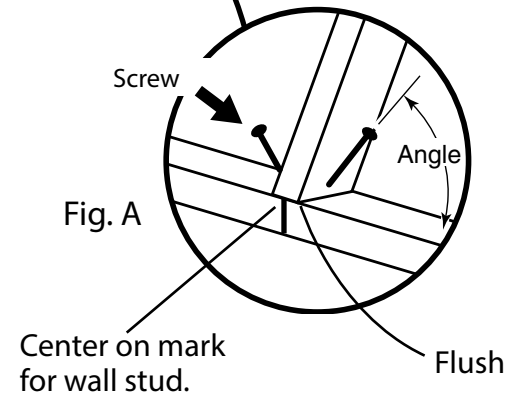


FINISH

- 2 You have finished installing your rafters.



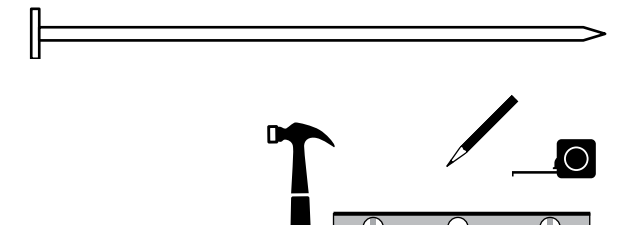
⚠ Maintain the measurements between rafters.



LOFT JOISTS

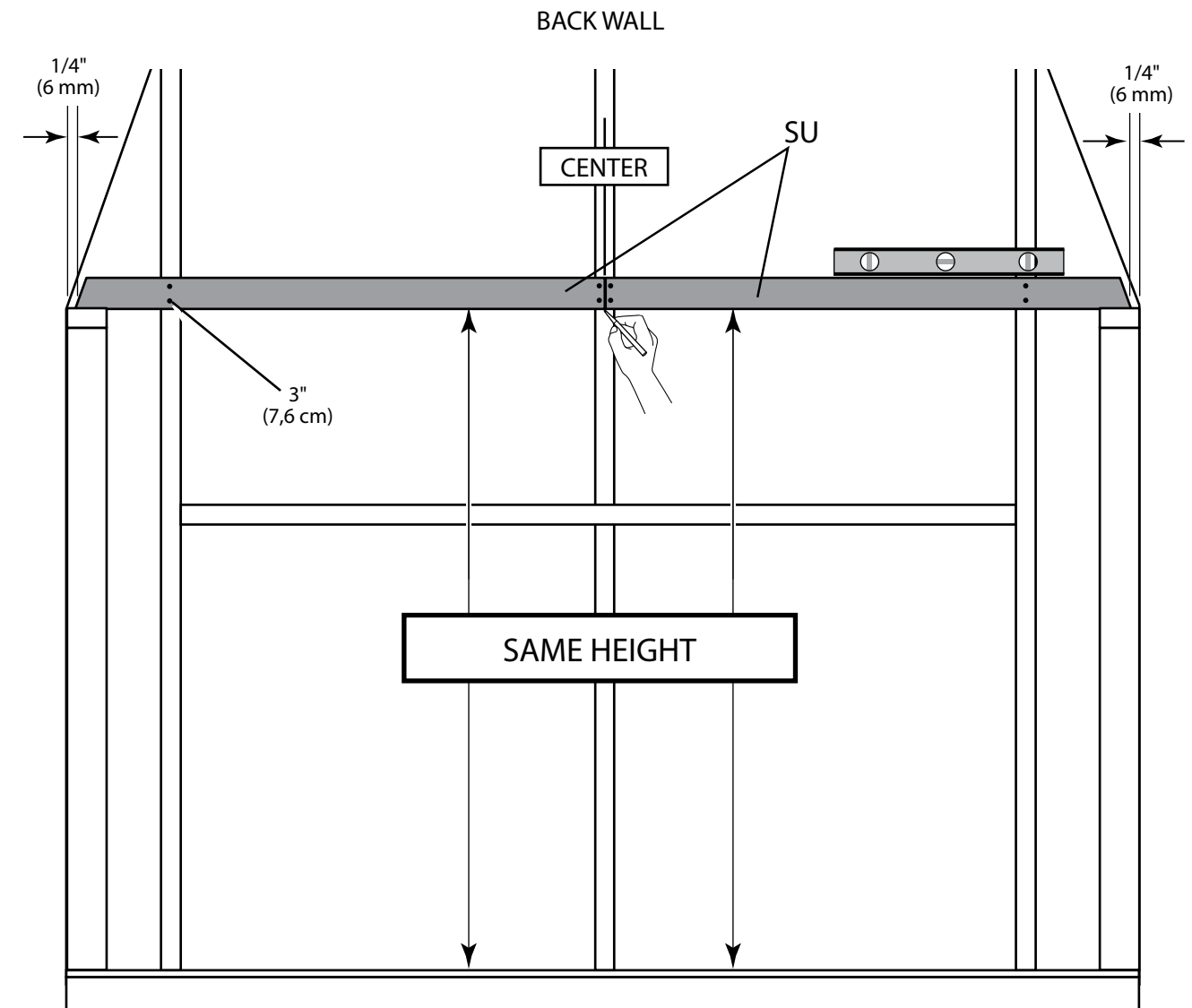
PARTS REQUIRED:

- x2 SU
2 x 4 x 59-3/4" (5 x 10 x 152 cm)



✓ BEGIN

- 1 Install SU at same height as top plates and level. Install using two 3" nails at each connection, as shown.

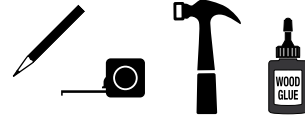
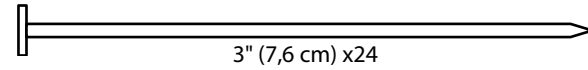


LOFT JOISTS

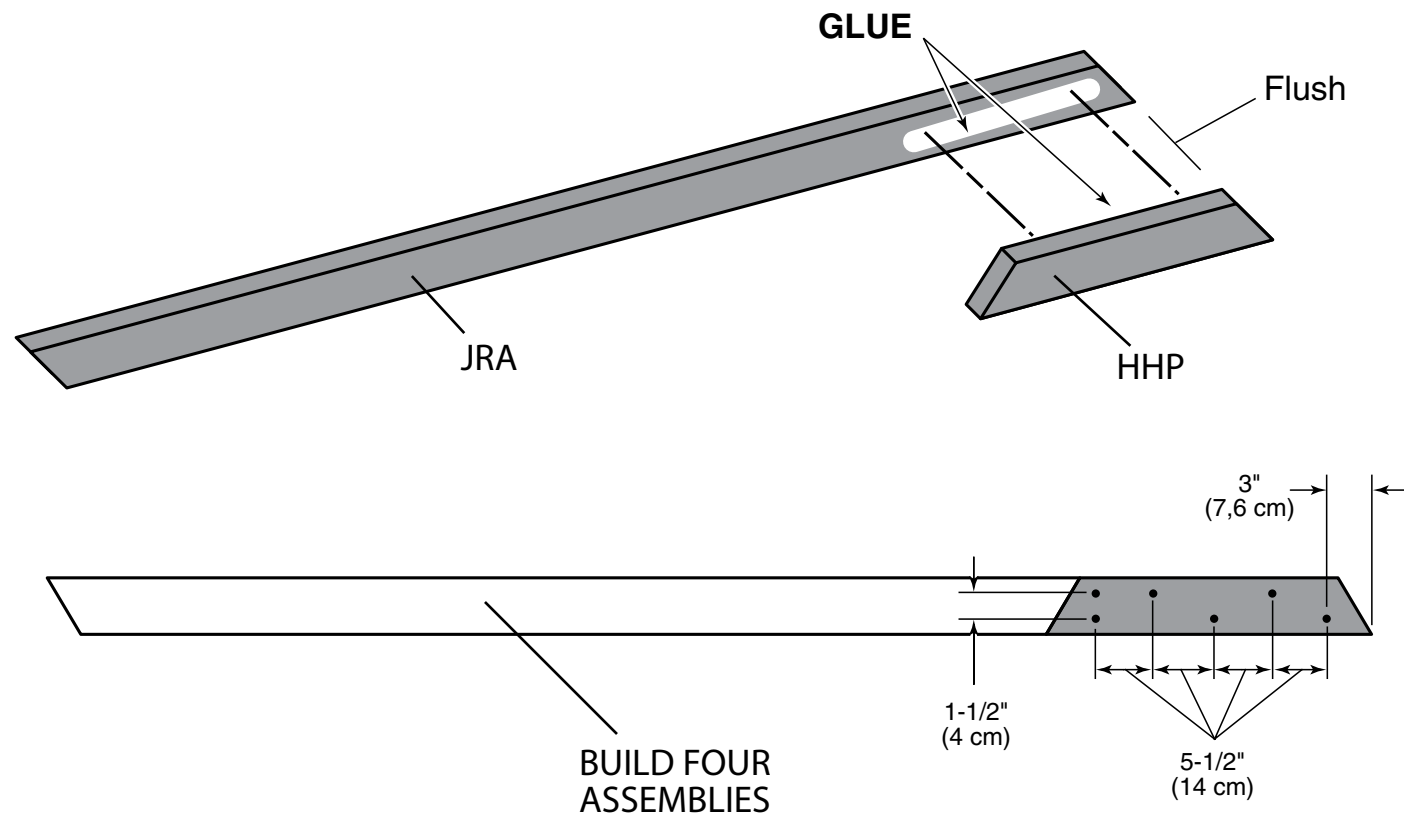
PARTS REQUIRED:

x4 **HHP**
2 x 4 x 28-3/4" (5 x 10 x 70 cm)

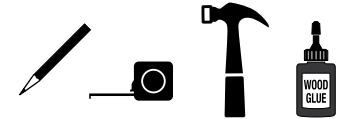
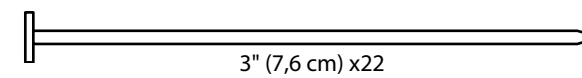
x4 **JRA**
2 x 4 x 92-5/16" (5 x 10 x 234)



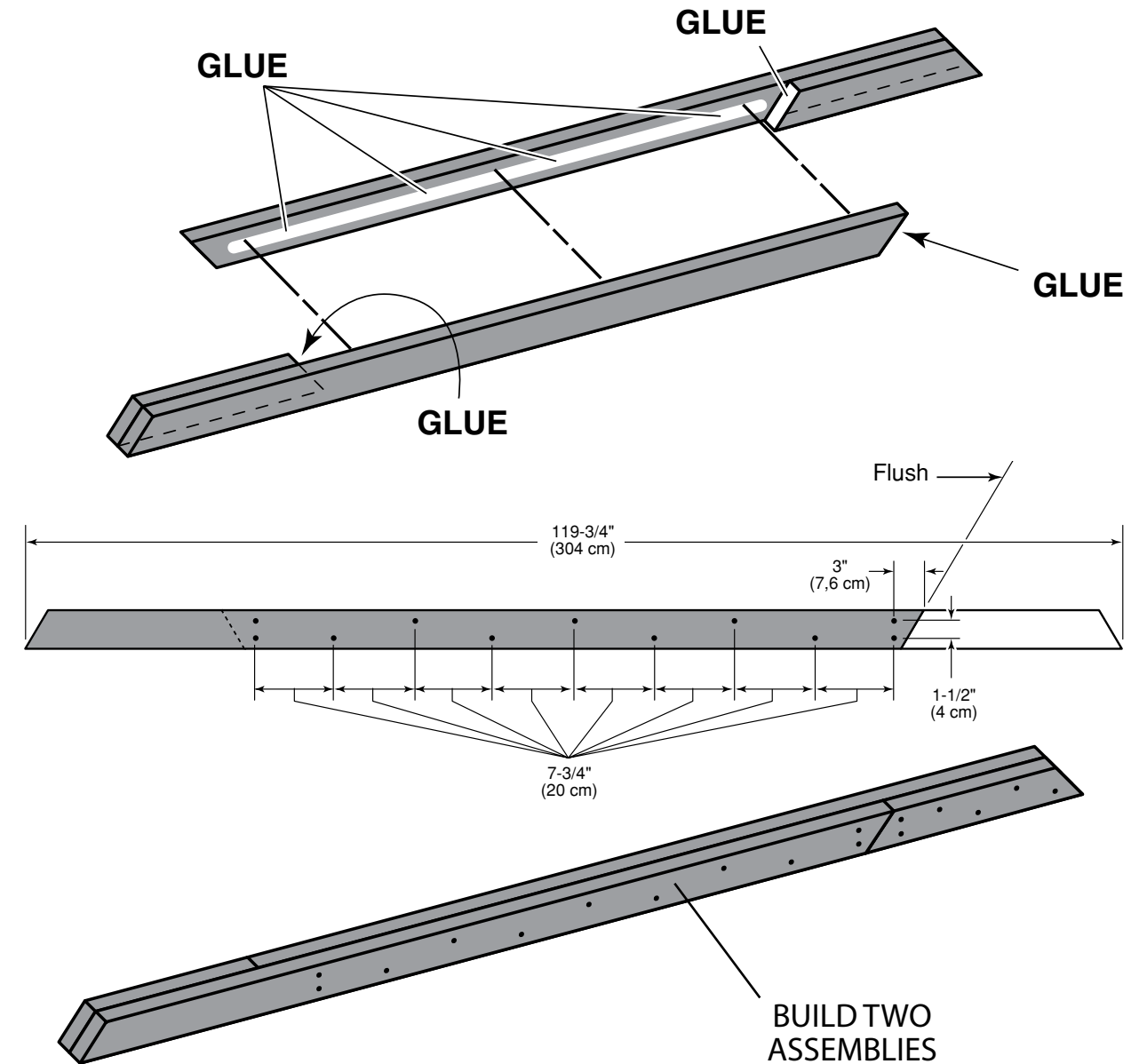
- 2 You will construct FOUR Loft Joist sub-assemblies.
- 3 Glue HHP onto JRA as shown. For best results use an exterior grade wood glue.
- 4 Nail HHP onto JRA using six 3" (7,6 cm) nails in the pattern as shown.
- 5 Repeat STEPS 3-4 to build THREE additional sub-assemblies.



LOFT JOISTS



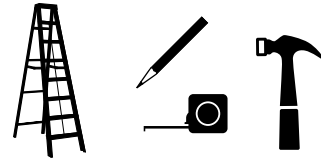
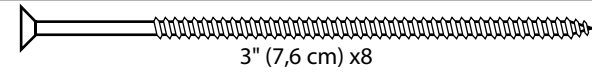
- 6 Take two loft joist sub-assemblies and flip one end to end so they will produce a 4" x 4" loft joist.
- 7 Spread glue on the surfaces which come into contact with one another as shown.
- 8 Nail the two sub-assemblies together using eleven 3" (7,6 cm) nails in the pattern as shown.
- 9 Repeat STEPS 6-8 to build a second 4" x 4" loft joist.
- FINISH**
- 10 You have finished assembling your loft joists.




LOFT JOISTS

PARTS REQUIRED:

x2  ASSEMBLED LOFT JOIST



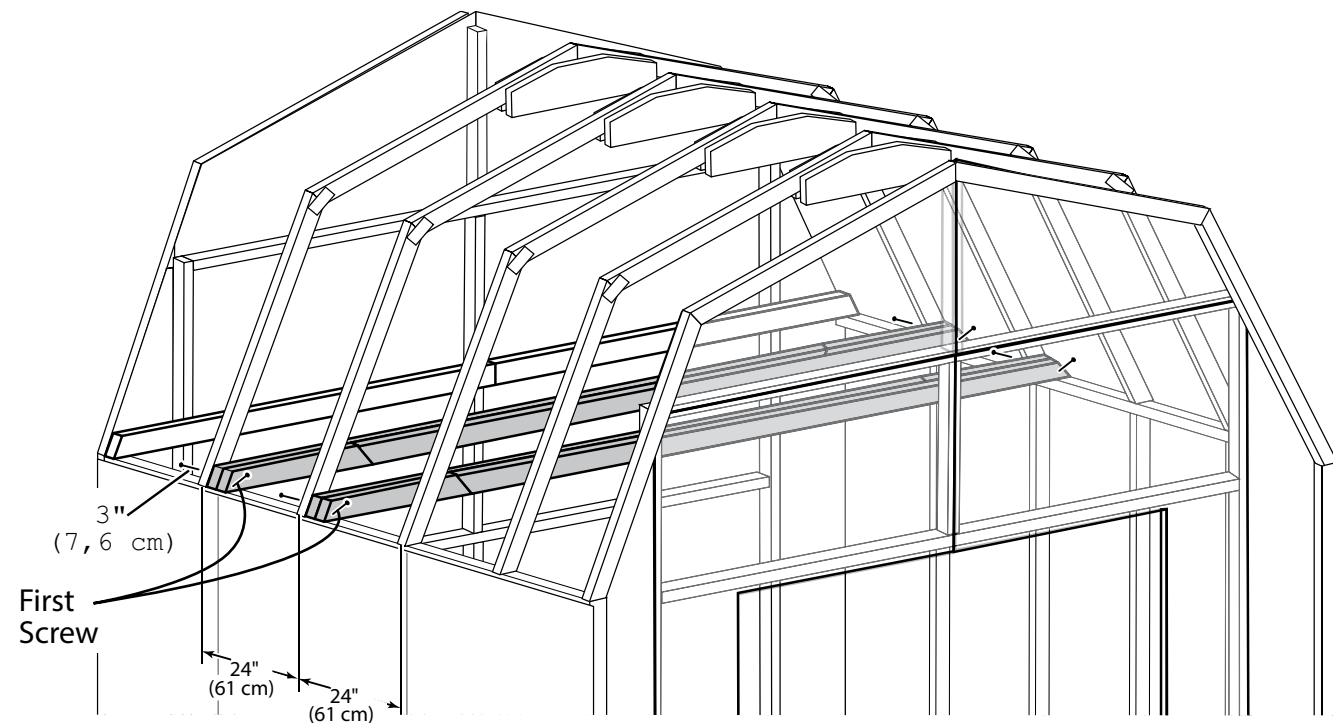
✓ BEGIN


- 1 Put a loft joist flush on the front side of each of the back two rafters.
- 2 Attach each joist with one 3" screw angled through the joist into the top plate. Then, screw through rafter into the loft joist with one 3" screw.
- 3  Check rafters are still 24" on center.



FINISH

- 4 You have finished installing your loft joists.

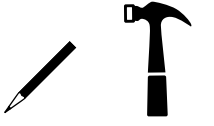
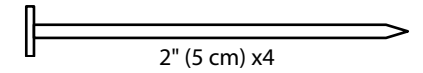


 Check 24" (61 cm) is maintained.


LOFT PANEL

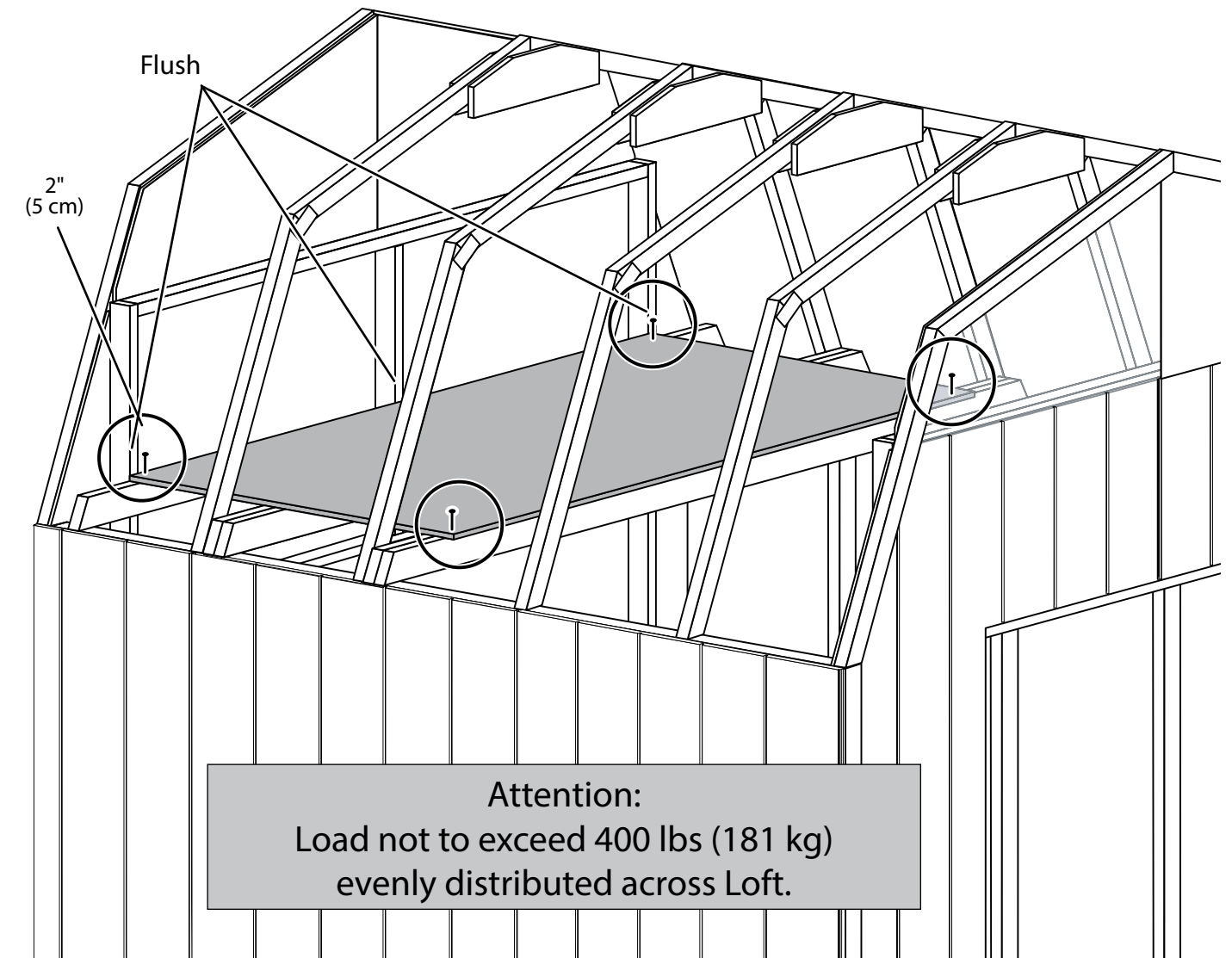
PARTS REQUIRED:

 7/16 x 48 x 96"
(1 x 122 x 244 cm)



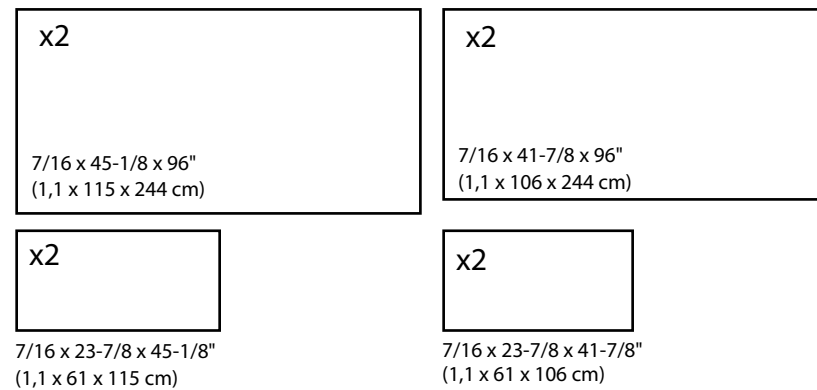
✓ BEGIN

- 1 Place loft panel grid lines up onto the three loft joists centered from side-to-side and flush with the back wall frame.
- 2 **IMPORTANT!** Using only FOUR 2" nails, nail loft panel in place to allow racking of the roof. You will complete nailing the loft panel later.
- 3  You have temporarily finished your loft panel.



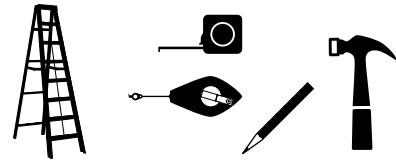
ROOF PANELS

PARTS REQUIRED:



3/4"
GAUGE
BLOCK

2" (5 cm) x196



! Roof panels may cause serious injury until securely fastened.

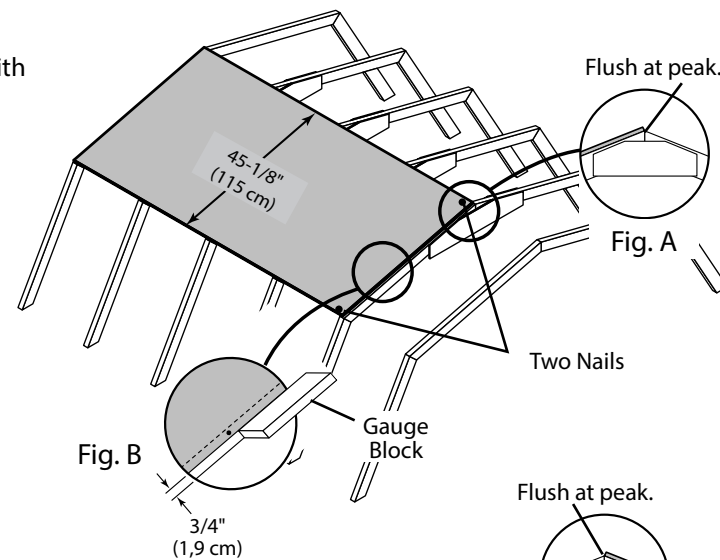


You must square the roof by attaching one panel first. You will use the panels' long edge as a lever to bring your roof into square. Commonly known as "racking".

BEGIN

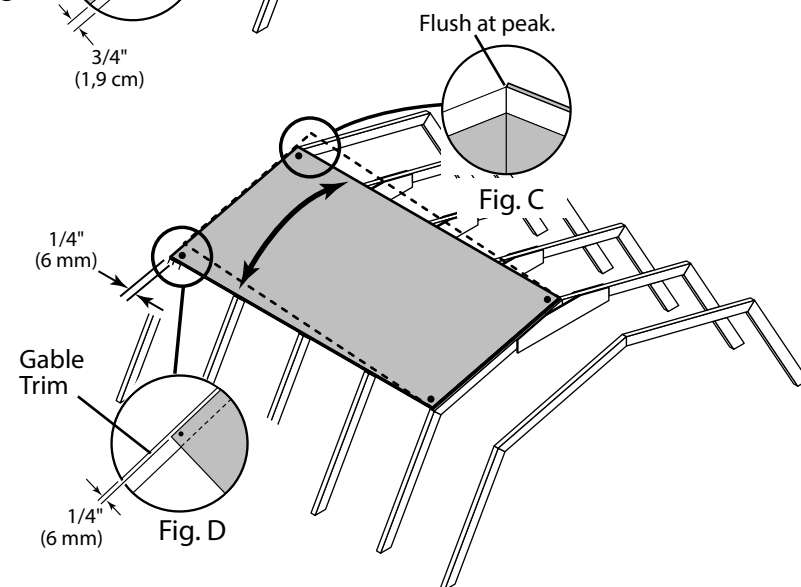
1 Attach the $45\text{-}1/8 \times 96$ " panel with the rough side up (painted-grid lines side) with a $3/4$ " measurement on the rafter (Fig B) and the panel flush at the peak (Fig. A).

Secure panel with two 2" nails in the corners.



2 Move to the opposite end. Using the long edge of the panel as a lever move the panel side-to-side until the top corner is flush to the peak (Fig. C) and there is $1/4$ " measurement to the gable trim (Fig. D).

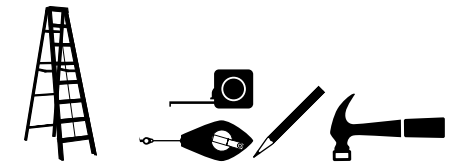
You may need to move your backwall to get the $1/4$ " measurement. Secure panel with two 2" nails in the corners.



ROOF PANELS

PARTS REQUIRED:

3/4"
GAUGE
BLOCK

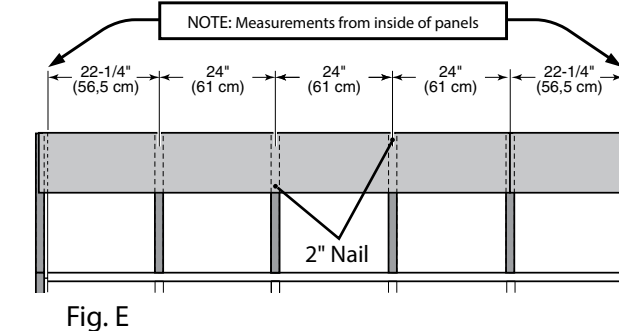
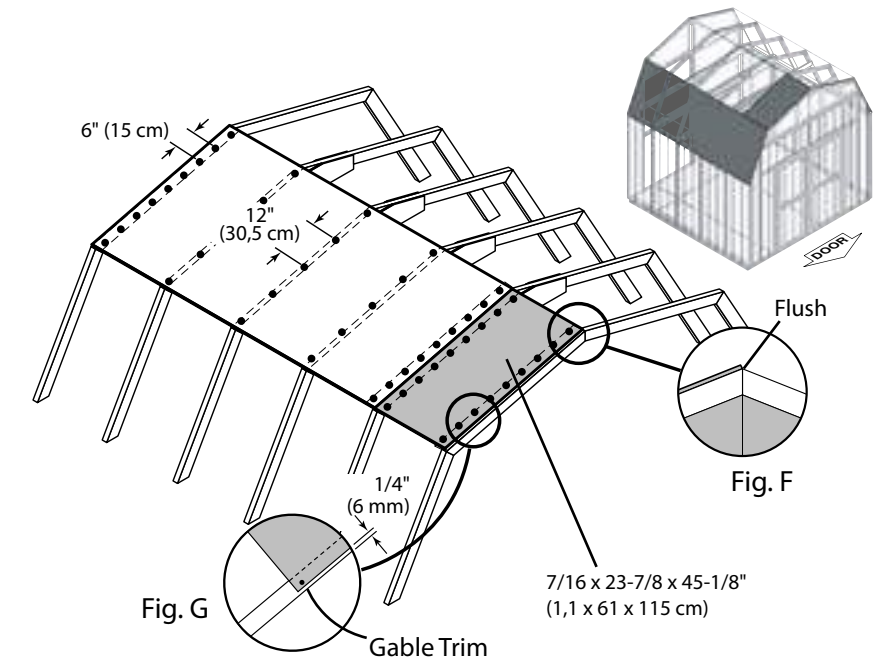


3 Keep spacing between the center of the rafters at the lower edge of the panel and secure with one 2" nail into each rafter (Fig. E).

Move to the top of the panel and keep spacing between the center of the rafters. Secure with one 2" nail into each rafter (Fig. E).

Nail the roof panel using 2" nails 6" apart on edges and 12" apart inside panel.

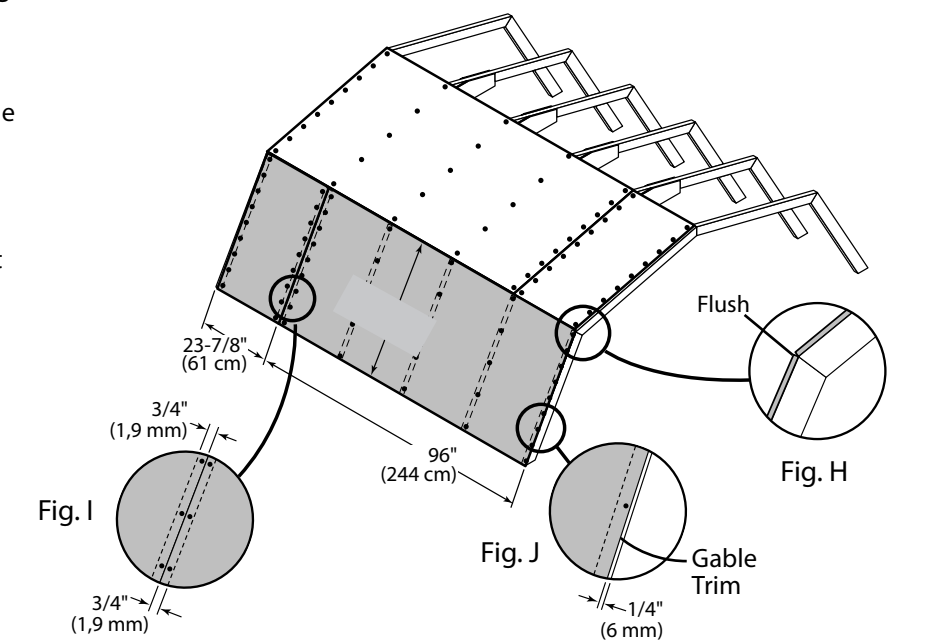
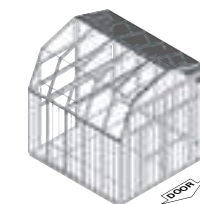
Attach the second $23\text{-}7/8 \times 45\text{-}1/8$ " upper roof panel flush to first panel, flush at peak and with the $1/4$ " measurement (Fig. F, G).



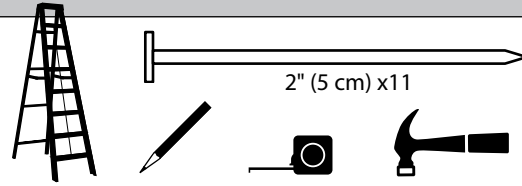
4 Attach the lower gable panels flush to the upper panels (Fig. H) and $3/4$ " on rafter (Fig. I) and with a $1/4$ " measurement at the gable trim (Fig. J).

Nail the roof panel using 2" nails 6" apart on edges and 12" apart inside panel.

Repeat process to attach roof panels on the opposite side.



LOFT PANEL

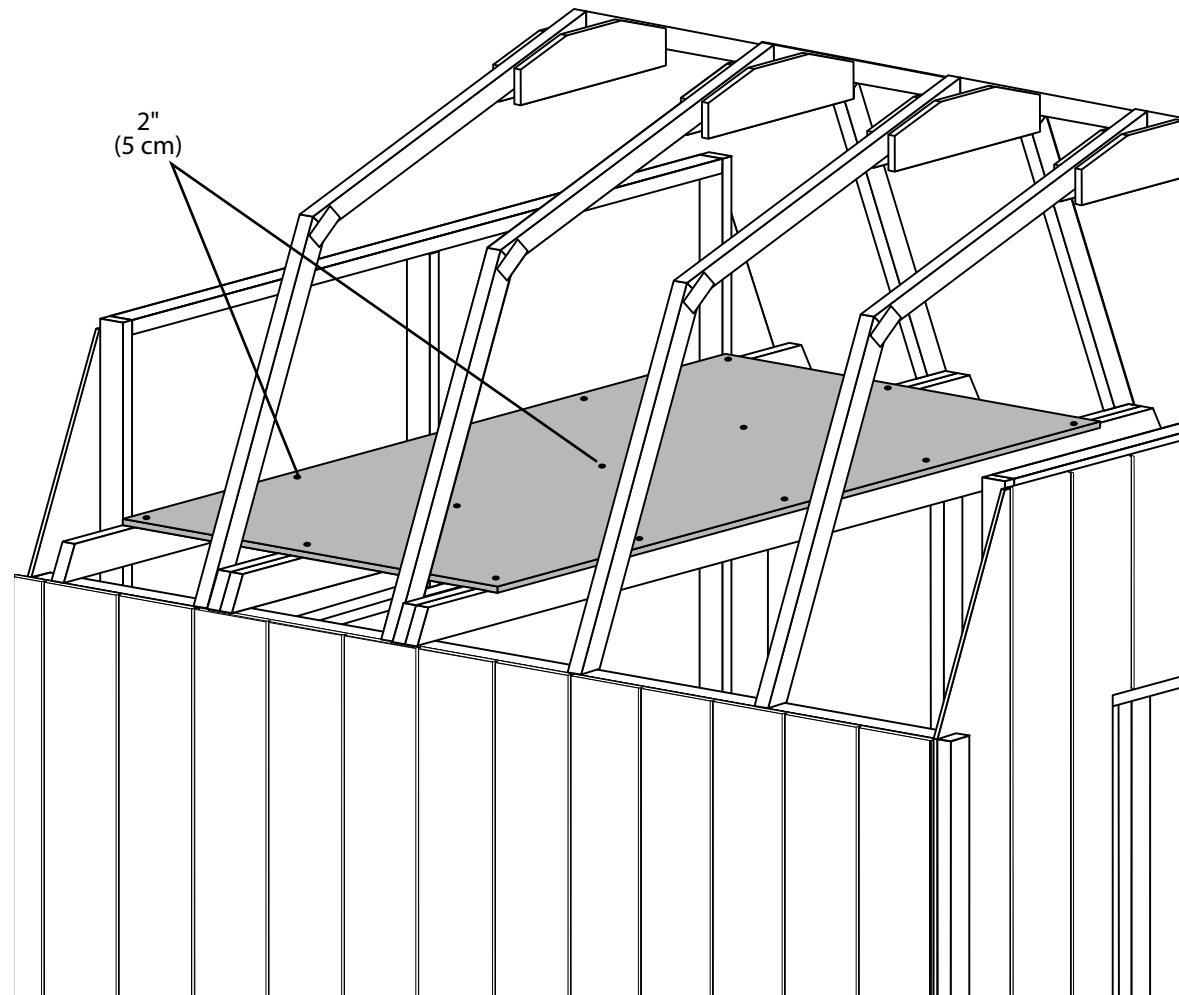


✓ **BEGIN**

1 Complete installation of Loft panel using 2" nails spaced 24".

FINISH

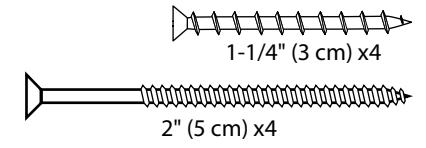
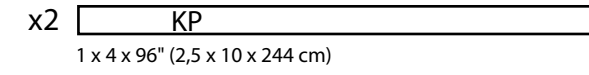
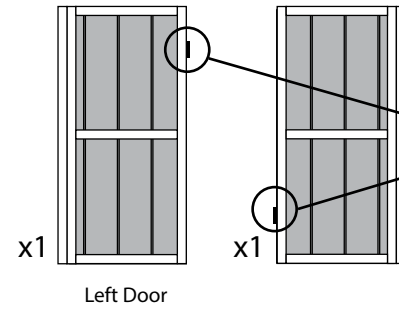
2 You have finished your loft panel



Attention: Load not to exceed 400 lbs (181 kg) evenly distributed across Loft.

DOORS

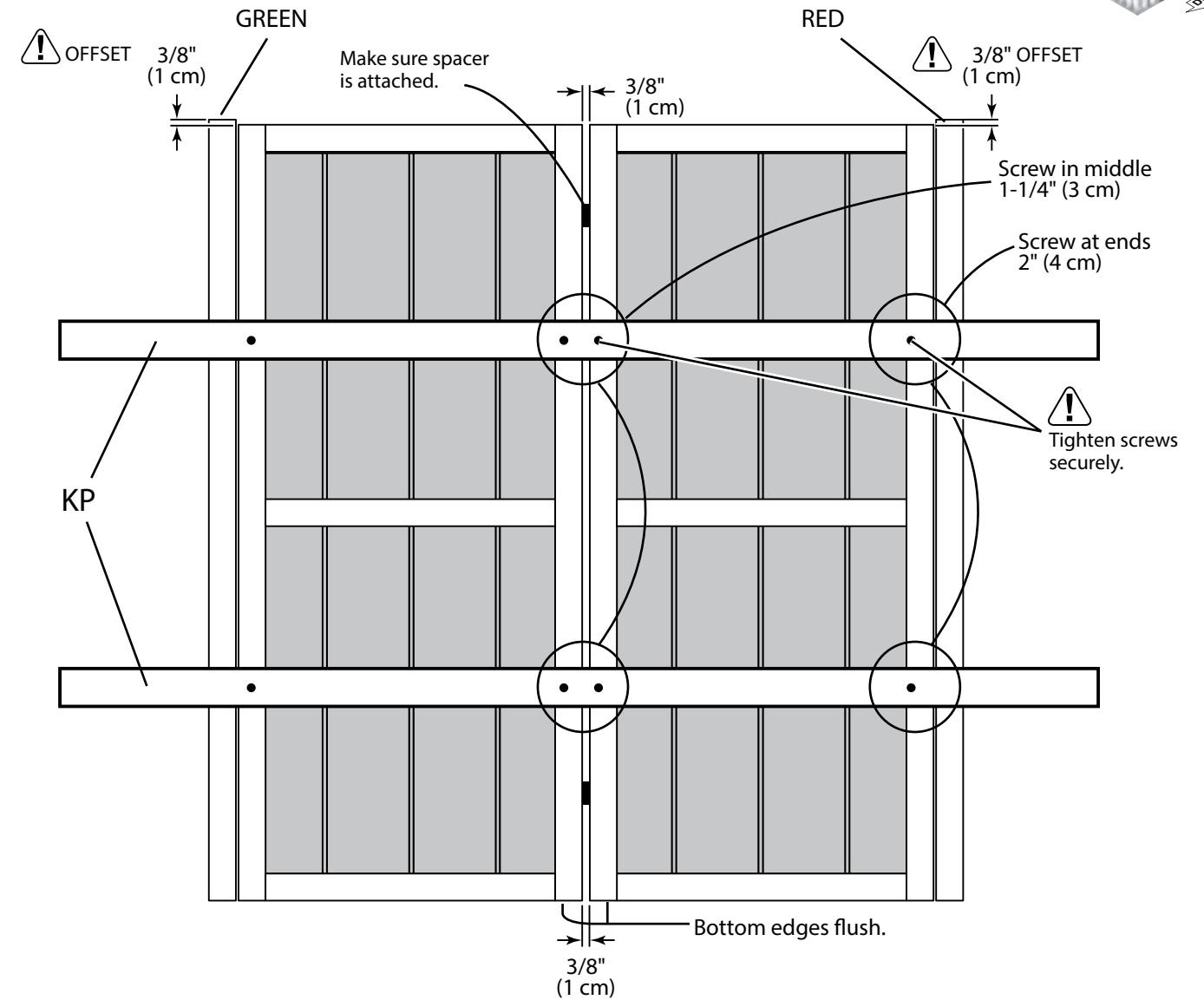
PARTS REQUIRED:



✓ **BEGIN**

1 Orient parts as shown on flat surface. ⚠️ 3/8" offset is to top. Look for red (right) and green (left) on hinge board.

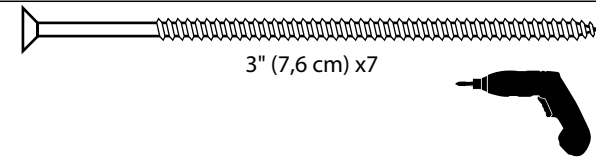
Attach temporary supports KP with 1-1/4" screws in middle and 2" screws at ends. Tighten securely.



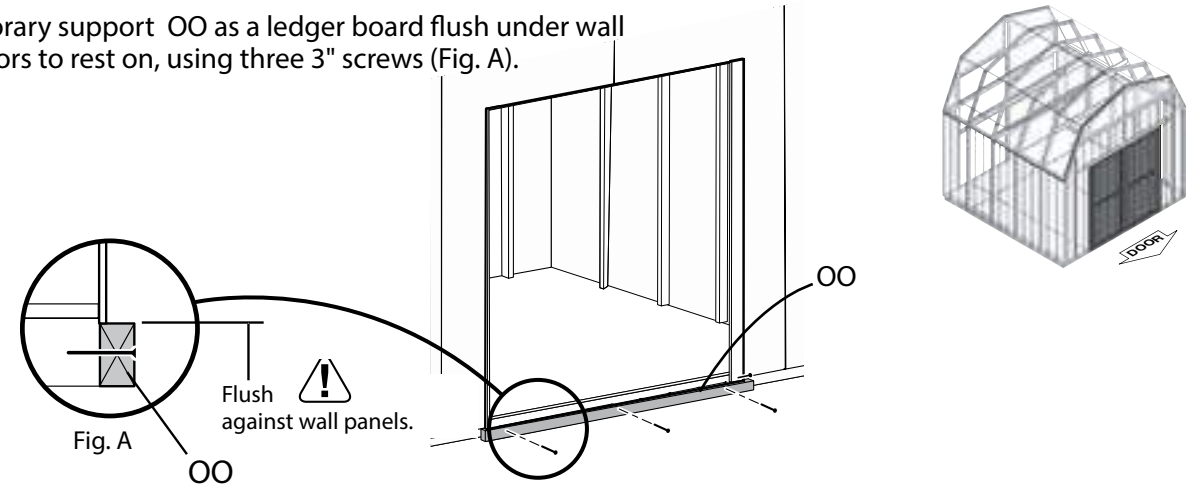
DOORS

PARTS REQUIRED:

x1 **OO**
2 x 3 x 69" (5 x 7,6 x 175,3 cm)



- 2 Attach temporary support **OO** as a ledger board flush under wall panels for doors to rest on, using three 3" screws (Fig. A).



- 3 Center doors on right edge of groove as shown (Fig. B).



⚠ Check ledger board is still flush under panels.

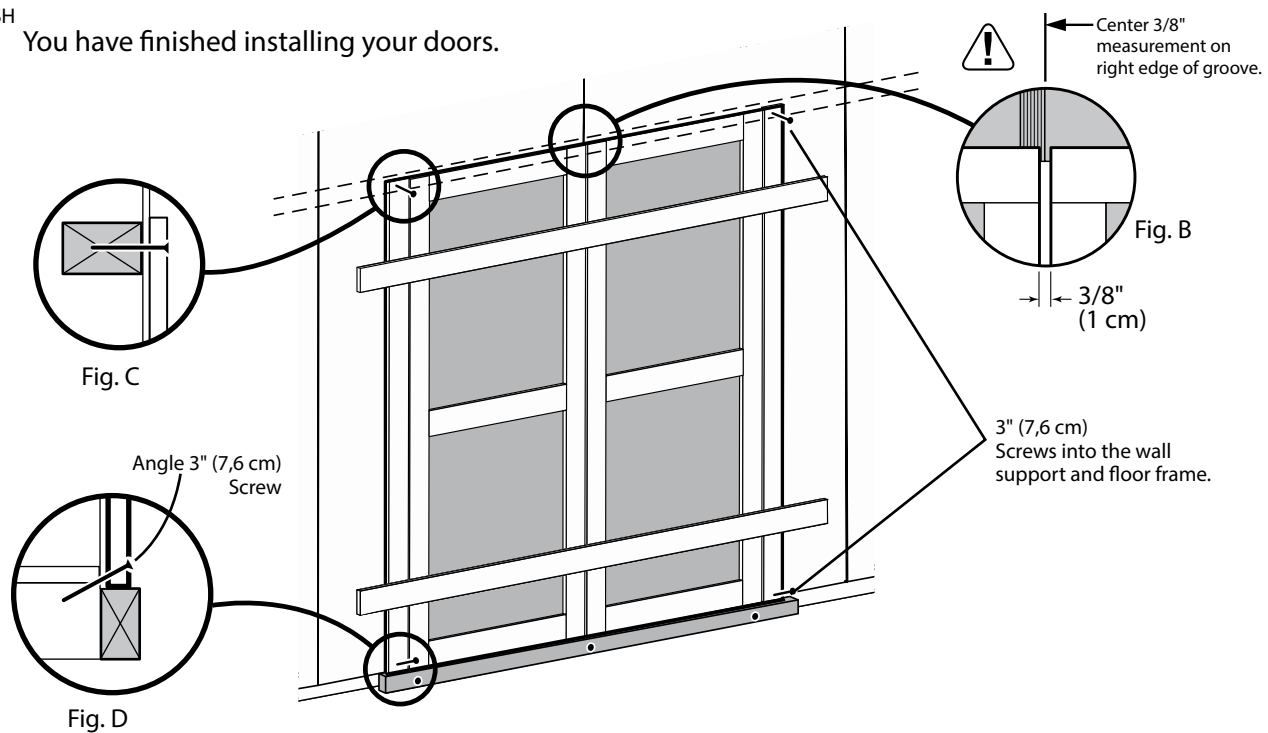
- 4 Screw hinge boards into wall supports and floor using four 3" screws as shown.

⚠ Make sure screws go into framing and floor (Fig. C, D).

- 5 Remove temporary supports and check doors open properly.



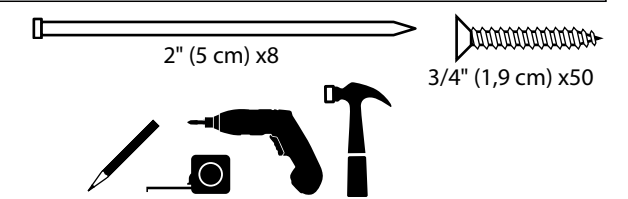
- 6 You have finished installing your doors.



DOOR

PARTS REQUIRED:

x1 **ZJ**
5/8 x 3 x 72" (1,6 x 7,6 x 183 cm)



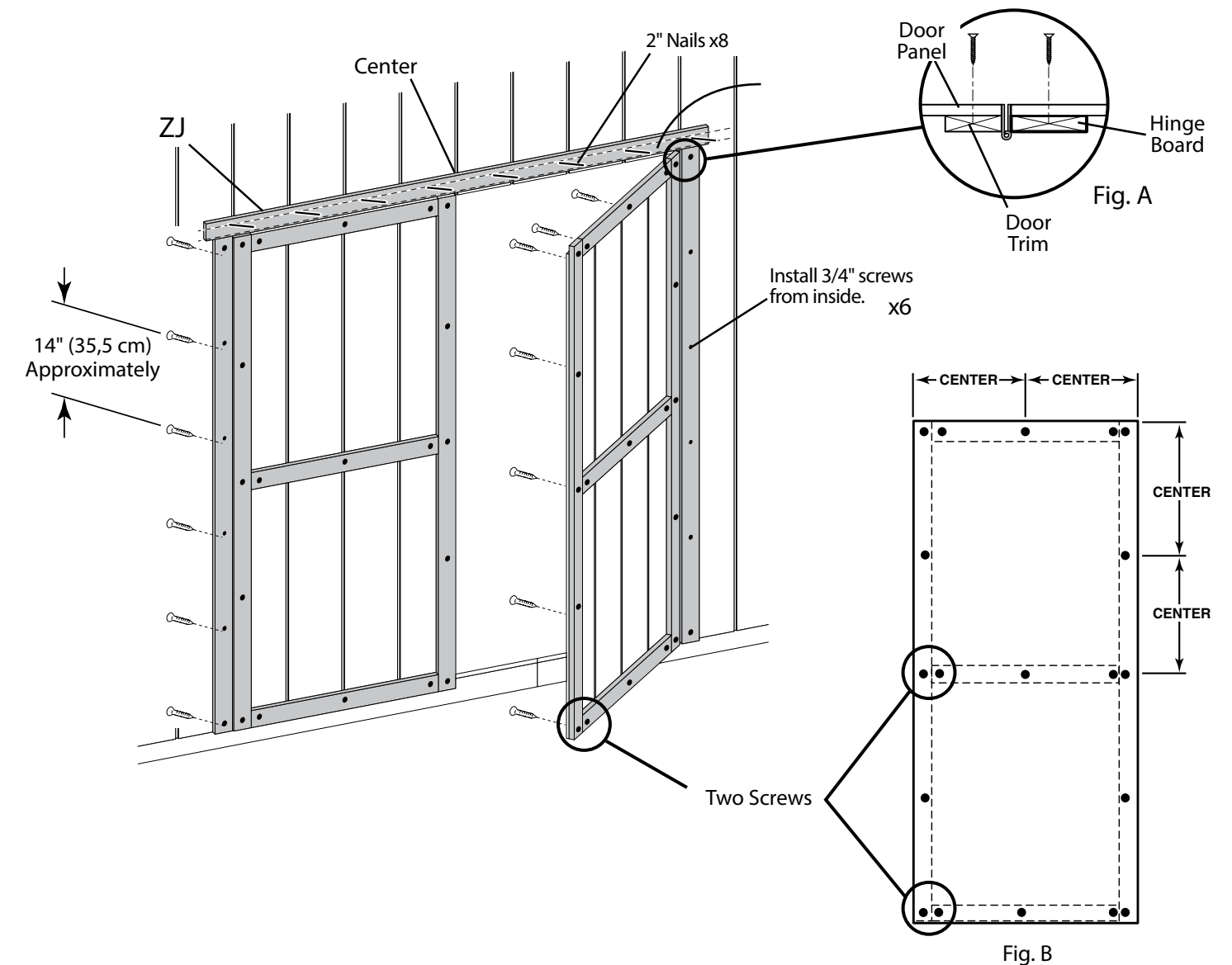
✓ BEGIN

- 1 Secure hinge boards from inside using 3/4" screws as shown (Fig. A).
- 2 Reinforce the door trim using 3/4" screws through door panel into trim (Fig. A). Locate screws as shown in Fig. B. Use two screws at seams.
- 3 Center trim **ZJ** over doors and secure using eight 2" finish nails into framing as shown.



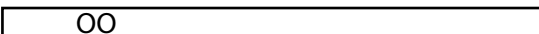
FINISH

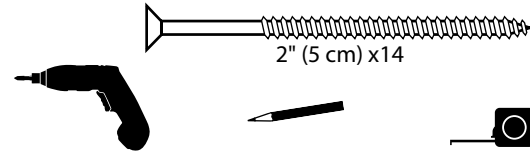
- 4 You have finished securing your door and trim.



DOOR WEATHERSTRIP

PARTS REQUIRED:

x2  OO
2 x 3 x 69" (5 x 7,6 x 175 cm)



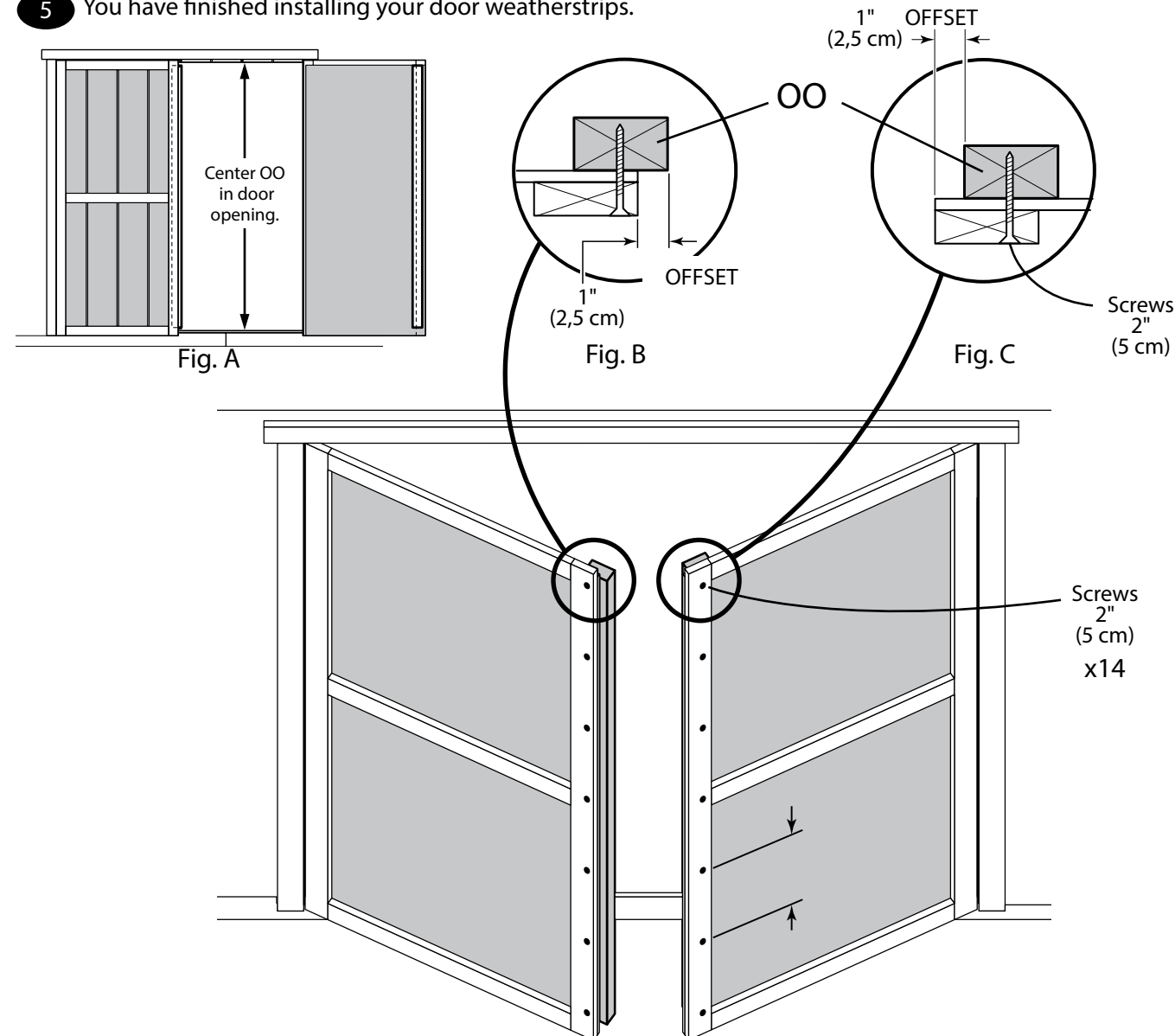
✓ BEGIN

- 1 With left door closed, center a weatherstrip OO vertically on the left door in the door opening (Fig. A). OO will offset the left door 1" OUT past the door trim 1" (Fig. B).
- 2 Secure OO using seven 3" screws through outside trim into OO (Fig. B)
- 3 On right door center OO vertically in door opening (Fig. A). OO will offset the right door 1" IN from the door trim (Fig. C).
- 4 Secure OO using seven 3" screws through outside trim into OO (Fig. C).



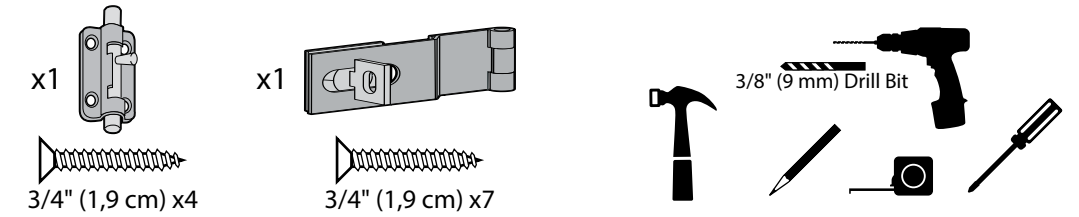
FINISH

- 5 You have finished installing your door weatherstrips.



DOOR HARDWARE

PARTS REQUIRED:



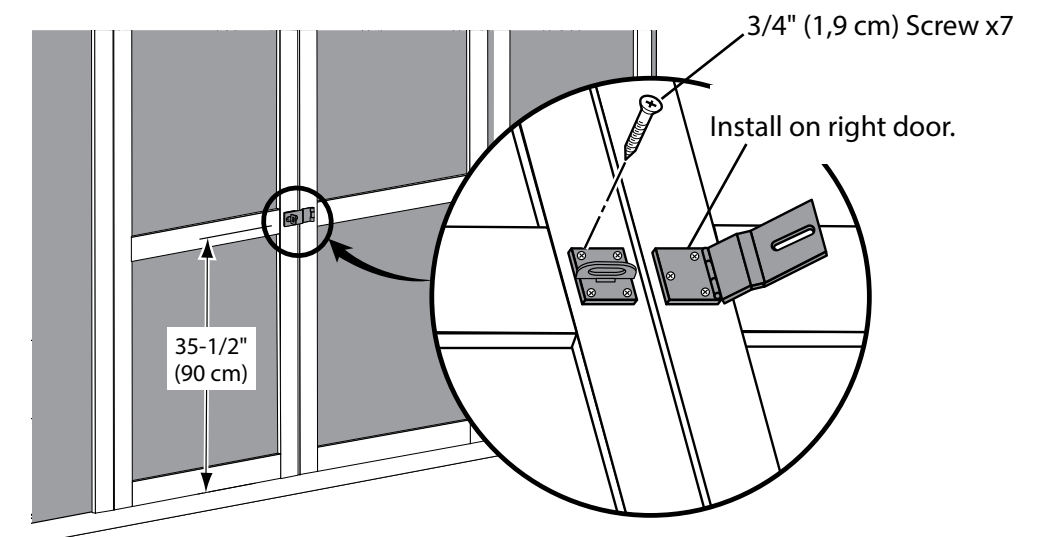
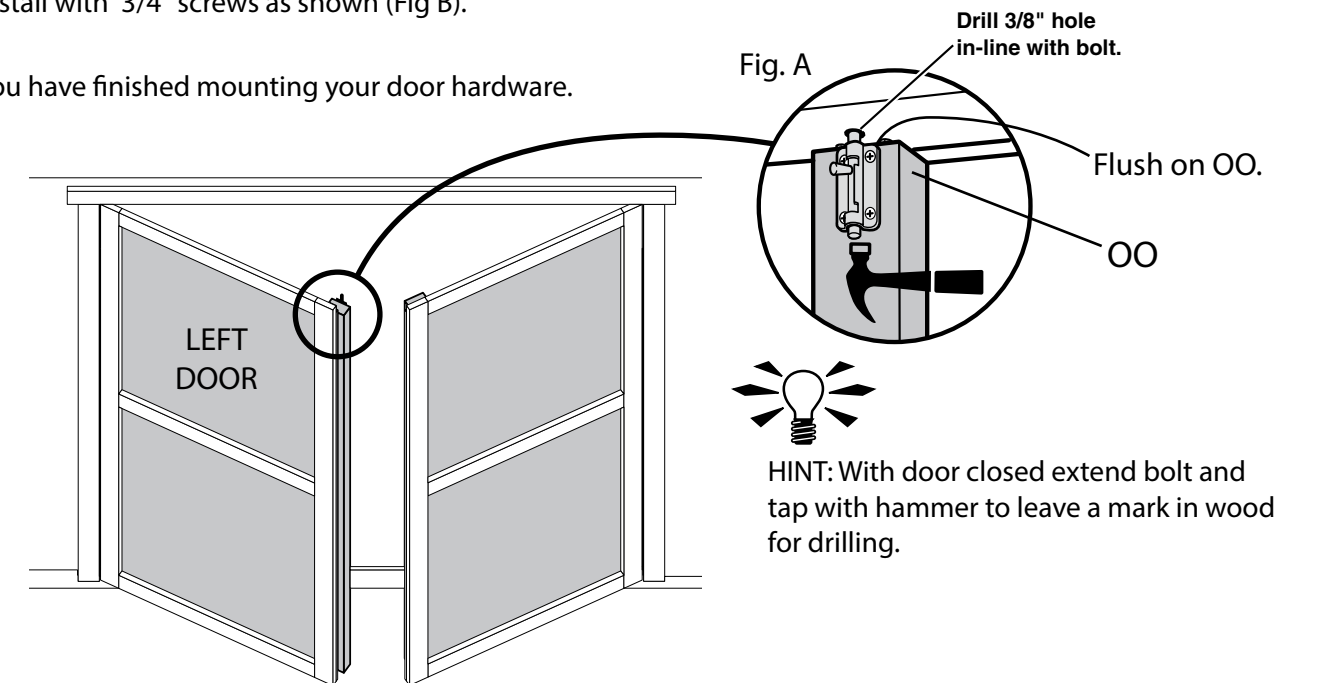
✓ BEGIN

- 1 Mount barrel bolt flush at top of OO on left door using 3/4" screws as shown (Fig A).
- 2 With door closed mark hole location for bolt to extend into.
HINT: Extend bolt to leave a mark in wood. Tap bolt with hammer. Drill 3/8" hole deep enough for bolt to slide into.
- 3 Install hasp on right door and latch on left door. Bottom edge of hasp is 35-1/2" (90 cm) up from bottom edge of door trim. Measure and mark locations and install with 3/4" screws as shown (Fig B).



FINISH

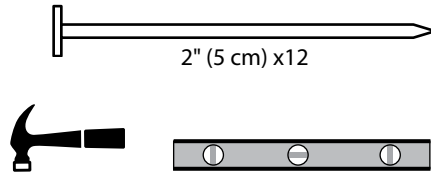
- 4 You have finished mounting your door hardware.



COLLAR TIES

PARTS REQUIRED:

x2 KP
1 x 4 x 96" (2,5 x 10 x 244 cm)



2" (5 cm) x 12

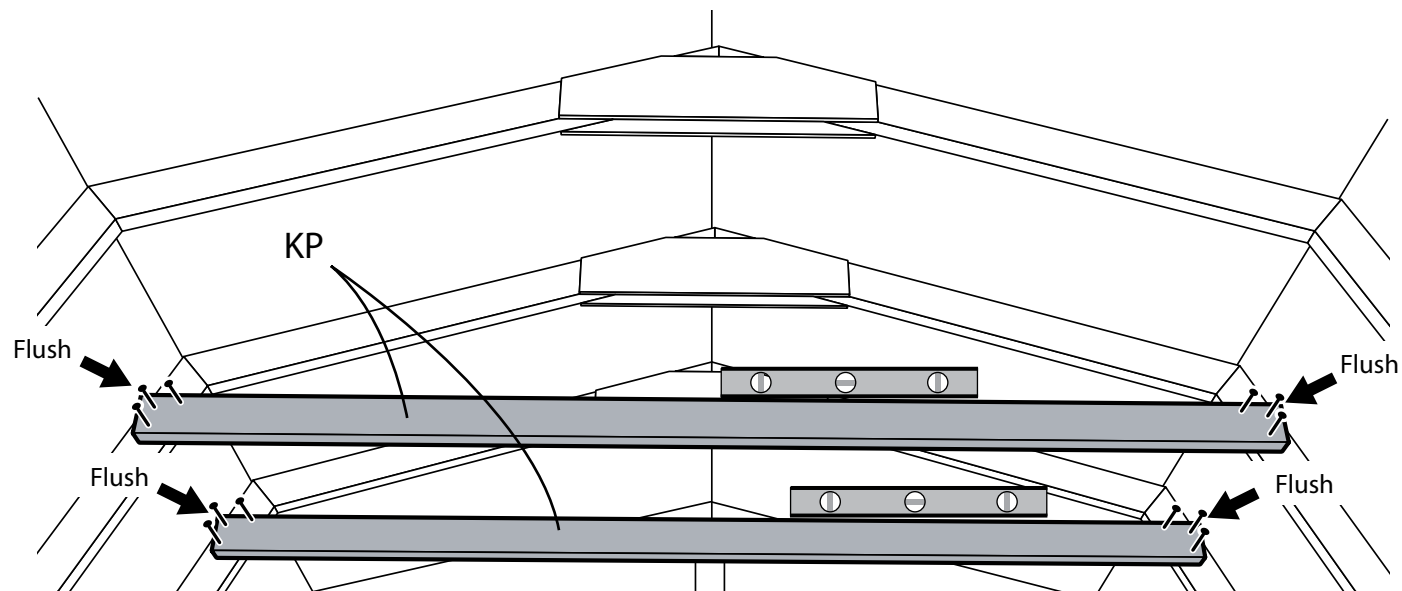
✓ BEGIN

- 1 Install a collar tie KP on the two rafters closest to the door opening.
- 2 Use three 2" nails at each side of collar tie. Collar ties should be flush to the roof panels. Ensure the collar ties are level before nailing.



FINISH

- 3 You have finished installing your collar ties.



DOOR

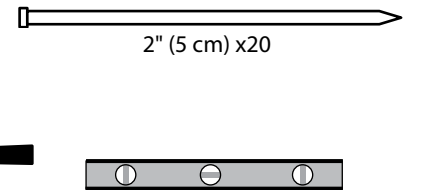


HINT: For best appearance, install collar ties on back side of rafters.

TRIM

PARTS REQUIRED:

x2 HQ
1 x 3 x 94-1/2" (2,5 x 7,6 x 240 cm)



2" (5 cm) x 20

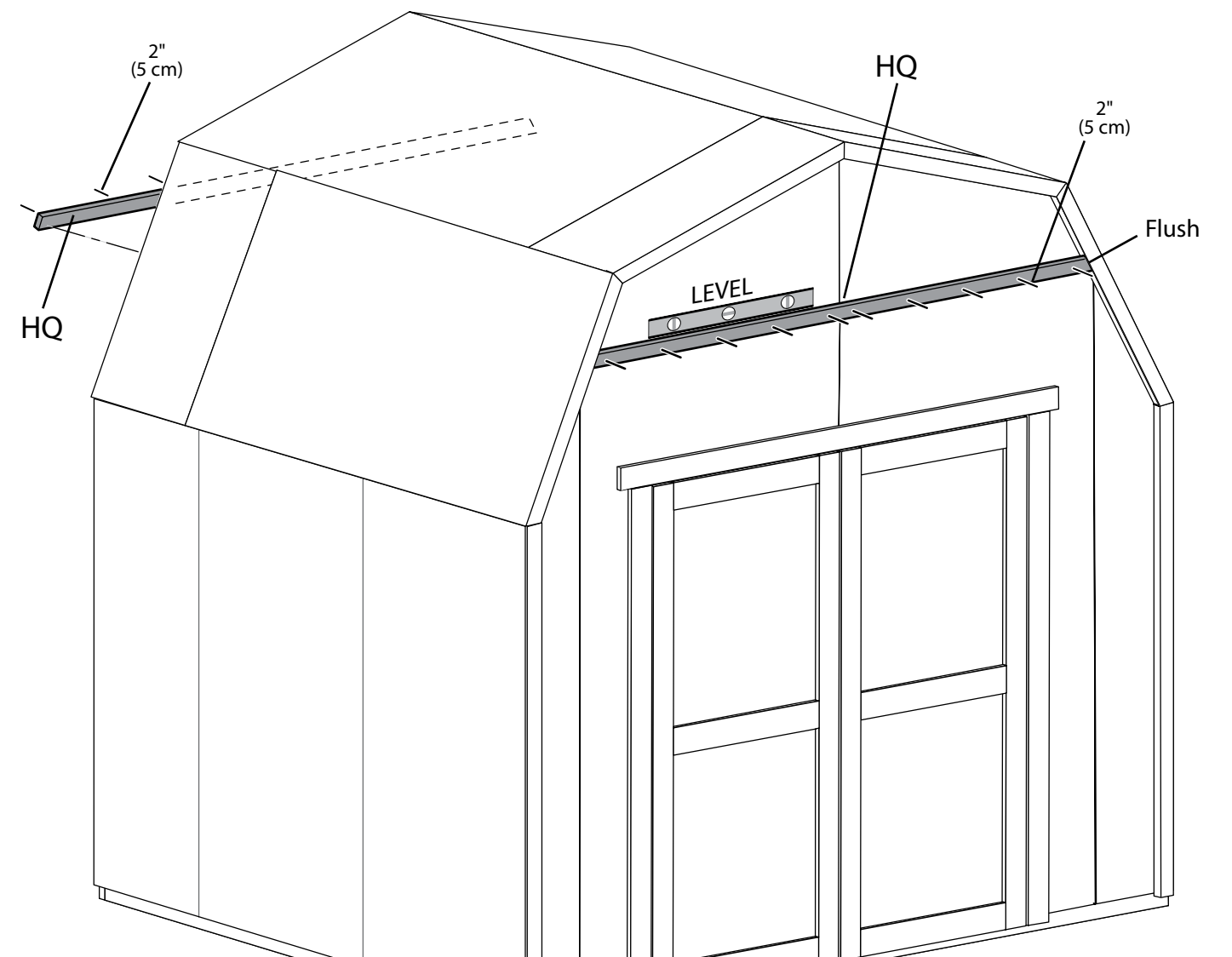
✓ BEGIN

- 1 Install HQ over seam of front wall panels using 2" finishing nails as shown.
- 2 Repeat Step 1 installing HQ over seam at back side.

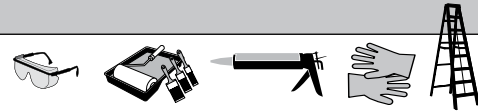


FINISH

- 3 You have finished installing the horizontal gable trim.



PAINT & CAULK
- NOT INCLUDED -

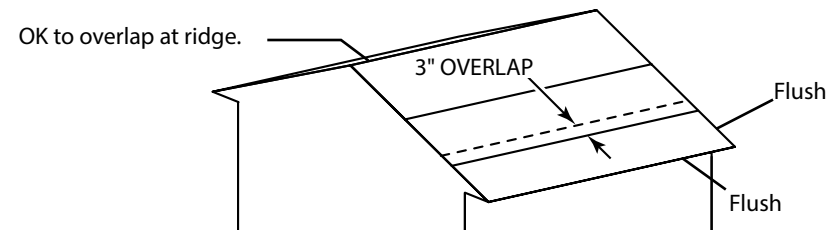


- Use acrylic latex caulk that is paintable. Caulk at all horizontal and vertical seams, between the trim and walls, and all around the door trim.
- Use a high quality exterior acrylic latex paint. When painting your building, there are a few key areas that can be easily overlooked that must be painted:
 - Bottom edge of all siding and trim
 - Inside of doors and all 4 edges

Note:
Prime all un-primed exterior wood before painting.
(Follow directions provided by manufacturer.)

ROOF FELT
- NOT INCLUDED -

- Install felt flush to all roof edges overlapping 3". Use minimal amount of roofing nails to hold in place.

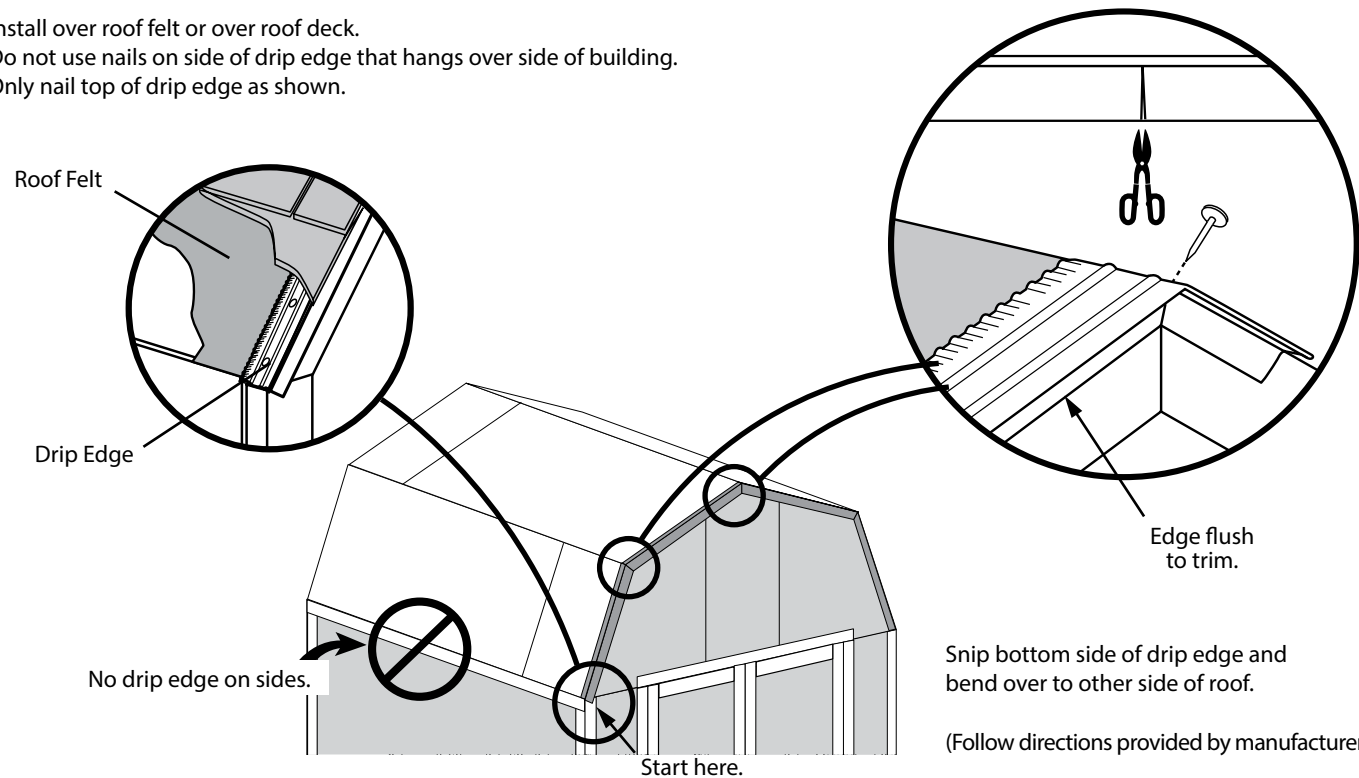


DRIP EDGE
- NOT INCLUDED -

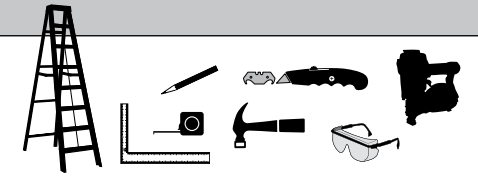


! Drip edge is only installed on the front and back sides of this shed.

- Install over roof felt or over roof deck.
- Do not use nails on side of drip edge that hangs over side of building.
- Only nail top of drip edge as shown.

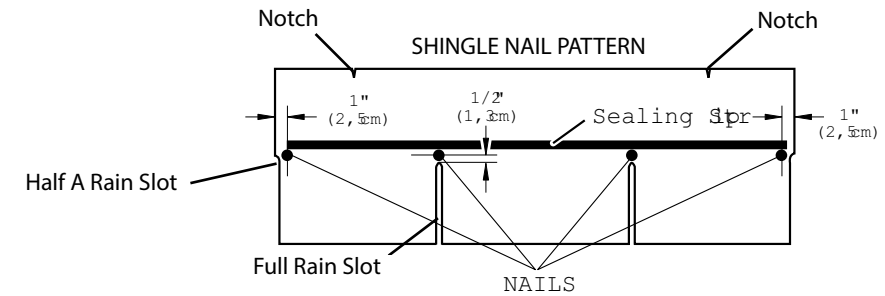


SHINGLES
- NOT INCLUDED -



- Follow directions provided by manufacturer and these instructions.

! Familiarize yourself with a 3-Tab Shingle.

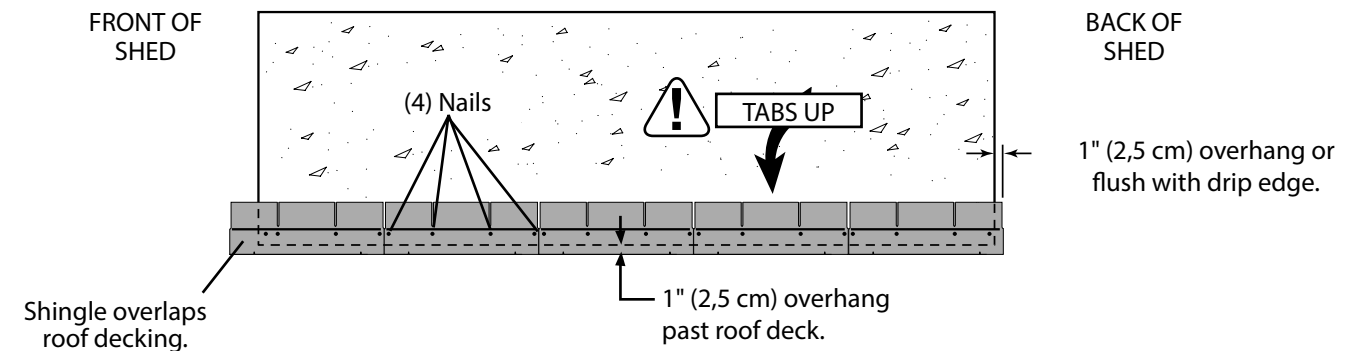


! NEVER DRIVE FASTENERS INTO OR ABOVE SEALING STRIPS.

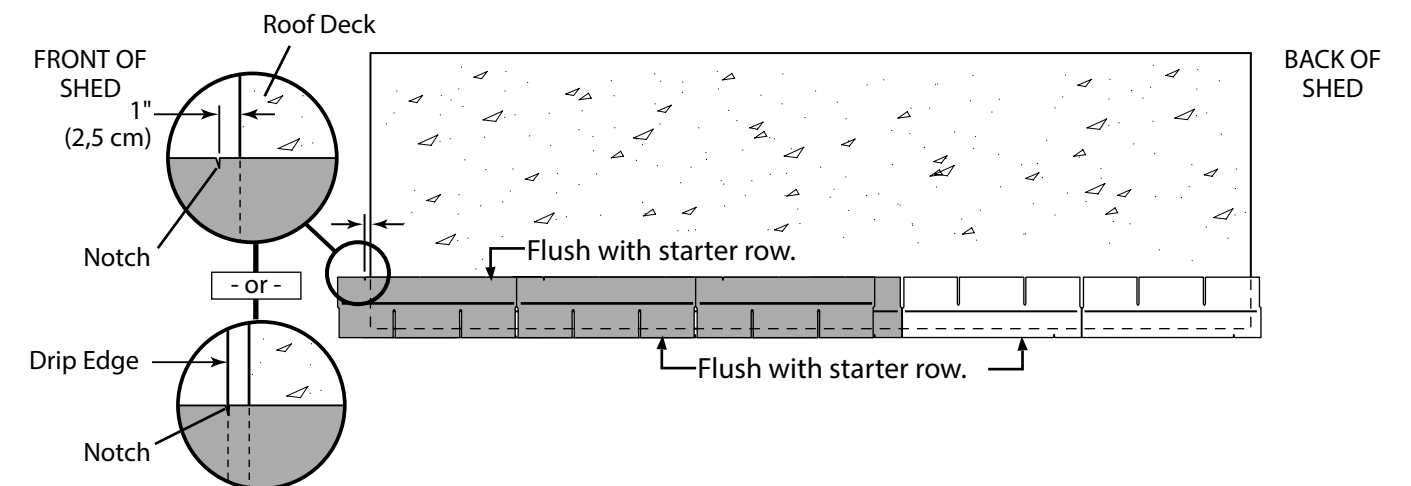
BEGIN

- 1 Install first starter row upside down and color up with a 1" overhang at back and bottom of roof panel. Use (4) nails per shingle. Starter row must be straight and level all the way across with lower edge of roof deck.

NOTE: If you have installed drip edge install shingles flush to drip edge.

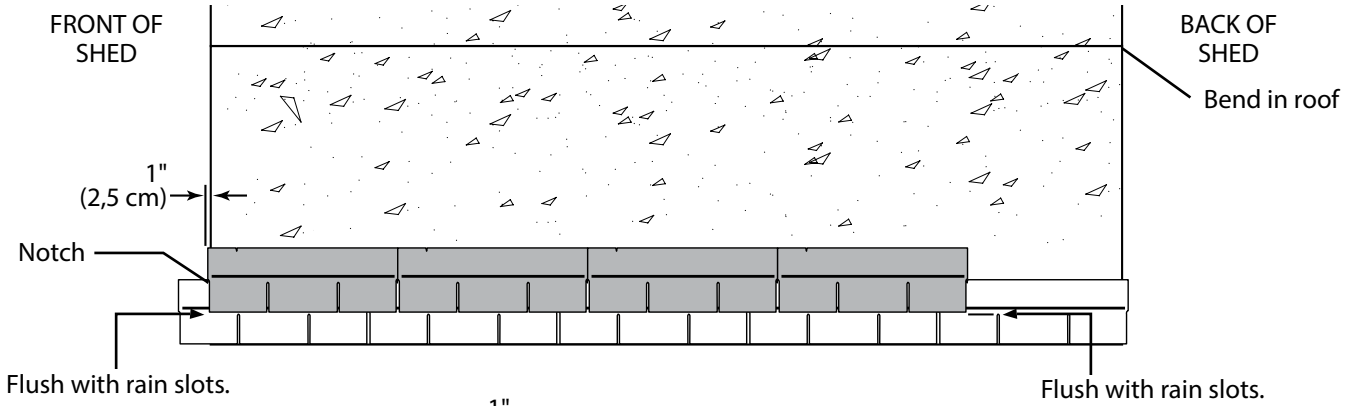


- 2 Beginning at front of shed, install first row of shingles with notch at 1" past roof edge or flush with drip edge.

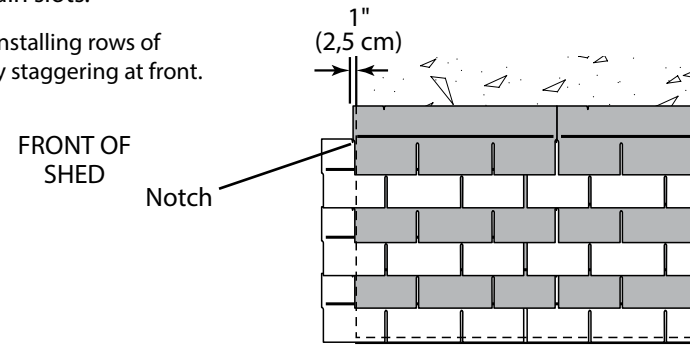


SHINGLES continued...

- 3 Install second row of shingles flush at top of first row's rain slots. Ensure 1" overhang or flush to drip edge at front, stagger each row.



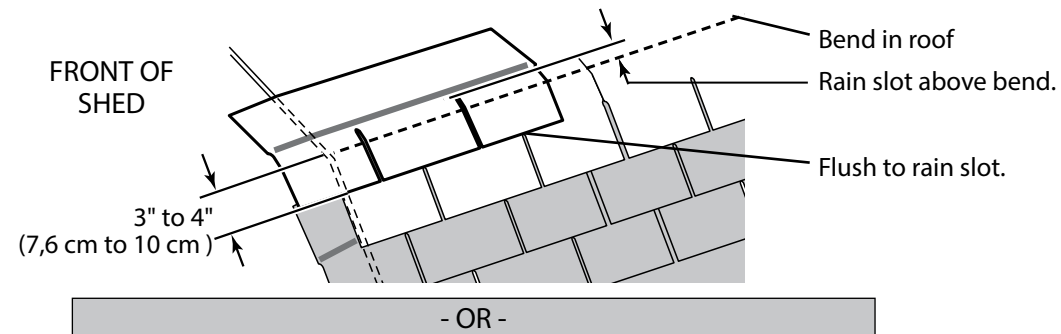
- 4 Continue installing rows of shingles by staggering at front.



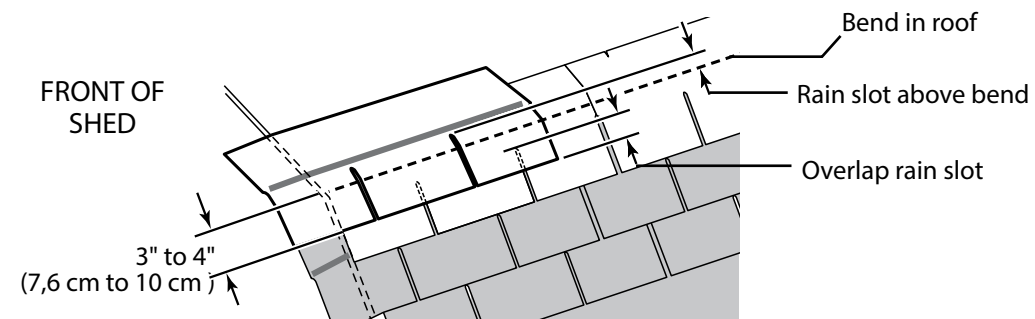
- 5 The shingle over the bend in the roof will be nailed down. You will need 3" to 4" of this shingle to extend downward over the bend for nailing.

Look for either of the following:

- If the rain slot of the shingle installed over the bend is ABOVE the bend and 3" to 4" of it overhangs down over the bend, continue shingling up to the peak. You have enough to nail shingle down over the bend.



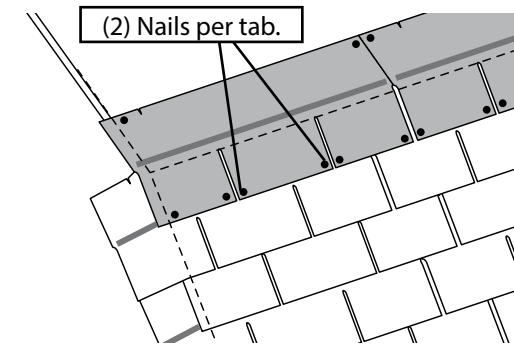
- If the rain slot of the shingle installed over the bend is BELOW the bend, install the shingle over the bend and overlap the rain slot to get the 3" to 4" overlap.



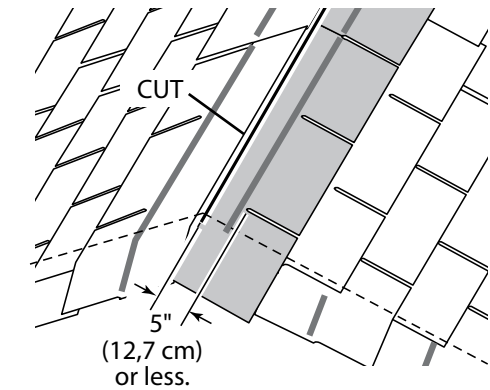
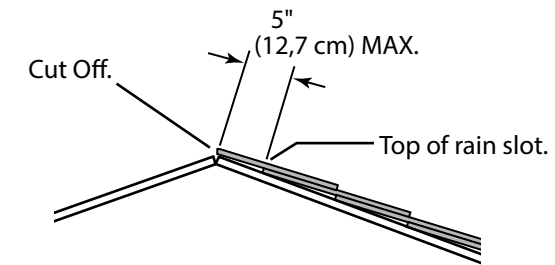
- ! The shingle OVER the bend must be installed with a 3" to 4" overlap AND the rain slot above the bend.

SHINGLES continued...

- 6 After shingles are installed over bend, nail down overlap using two roofing nails per tab.



- 7 Continue installing rows of shingles to the peak. At the peak make sure there is a maximum of 5" or less to the rain slot, as shown below. If shingles overlap at ridge cut to peak with a utility knife.

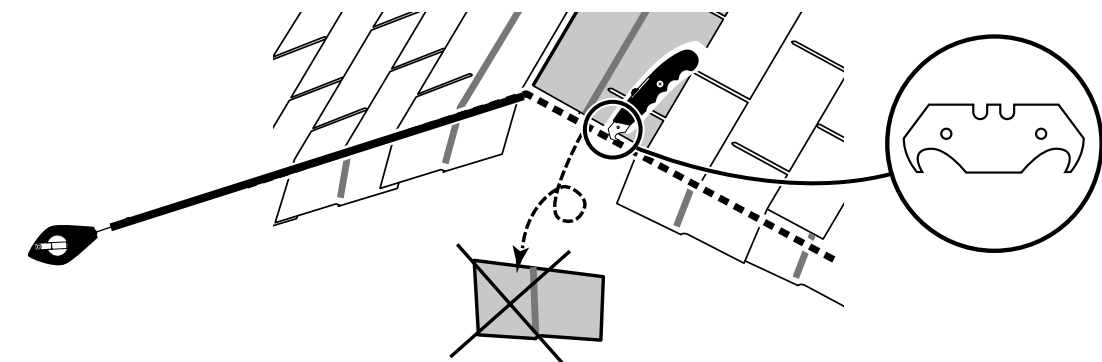


- ! If more than 5" to rain slot you must install another row of shingles.

- 8 Repeat steps 1 - 7 to shingle the opposite side of your roof. Trim shingles at ridge.

- 9 Once both sides are shingled you need to trim ends. Strike a chalk line 1" from edge.

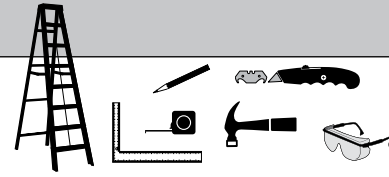
- 10 Using your shingle hooked blade carefully cut shingles along chalk line.



- 11 You have finished shingling your roof. Proceed to capping the ridge.

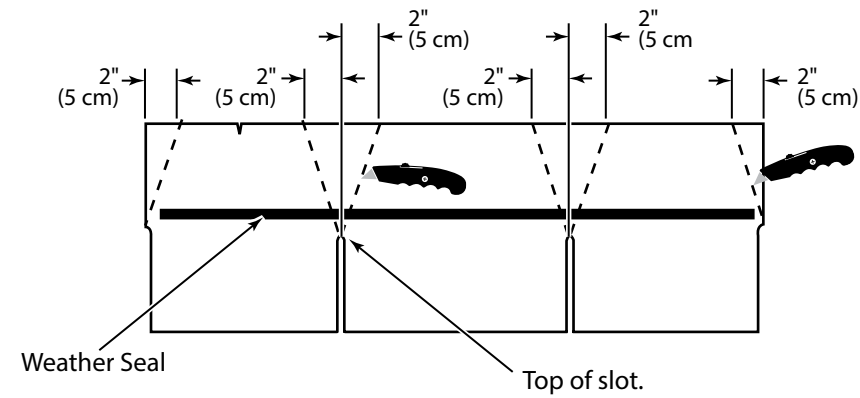
SHINGLES - RIDGE CAP

• You will finish off the top of the roof with a ridge cap made from shingles.



✓ BEGIN

1 Cut shingles into THREE pieces. Hint: Use cut-off pieces first.

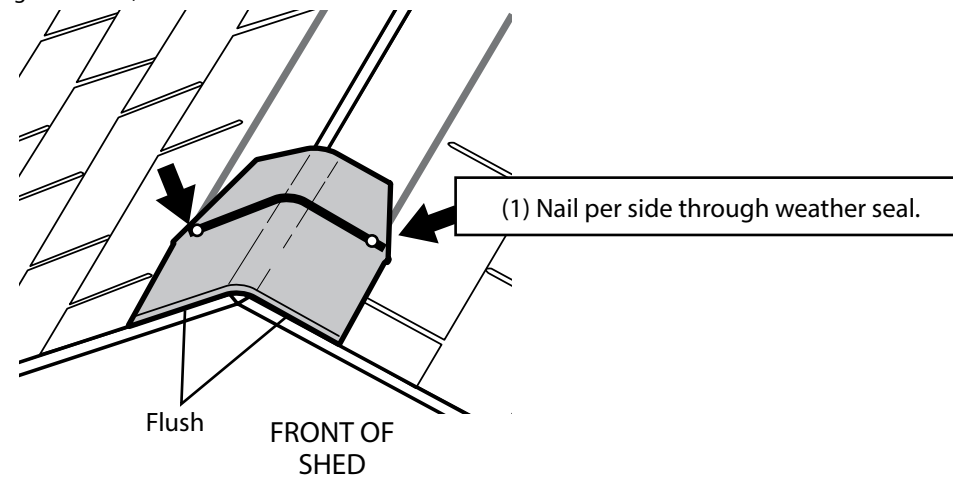


Score shingle,
then snap-off angled cut.

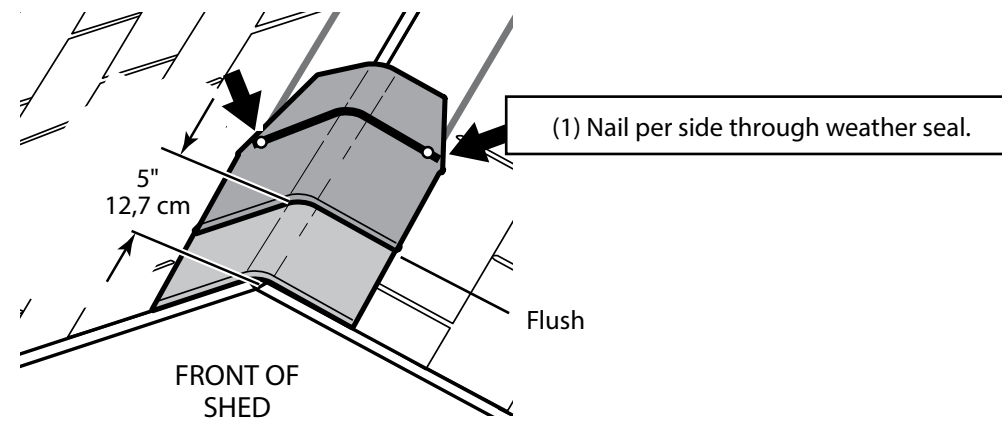
24 to 26
Pieces

Note: • You will need about 24 - 26 cut pieces.

2 Install first ridge cap flush to shingles at front, as shown.

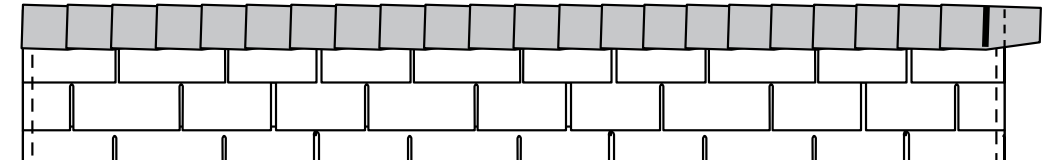


3 Install second ridge cap 5" back, as shown.

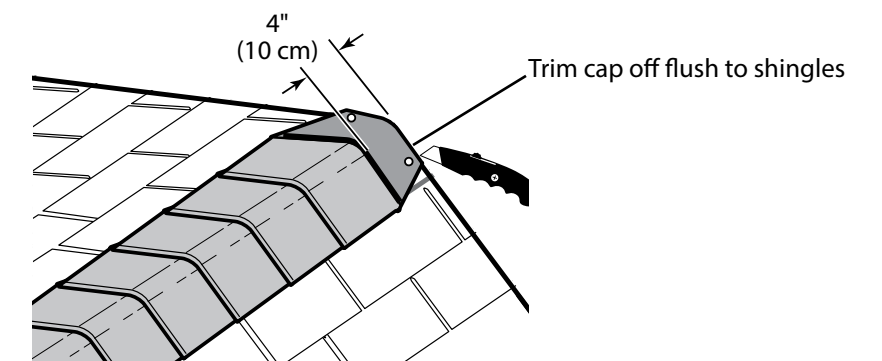


SHINGLES - RIDGE CAP continued...

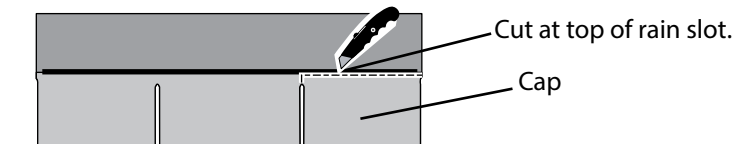
4 Continue installing ridge cap to back of roof.



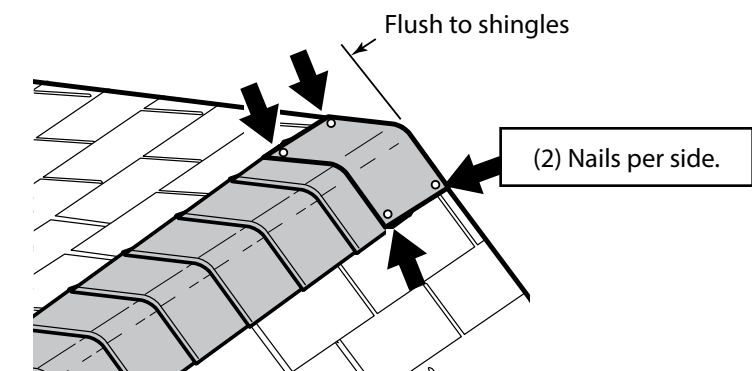
5 Make sure there is 4" between the shingle-color and edge of shingles.



6 When you have 4" minimum of shingle color cut one piece to cap your roof.



7 Install flush to shingles.



FINISH

8 You have finished your ridge cap.

WARRANTY REGISTRATION

Please complete your warranty registration to properly validate your warranty.

Register your product online at: www.OnlineWarranty.net

LIMITED CONDITIONAL WARRANTY*

Backyard Storage Solutions, LLC warrants the following:

1. Every product is warranted from defects in workmanship and manufacturing for 1 year.
2. All accessories, hardware and metal components are warranted for 2 years.
3. All Oriented Strand Board (OSB) is warranted for 2 years
4. Siding and Trim is warranted for:
10 years: Value Series / Solar Shed
12 years: Classic Series / Architectural Series
15 years: Big Buildings
5. Solar Shed windows are warranted for 1 year.
6. Cedar lumber is warranted for 15 years.
7. Preserved Pine is warranted for 10 years.

Backyard Storage Solutions, LLC will repair, replace or pay for the affected part. In no event shall Backyard Storage Solutions, LLC pay the cost of labor or installation or any other costs related thereto. All warranties are from date of purchase. If a cash refund is paid on an affected part, it will be prorated from the date of purchase.

CONDITIONS

The warranty is effective only when:

1. The unit has been erected in accordance with the assembly instructions.
2. The unit has been properly shingled and painted or stained and reasonably and regularly maintained thereafter.
3. The failure occurs when the unit is owned by the original purchaser.
4. Backyard Storage Solutions, LLC has received the warranty registration card within thirty (30) days of purchase and notification of the failure in writing within the warranty period specified above.
5. Backyard Storage Solutions, LLC has had reasonable opportunity during the sixty (60) days following receipt of notification to inspect and verify the failure prior to commencement of any repair work.

REQUIREMENTS

Storage Buildings

To validate your warranty, it is necessary to properly maintain your Backyard Storage Solutions, LLC unit; shingle the roof and paint or solid-colored stain the siding using quality, 100% acrylic latex exterior product with a minimum of two (2) coats within thirty (30) days of assembly; caulk above all doors and all horizontal and vertical trim boards; paint and seal all exposed edges, sides and faces of siding/trim and OSB siding to include all exterior walls and all sides and all edges of doors.

Gazebos & Pergolas

To validate your warranty, it is necessary to properly maintain your Backyard Storage Solutions, LLC unit. This includes treating all of the exposed cedar and pine surfaces on your gazebo or pergola structure with an exterior grade wood preservative, an exterior oil-based semi-transparent stain, an acrylic latex exterior paint or an acrylic latex solid color exterior stain within 30 days of assembly and as needed thereafter to maintain your warranty.

Keep vegetation trimmed away from building and make sure siding panels and trim do not come in contact with masonry or cement. The minimum ground clearance for siding must be one half inch (½ inch) from concrete slab or two and one half inches (2 ½") from the ground when building is erected or constructed on a treated wood floor kit. Water from sprinklers must be kept off unit. In no event will Backyard Storage Solutions, LLC be responsible for any indirect, incidental, consequential or special damages nor for failure(s) that are caused by events, acts or omissions beyond our control including, but not limited to, misuse or improper assembly, improper maintenance (which eventually leads to rot or decay) and acts of God. Backyard Storage Solutions, LLC will not be held responsible for any labor costs incurred to construct your unit.

This warranty gives you certain specific rights that vary from state to state.

CLAIM PROCEDURE

To make a claim under this warranty, you can either call 1-888-827-9056 or email: customerservice@backyardproducts.com.

Please have ready the information below when you call or include the information in your email:

1. The model and size of the product.
2. A list of the part(s) for which the claim is made.
3. Proof of purchase of the Backyard Storage Solutions, LLC item, as shown on the original invoice.
4. Run code: found on exterior product label or assembly instructions enclosed in the product package.

All other inquiries can be mailed to:

Backyard Storage Solutions, LLC
Attn: Customer Service
1000 Ternes
Monroe, MI 48162

***WARRANTY TERMS MAY VARY OUTSIDE THE U.S.A.**

IMPORTANT: This is your warranty certificate.

Heartland LDR: 1/19/2016