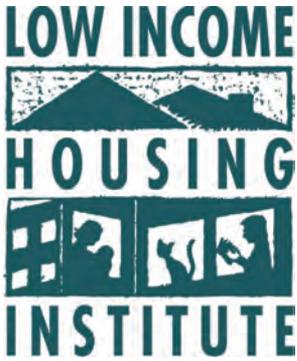


TINY HOUSE

BUILDING ASSEMBLY INSTRUCTIONS



SEATTLE CENTRAL
COLLEGE

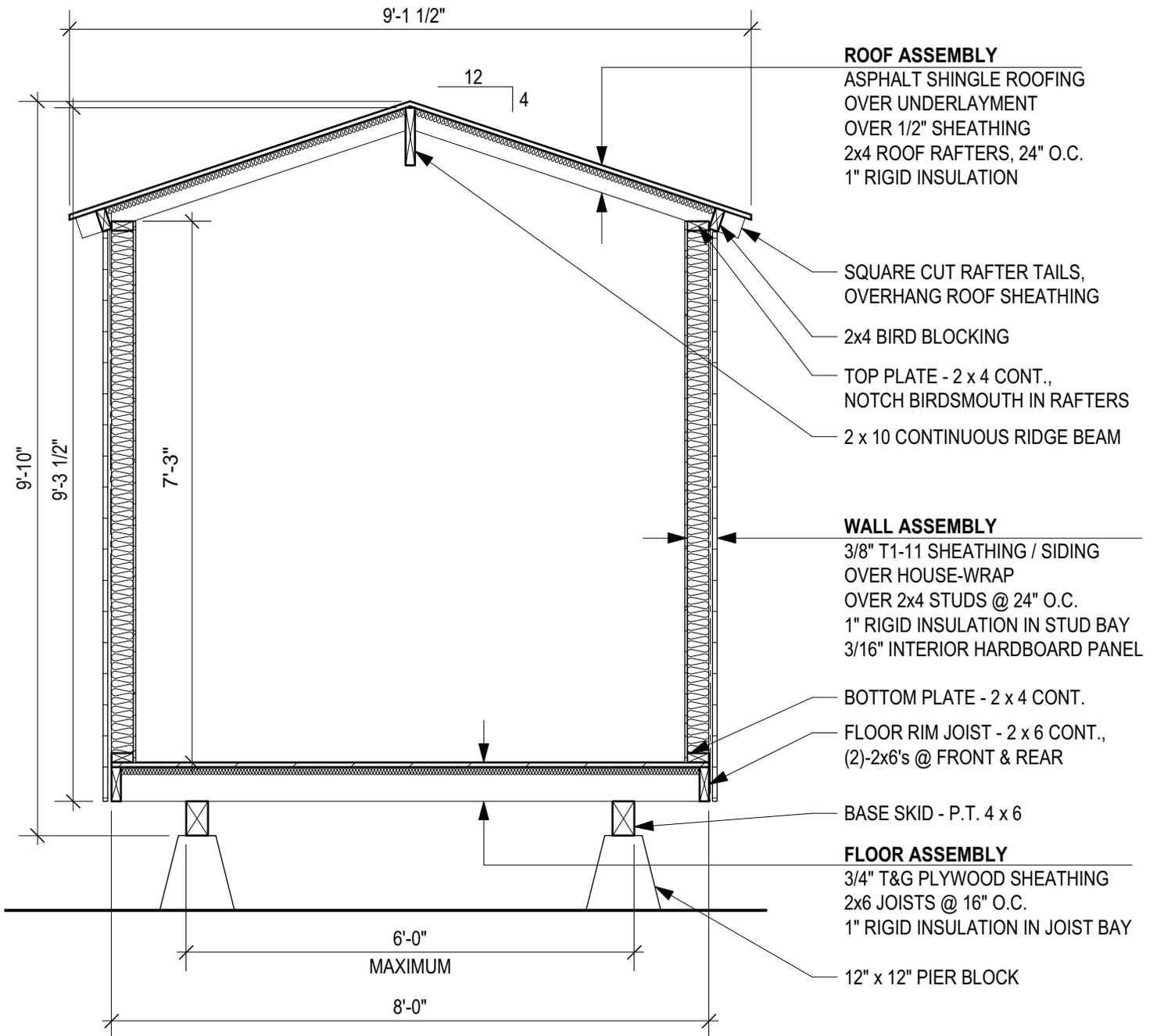


environmental
WORKS
Community Design Center



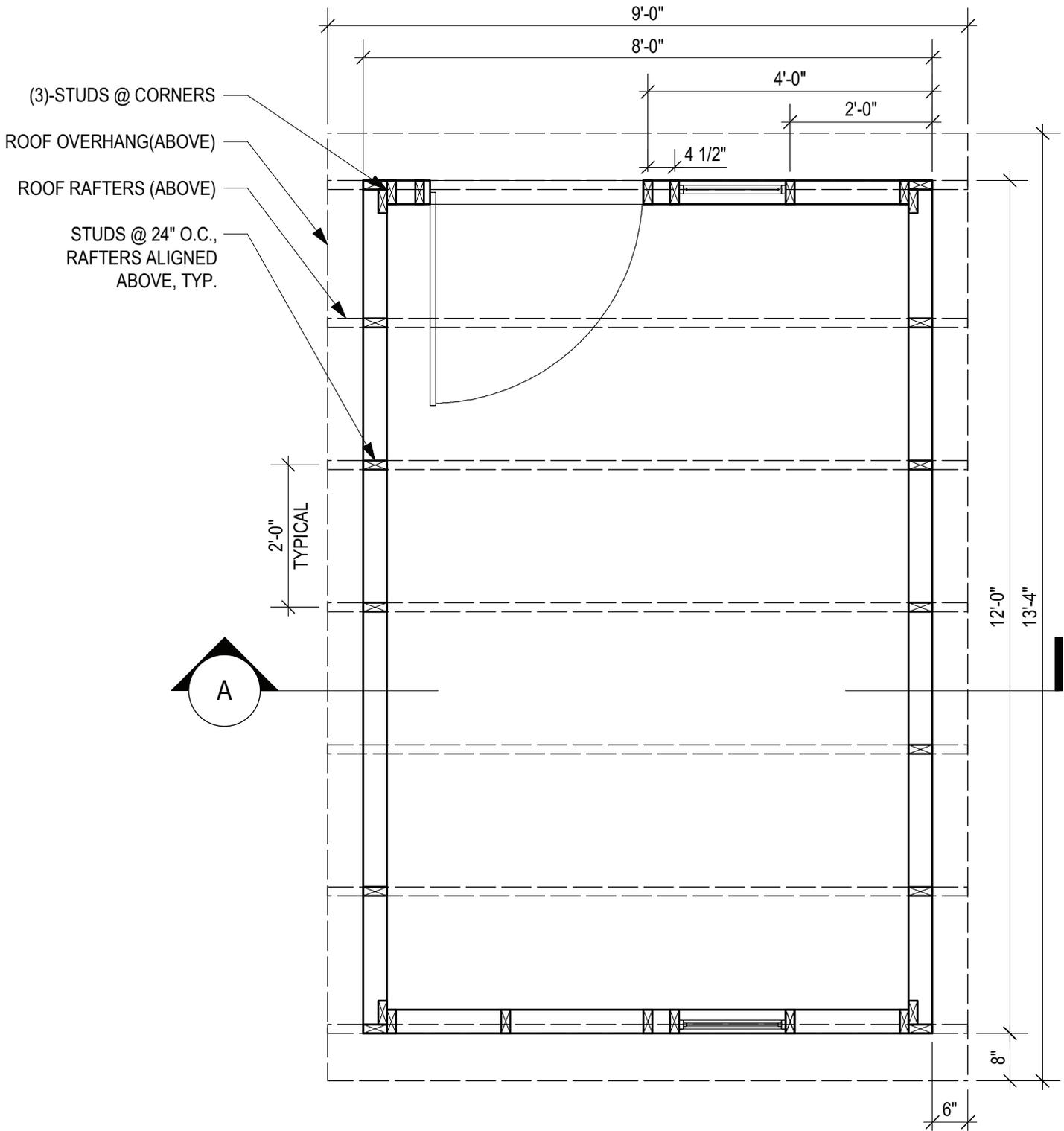
Materials List

| PART | TYPE | SKU | DESC | QTY |
|---------------------------|--------------------|----------------------|--|-----|
| FOUNDATION | | | | |
| Skids | pt 4x6 | 384658 | 4x6-12F PT CON SELECT FIR | 2 |
| Joist Header | 2x6 | 186714 | 2x6-12F #2/BTR KD HEM-FIR | 2 |
| Joists | 2x6 | 186695 | 2x6-8FT #2/BTR KD HEM FIR | 12 |
| Subfloor | t&g 3/4" ply | 915394 | 23/32" 4'x8' T&G PLYWOOD | 3 |
| Joist Hanger | hurricane tie | 102924 | H2.5AZ 18GA ZMAX HURRICANE TIE | 24 |
| Nails for hanger | hot galv 1-1/4" | 132272 | 1-1/4" HOT GALV JOIST HGR 1 LB | 1 |
| ridgid insulation | 1" foam | 614637 | 1"x4'x8' EPS POLY INSULATION | 3 |
| WALL A (door) | | | | |
| studs | 2x4 | 335373 | 2X4-14FT PREMIUM KD HEM FIR | 3 |
| plates | 2x4 | 291981 | 2x4-16FT PRIME KD HEM FIR | 1 |
| gable studs | 2x4 | 161640 | 2X4-96" PREMIUM KD HEM FIR | 1 |
| door & window frame | 2x4 | 335373 | 2X4-14FT PREMIUM KD HEM FIR | 1 |
| door | Right Hung Door | 663624 | 36"x80" RH BASIC FLUSH IS NBM | 1 |
| window (Online Item Only) | Single Hung Window | Internet # 203951019 | 18x36" TAFCO SINGLE HUNG VINYL WINDOW | 2 |
| WALL B | | | | |
| studs | 2x4 | 335373 | 2X4-14FT PREMIUM KD HEM FIR | 5 |
| plates | 2x4 | 186602 | 2X4-12FT PREIUM KD HEM FIR | 2 |
| WALL C (back) | | | | |
| studs | 2x4 | 335373 | 2X4-14FT PREMIUM KD HEM FIR | 3 |
| plates | 2x4 | 291981 | 2x4-16FT PRIME KD HEM FIR | 1 |
| gable studs | 2x4 | 161640 | 2X4-96" PREMIUM KD HEM FIR | 1 |
| door & window frame | 2x4 | 161640 | 2X4-96" PREMIUM KD HEM FIR | 1 |
| window (Online Item Only) | Single Hung Window | Internet # 203951019 | 18x36" TAFCO SINGLE HUNG VINYL WINDOW | 2 |
| WALL D | | | | |
| studs | 2x4 | 335373 | 2X4-14FT PREMIUM KD HEM FIR | 5 |
| plates | 2x4 | 186602 | 2X4-12FT PREIUM KD HEM FIR | 2 |
| INTERIOR | | | | |
| fiberglass insulation | 23x93" batt | 585873 | R-13 FACED INSULATION BATTS 23"x98" | 2 |
| ridgid insulation | 1" foam | 614637 | 1"x4'x8' EPS POLY INSULATION | 3 |
| sheathing | 4x8 ply | | 1/4" 4x8' PLYWOOD | |
| EXTERIOR SIDING | | | | |
| house wrap | Everbilt | 100001507 | EVERBILT 9'x150' 76 GRMS HOUSE WRAP | 1 |
| ext sheathing | t&g 3/8" T1-11 | 509095 | 3/8" 4'x8' SMART SIDE SIDING | 10 |
| ext gable sheathing | lap siding | 694876 | 8'x12' TEXTURED STRAND LAP SDNG | 2 |
| gable flashing | z-bar | 322946 | 3/8" GALV Z-BAR | 2 |
| corner detail | 3/4" cedar | 161897 | 3/4x4-8FT CEDAR BOARD | 8 |
| door detail | 3/4" cedar | 161897 | 3/4x4-8FT CEDAR BOARD | 3 |
| window detail | 3/4" cedar | 161897 | 3/4x4-8FT CEDAR BOARD | 3 |
| ROOF FRAME | | | | |
| rafter | 2x4 | 186552 | 2x4-10FT PREMIUM KD HEM FIR | 9 |
| lookout | 2x4 | 186602 | 2X4-12FT PREIUM KD HEM FIR | 1 |
| ridge | 2x10 | 186924 | 2X10-16FT #2 & BTR KD HEM FIR | 1 |
| bird block | 2x4 | 186602 | 2X4-12FT PREIUM KD HEM FIR | 2 |
| ROOF | | | | |
| sheathing | 4x8 ply | 915378 | 15/32" 4x8' PLYWOOD | 5 |
| felt | #15 felt | 258830 | #15 FELT 432SQFT | 1 |
| drip edge flashing | steel roof edge | 894803 | 1-1/2" GALV STEEL ROOF EDGE | 3 |
| shingles | 25 yr shingles | 1001188139 | SUPREME METRIC ESTATE GRAY | 8 |
| staples | T50 | 172618 | ARROW 1/4" T50 GALV STAPLES 1250pk | 1 |
| roofing nails | 3/4" galv | 193534 | 3/4" ELECTRO GALV ROOFING 5 LB | 1 |
| HARDWARE | | | | |
| framing nails | 8d | 944319 | 8D 2-3/8" COATED SINKER 5lb | 2 |
| framing nails | 16d | 944327 | 16D 3-1/4" COATED SINKER 5LB | 2 |
| OTHER | | | | |
| Membrane Flashing | 75' | 305163 | Grace Vycor Plus 6 in. x 75 ft Roll Full Adhered Flashir | 1 |
| Sheet Vinyl | 8' x 12' | 728266 | | 1 |
| Hardboard Panel | 3/16" X 4' x 8' | 832780 | Hardboard Tempered Panel | 10 |
| Fascia Board | 1" x 6" x 12' | 1000935543 | 1 in x 6in x 12ft SPF S1S2E White Prime Select Fascie | 2 |
| Rigid Insulation | 1" foam | 614637 | | 9 |



Building Section

SCALE: 1/2" = 1'-0"



Floor Plan

SCALE: 1/2" = 1'-0"

Safety Information

*Adapted from the Habitat for Humanity
Construction and Safety Policy and Plan
<http://www.habitatpgw.org/>*

Introduction

Construction sites can have numerous dangers. Start a project by making safety a primary concern at the job site. Recognize that safety is the responsibility of each member of the build team. Try to be conscious of the safety of others as well as yourself as you move around and work on the job site.

Be cautious in your work and ask questions of experienced build team members. Do not go ahead with a task if you are uncertain about how it is done, or if you are unable to do it. Safety is based on knowledge, skill and an attitude of care and concern. Before work starts a job supervisor should instruct each worker about the correct and proper procedures for performing each task. This should familiarize the worker with the potential hazards of doing the tasks and advise him or her as to how such hazards can be minimized or eliminated.

Guidelines for a Safe Attitude

1. THINK before you do your work or task.
2. If you are uncertain about how to do a task or how to operate a power tool — ASK A SUPERVISOR.
3. Concentrate on your task and eliminate distractions.
4. Know where the first-aid kit is located and how to get emergency help.
5. Inspect all power tools, hand tools, ladders and scaffolding on a daily basis.
6. Advise your supervisor IMMEDIATELY of any unsafe or hazardous tool or condition.

Proper Safety Equipment

Proper clothing is as essential to safety as the proper selection and use of tools. Wear clothes and gloves that are appropriate for the work and weather conditions. Loose clothing is dangerous around power tools.

Workers shall wear work boots or thick-soled shoes at all times when on a construction site. Any worker wearing sandals or other types of inappropriate footwear shall not be permitted to remain at a construction site.

Hard hats are to be worn during the framing phase of construction, or when required by a supervisor, and are to be made available to workers on each job site at all times.

Protective glasses will be available for every construction worker. A worker must wear protective glasses any time he or she is operating a power tool or when instructed by a supervisor.

Each worker must wear a dust mask when installing insulation,

sanding or when instructed by a supervisor.

Ear plugs must be worn when using a power tool for a prolonged period of time or when instructed by a supervisor. Ear plugs are to be made available to workers on each job site at all times.

Power Tools and Other Electrical Equipment

A power tool should not be used without proper instruction on its use and on what can happen if the tool is not used properly. The instruction should be done by a qualified person and should be given to all workers; even experienced do-it-yourselfers should receive instruction. The trainee should use the power tool in the presence of the instructor, until the instructor is satisfied that the trainee knows how to use the power tool properly.

Never lower or carry a power tool by its cord. Clean tools daily. Power tools should be checked for defective switches, cords, plugs and proper grounding. Defective tools should not be used and should be reported to the supervisor (do not wait until the end of the day).

To avoid electrical shock, the following rules must be obeyed:

1. A three-pronged plug must be used on all electric power tools.
2. Extension cords must not have frayed insulation or be fastened with staples, hung from nails or suspended from wires.
3. All temporary lights must be equipped with non-conductive guards.

Hand Tools

Always select the correct type and size of tool for your work and be sure it is sharp and properly adjusted. Guard against using any tool if the handle is loose or in poor condition. Dull tools are hazardous to use because excessive force must be used to make them cut. Oil or dirt on a tool may cause it to slip and cause an injury. When using tools, hold them correctly. Most edged tools should be held in both hands with the cutting action away from yourself. Avoid using your hand or fingers as a guide to start a cut, but if it is necessary, use extreme caution. Handle and carry tools with care. Keep edged and pointed tools turned downward. Carry only a few tools at one time unless they are mounted in a special holder or carried in a tool belt. Anyone working with a hammer at a height should

wear a hammer loop or tool belt, and, when not in use, the hammer should be kept in the loop or belt and not placed on a sloping surface or in a precarious position. Do not carry sharp tools in your pockets. When not in use, tools should be kept in special boxes, chests or cabinets.

A special word on saws

1. Don't bind the blade of any saw. When cutting long panels, the blade may bind, and the saw mill will catch and kick back toward the operator. Use small wood wedges or shim shingles to spread the saw cut as you go along.
2. Maintain the blade guard. A spring-actuated blade guard often can become bent and won't slide quickly, or the spring can become stretched so the return is slow. Repair any damage to the guard as soon as it happens, and NEVER tie the guard back out of the way.
3. Support what you are working on properly. Never attempt to cut something that could tilt or fall and cause the saw to slip.

Ladders

Inspect a ladder before you use it. If the ladder is unsafe, don't use it. Look for wear and tear, loose rungs and defects. Use a ladder that will reach the work. An extension ladder should reach 3 feet above the work level. Move your ladder with your work. If both of your shoulders are extended outside the ladder while you are working, you are reaching too far. When using an extension ladder, use the "4-to-1" rule: For every 4 feet of height, move the bottom of the ladder 1 foot away from the wall. A ladder is pitched at the proper, safe angle if you can grasp a rung at shoulder height.

Place your ladder on solid footing. If there is a danger of the ladder moving while you work, tie it down. If there is a danger that the ladder will be hit, barricade it. If the feet of the ladder are not level, dig the ground out under one foot with the claw of a hammer rather than raise one foot with blocks.

Never use an aluminum ladder in the vicinity of electrical lines and never use a ladder outdoors during inclement weather or on very windy days.

Carry tools and materials in proper carrying devices and keep your hands free for climbing. When climbing, always face the ladder.

Clean Work Site

A clean work place is a safe work place. This refers to the neatness and good order of the construction site. Maintaining good housekeeping contributes to the efficiency of the worker and is important in preventing accidents.

Position building materials and supplies in carefully laid out piles to allow adequate aisles and walkways. Clean up all

rubbish and scrap materials on a daily basis. Do not permit blocks of wood, nails, bolts, empty cans, pipe, wire or other materials to accumulate on the work site. They interfere with work and can constitute a hazard. Keep tools and equipment that are not being used in chests, panels or tool boxes. This protects the tools and the workers.

Never leave a work site unguarded unless all tools and materials have been properly secured.

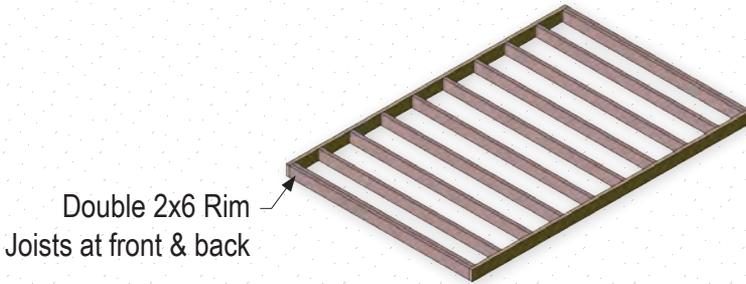
Emergency Medical Care

If someone is injured on the job, contact your supervisor immediately and

summon any needed medical help. You also should use the supplies located in the first-aid kit to stabilize the injury as much as possible until medical help arrives.

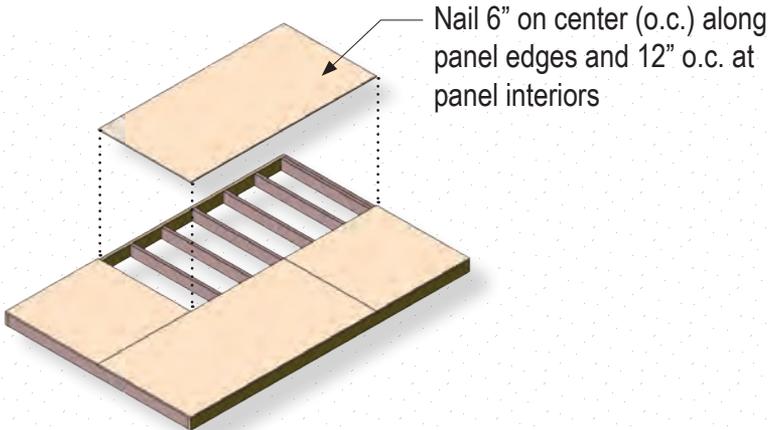
Step 01

Materials: 2x6 Floor Joists - 16d Framing Nails



Step 02

Materials: T&G 3/4" Plywood; 16d Framing Nails

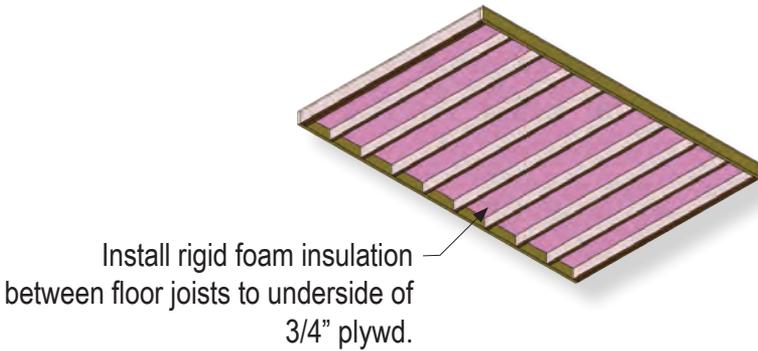


Flooring Notes:

1. Check work by walking floor; Look for missing and improperly installed fasteners; Adjust as needed
2. Nails should be driven into the joists and sink securely into joist and subfloor

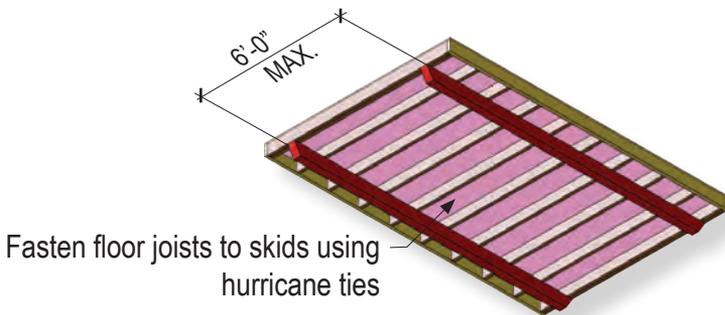
Step 03

Materials: 1" Rigid Foam Insulation



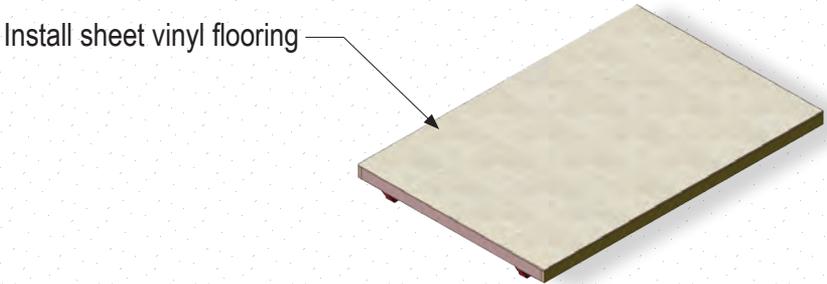
Step 04

Materials: 4x4 Pressure Treated Beam; Hurricane Ties - Hot Galvanized 1-1/4" Nails



Step 05

Materials: Sheet Vinyl Flooring



Flooring Note:

1. Protect installed flooring with cardboard or equivalent material during construction

Step 06

**Materials: 2x4 Wd. Studs - 16d Framing Nails;
2x4 Wd. Plates - 16d Framing Nails**

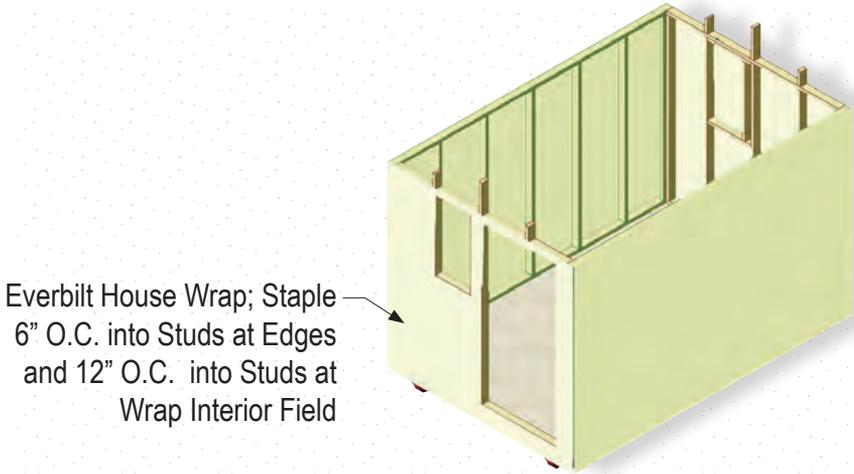


Framing Notes:

1. Framing to be plumb, square, and level
2. Secure top and bottom plates to studs w/ 2 nails, min.

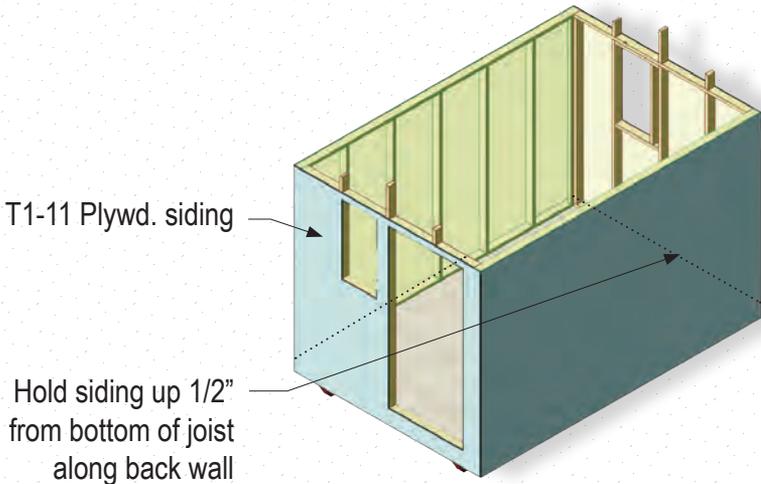
Step 07

Materials: Everbilt House Wrap - T50 Staples



Step 08

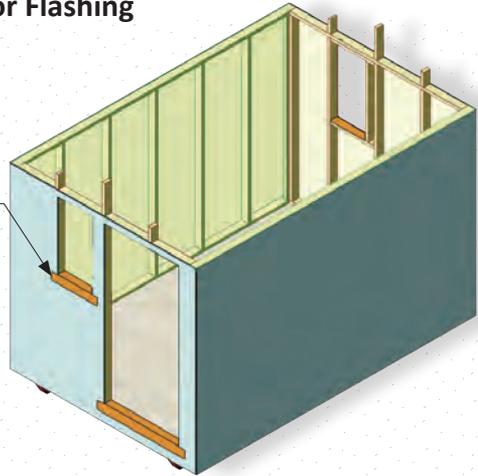
Materials: T1-11 Plywood Siding - 8d Framing Nails



Step 09

Materials: Window & Door Flashing

Peel and stick flashing at window and door sills; Wrap into opening leaving 2-1/2" max. on face of sheathing



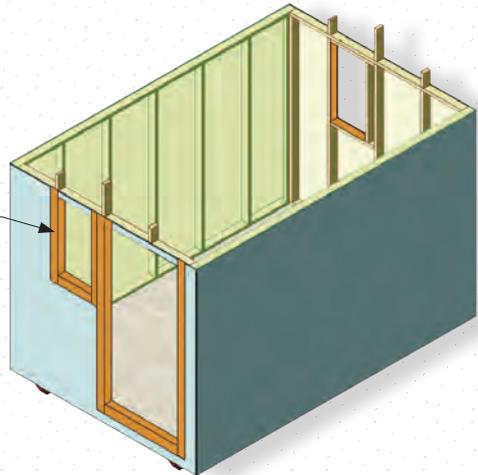
Flashing Notes:

1. Lap flashing full framing depth into openings
2. Start flashing at sills of openings, then install jamb flashing overlapping the sill flashing, and head flashing overlapping the jamb flashing
3. Allow only 2 1/2" of flashing to be exposed on face of sheathing

Step 10

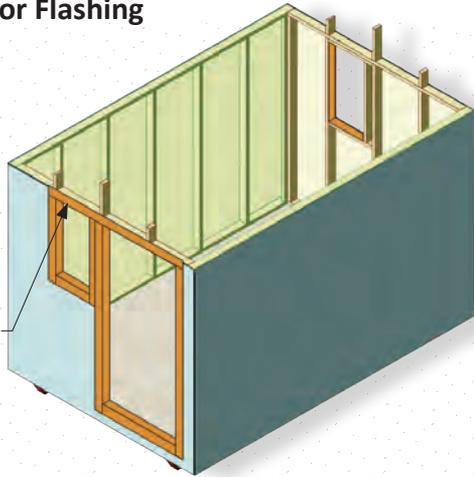
Materials: Window & Door Flashing

Peel and stick flashing at window and door jambs



Step 11

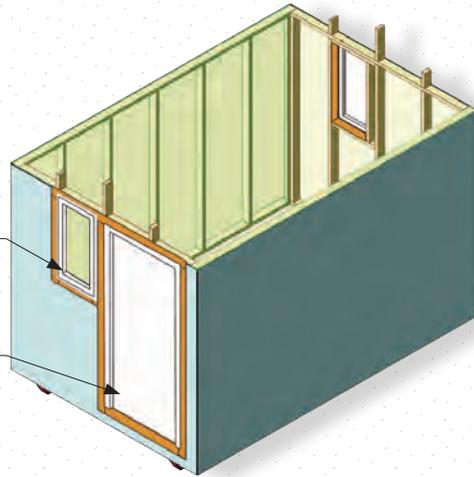
Materials: Window & Door Flashing



Peel and stick flashing at window and door head; Strip can be one continuous piece across both openings; Wrap into openings full depth of framing at both openings

Step 12

Materials: Install Door and Windows

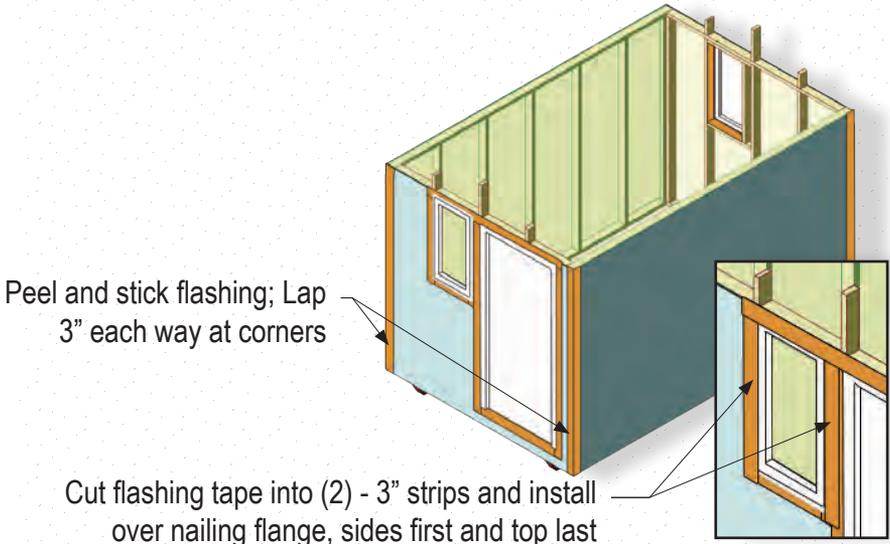


Window; Install per manufacturer's instructions

Door; Install per manufacturer's instructions

Step 13

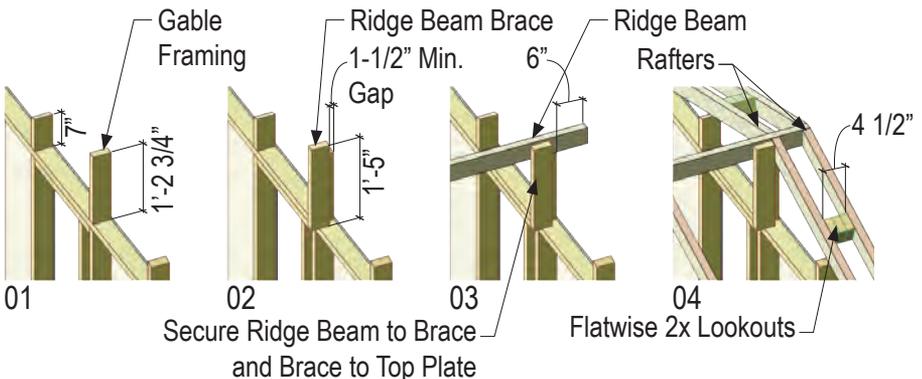
**Materials: Install Corner Flashing;
Flash around Window Nailing Flange**



Step 14

Step 15

Materials: Roof Framing - 16d Framing Nails



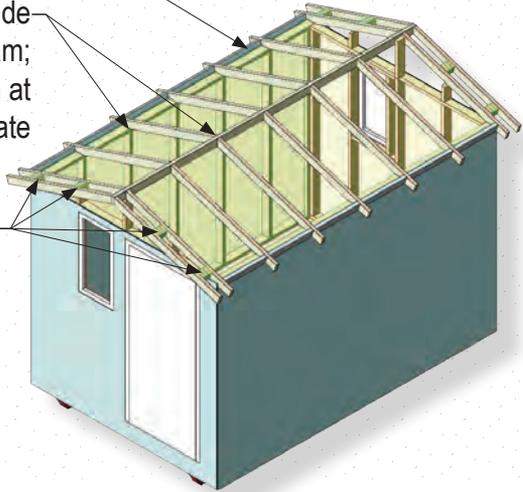
Securing Ridge Beam & Framing End Rafters

1. At detail 01, angle cut top of 7" gable framing supports to accommodate 4:12 roof slope; Toenail supports into top plate taking care that framing is plumb and square
2. Secure a 2x4 brace to each center stud at both gable end walls
3. Lift ridge beam into place and secure to brace and gable framing; Provide 6" overhang at both ends
4. Refer to step 16 for detail 04 rafter framing

Step 16

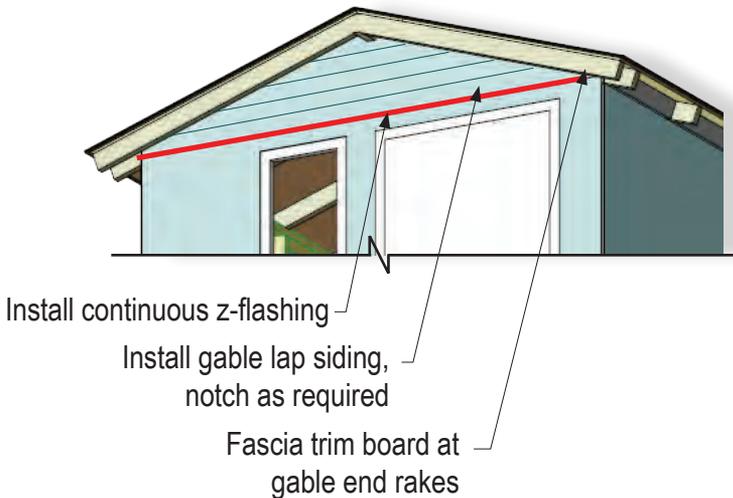
Materials: 2x4 Rafters, Barge Rafters, and Birdblocking

- Install 2x4 Birdblocking Between Rafters, Typ. Rafters; Toenail Each Side of Rafter to Ridge Beam; Birdsmouth Notch at Connection to Top Plate
- (3) - 2x4's Built-Up Blocking for Rake Overhangs, Min. 2 Each



Step 17

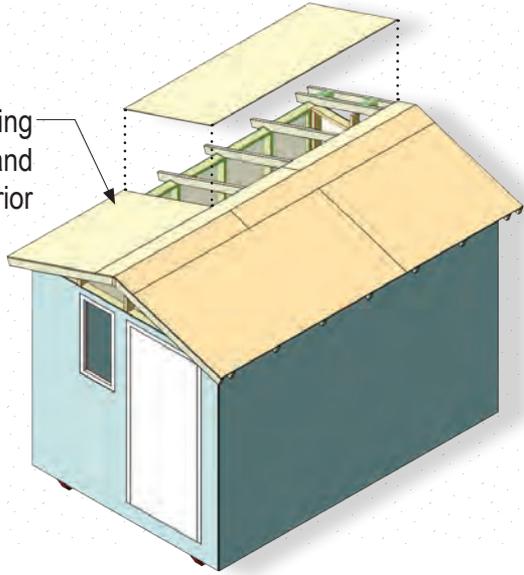
**Materials: 1x6 Wd. Fascia Board - 8d Framing Nails;
Gable siding - 8d Framing Nails**



Step 18

Materials: 1/2" Plywd./OSB Roof Sheathing - 16d Framing Nails

Roof sheathing; Nail sheathing
6" o.c. along panel edges and
12" o.c. at panel interior

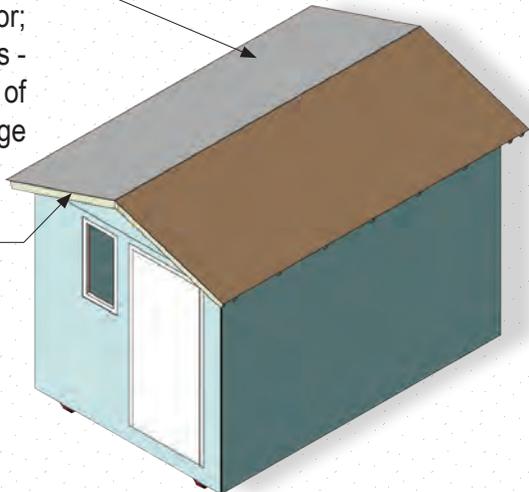


Step 19

Materials: Drip Edge Flashing; 15# Felt; T50 Staples

#15 Felt; Staple 6" o.c. at edges
and 12" o.c. at felt interior;
Overlap per recommendations -
min. 12"; Install from low edge of
slope working towards ridge

Drip edge
flashing continuous at
entire perimeter; Fasten at
each rafter along eaves

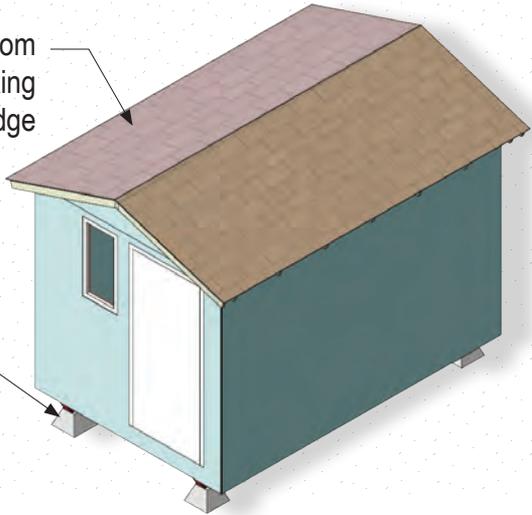


Step 20

Materials: 25 Year Asphalt Shingles; 3/4" Galv. Roofing Nails

Asphalt Shingles; Install from low edge of slope working towards ridge

Pier blocks indicated will only be used at final installation

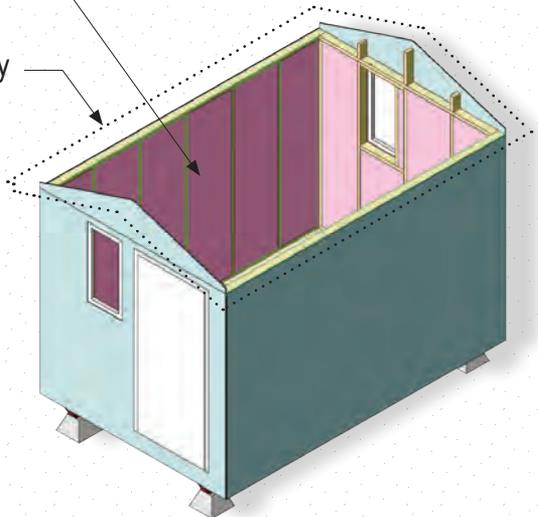


Step 21

Materials: 23"x93" Fiberglass Batt Insulation

Fiberglass batt insulation

Roof removed for clarity

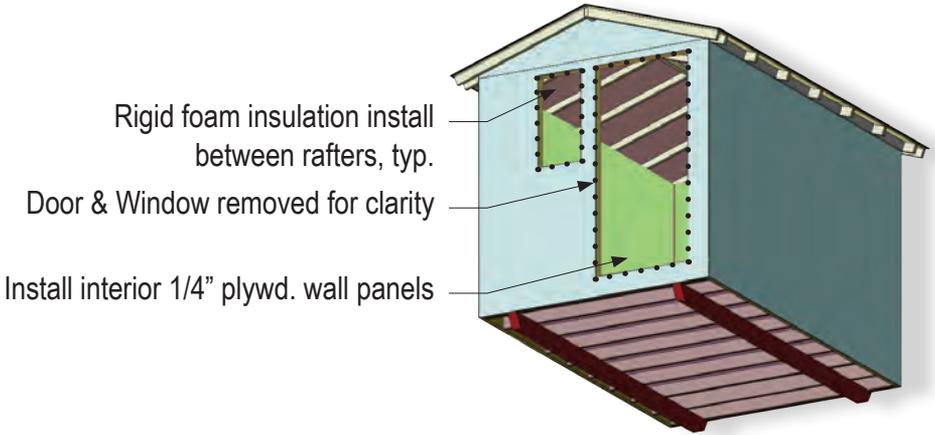


Insulation Note:

1. Wear safety glasses, gloves, and dust mask for insulation work

Step 22

Materials: 1" Rigid Foam Insulation; Hardboard Wall Panels



Step 23

Materials: 1x4 Cedar Trim at Corners, Doors, and Windows

install head trim over window & door casing; Install door trim first; Cut window trim adjacent to door trim as req'd to fit

