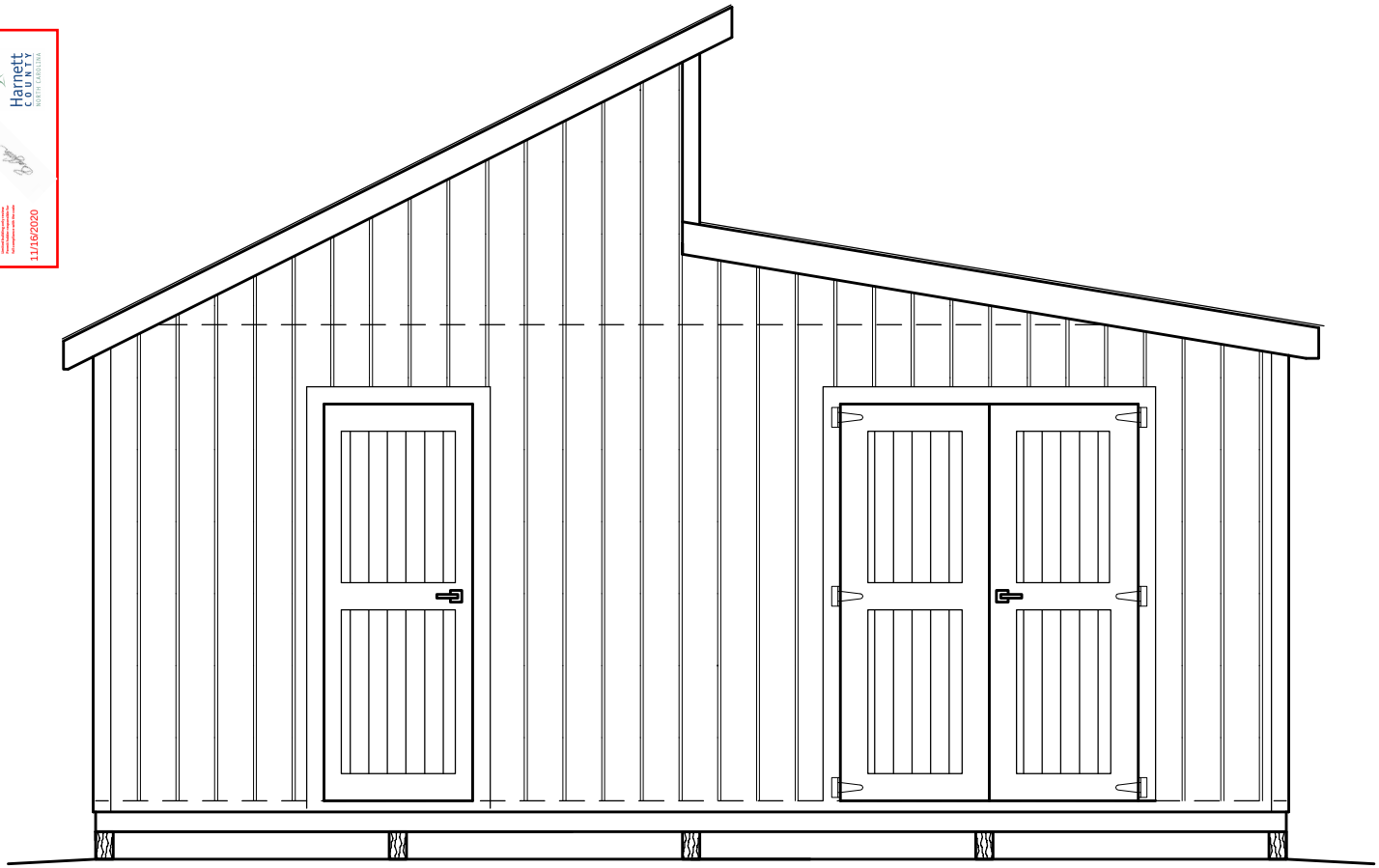

20x12 Clerestory Dormer Shed Plans

DRAWING INDEX

Please view and download the HOW TO BUILD A SHED tutorial at
http://www.icreatables.com/sheds/how-to-build-shed/how-to-build-a-shed-download.html

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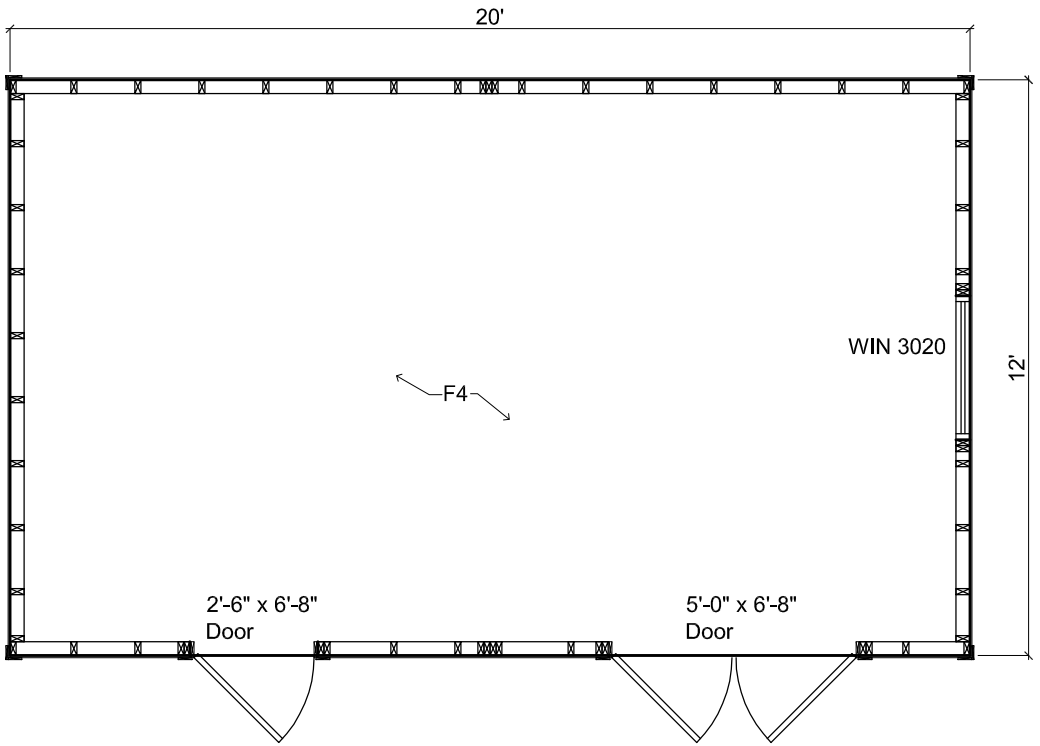

FLOOR PLAN

¼"= 1'-0" See wall framing plans for stud layout and material take off.

Floor Plan 2

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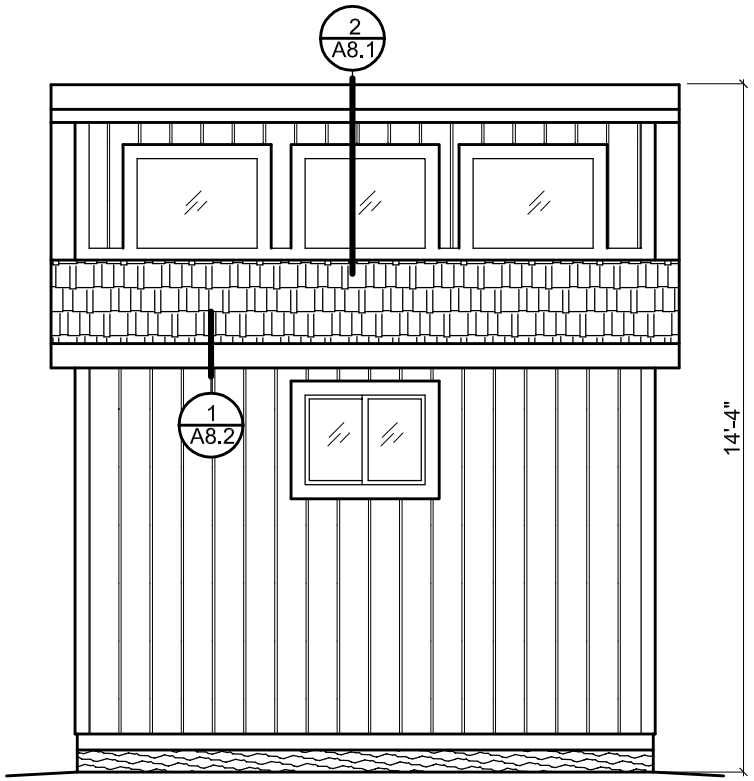
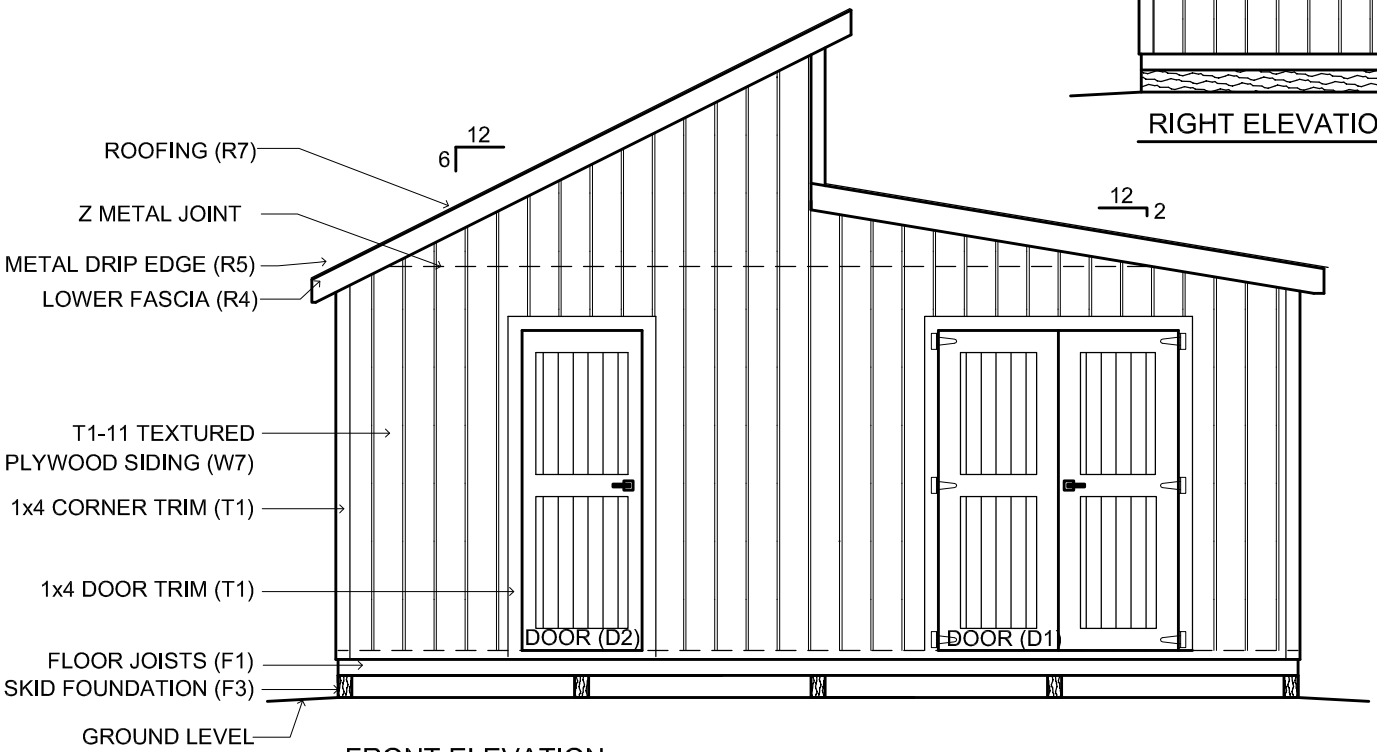
SIDING AND ROOFING MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
W7	4ft. x 8ft. T1-11	per plan	20
T4	1x4 Trim Board	3 1/2"x16'-0"	10
R5	Roof Drip Edge, Under roofing	1 1/2"x2 1/2"x10'	11
R5.1	Roof Drip Edge, Above roofing	4" x 4"x10'	6
R6	Roofing Felt		500 S.F.
R7	Asphalt Shingles	5 Squares	500 S.F.
W10	"Z" Metal flashing	10'	4
W12	3020 XO Window	3'-0" x 2'-0"	1
W12.1	2618 XO Window	2'-6" x 1'-8"	3
D1	5068 Pre hung factory built door		1
D1.1	2668 Pre hung factory built door		1



RIGHT ELEVATION



FRONT ELEVATION

Exterior Elevations 3

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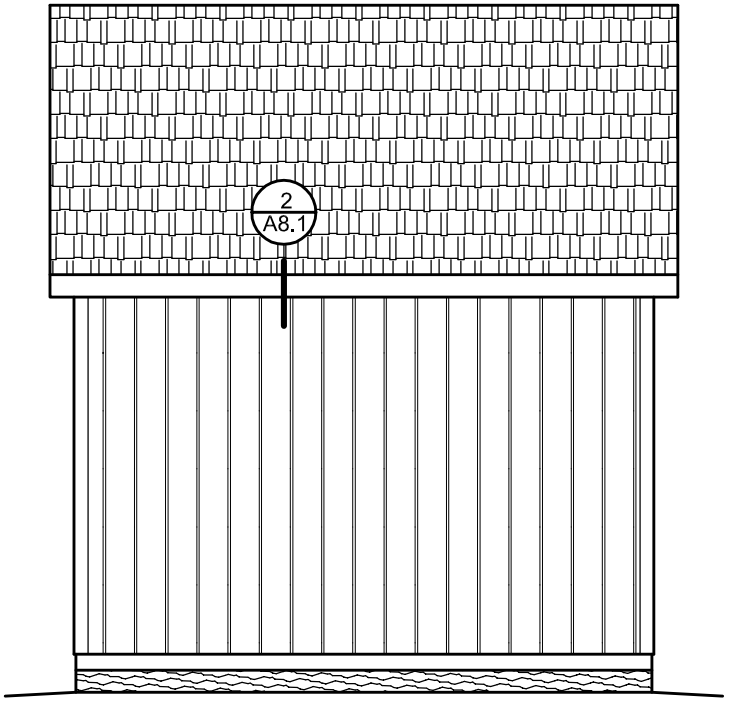
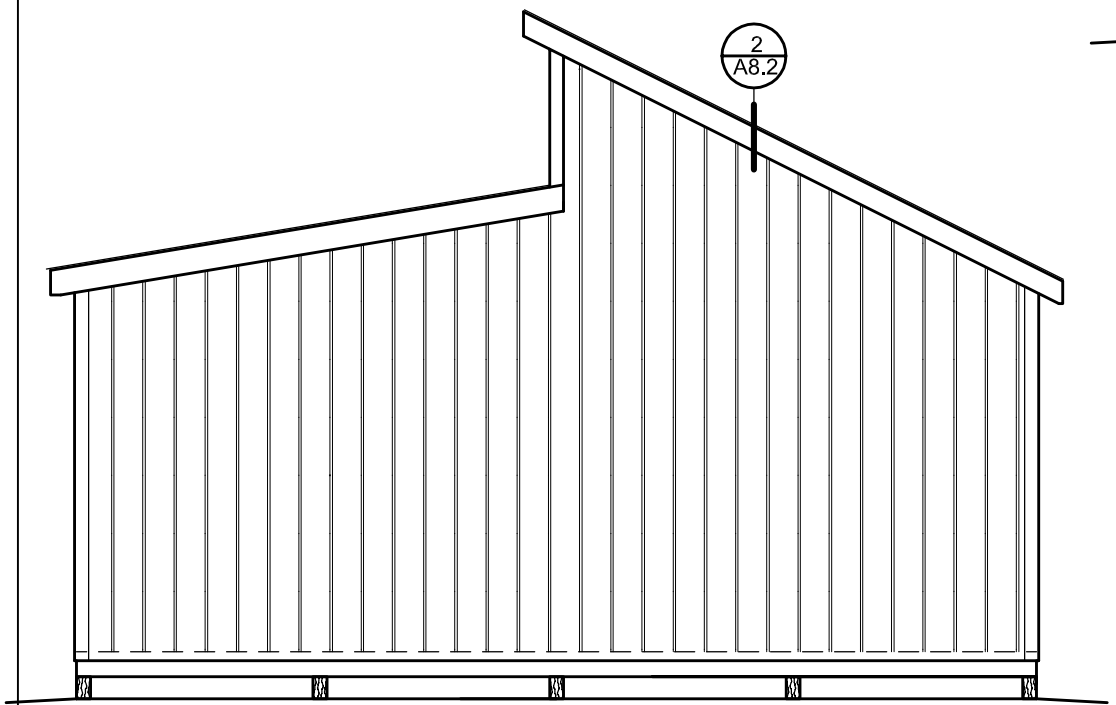


LEFT ELEVATION



REAR ELEVATION

Exterior Elevations 3.1

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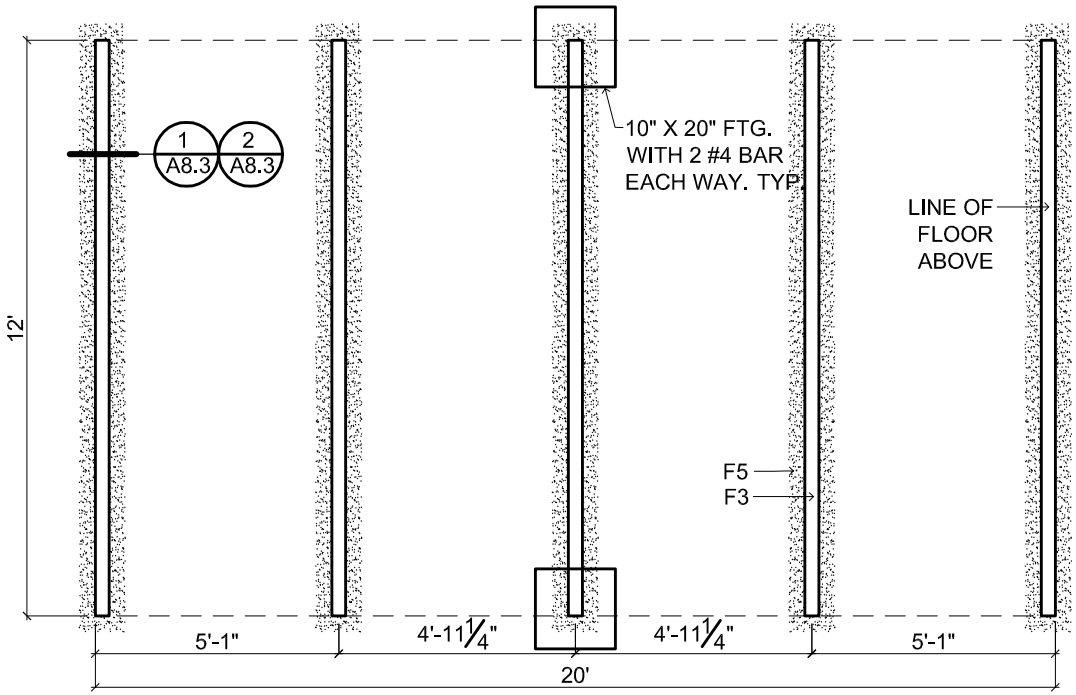

FOUNDATION RAIL FRAMING PLAN

¼"= 1'-0" Wood rails should be under the bearing walls of the shed. This means that the wood rails should be under the walls that the roof rests on. (not including the center rail)

FOUNDATION MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
F3	4x6 Skid, treated	12'-0"	3
F5	½" Gravel		

OPTIONAL GRAVEL BED FOUNDATION

Shed floor may be constructed using a gravel bed and setting the floor joists directly on the gravel. The floor joists must be changed to Pressure treated wood joists or Steel joists. This Floor system will lower the shed floor height.
See How To Build A Shed eBook and detail in these plans for more information.

Skid Foundation Plan 4

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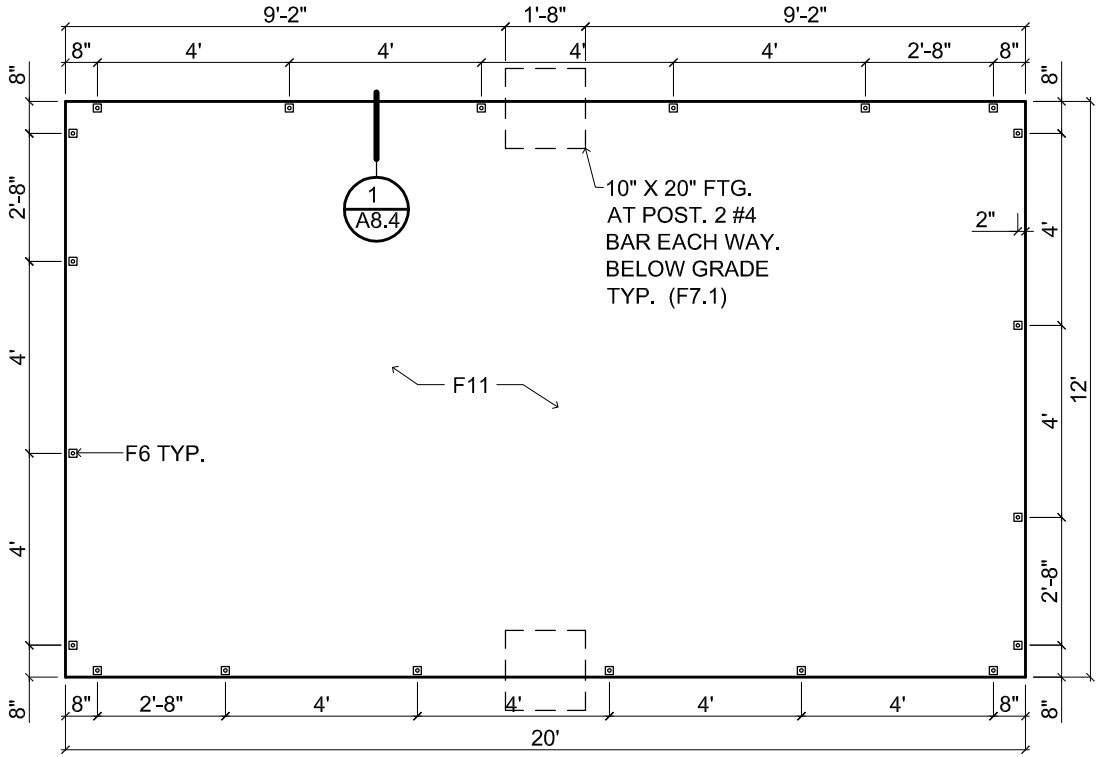

CONCRETE SLAB FLOOR PLAN

¼"= 1'-0" SITE VERIFY BOLT LAYOUT WITH WALL STUD LAYOUT. VERIFY DOOR LOCATION AND INSTALL A BOLT WITHIN 12" OF THE DOOR OPENING AND NOT IN THE DOOR OPENING.

NOTES:

-INSTALL ANCHOR BOLTS PER IRC SECTION R403.1.6.1. ½" x 10" ANCHOR BOLTS ARE TO BE PLACED AT MAXIMUM OF 6 FEET O.C. AND WITHIN 12" FROM ENDS MINIMUM.
-INSTALL 3X3 WASHERS PER IRC SECTION R602.11.1

-USING A CONCRETE SLAB INSTEAD OF A FRAMED FLOOR WILL LOWER THE FLOOR HEIGHT BECAUSE YOU ARE NOT INSTALLING 6" FLOOR JOISTS.
-CHECK LOCAL BUILDING REQUIREMENTS FOR FROST PENETRATION DEPTHS AND REQUIRED DEPTH OF FOOTINGS.

FOUNDATION MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
F5	½" Gravel		
F6	Anchor Bolt, Washer	½" x 10"	20
F7	#4 Rebar	1/2" x 16'-0"	11
F7.1	#4 Rebar	1/2" x 16"	8
F11	Concrete	Site Verify	

Concrete Foundation 4.1

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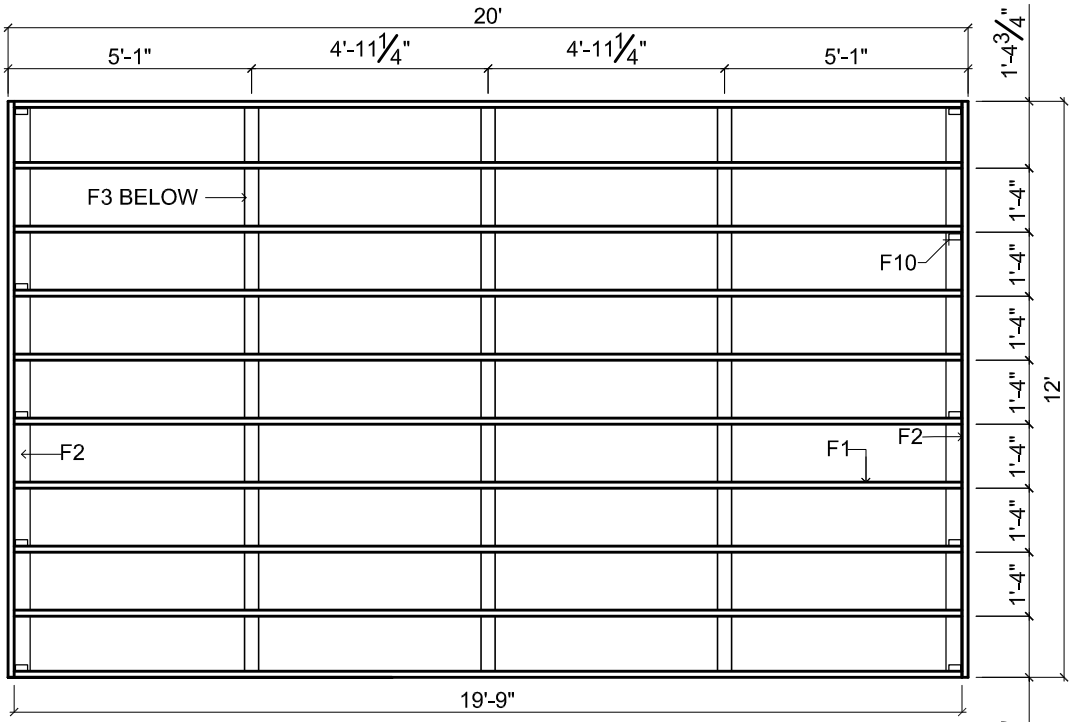

FLOOR FRAMING PLAN

FLOOR FRAMING MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
F1	2x6 Floor Joist	20'-0"	10
F2	2x6 Rim Joist	12'-0"	2
F4	Full Face O.S.B. T.&G.	4'x8'x$\frac{3}{4}$"	8
F10	SIMPSON A23 CLIP		10

Skid Floor Framing Plan 5

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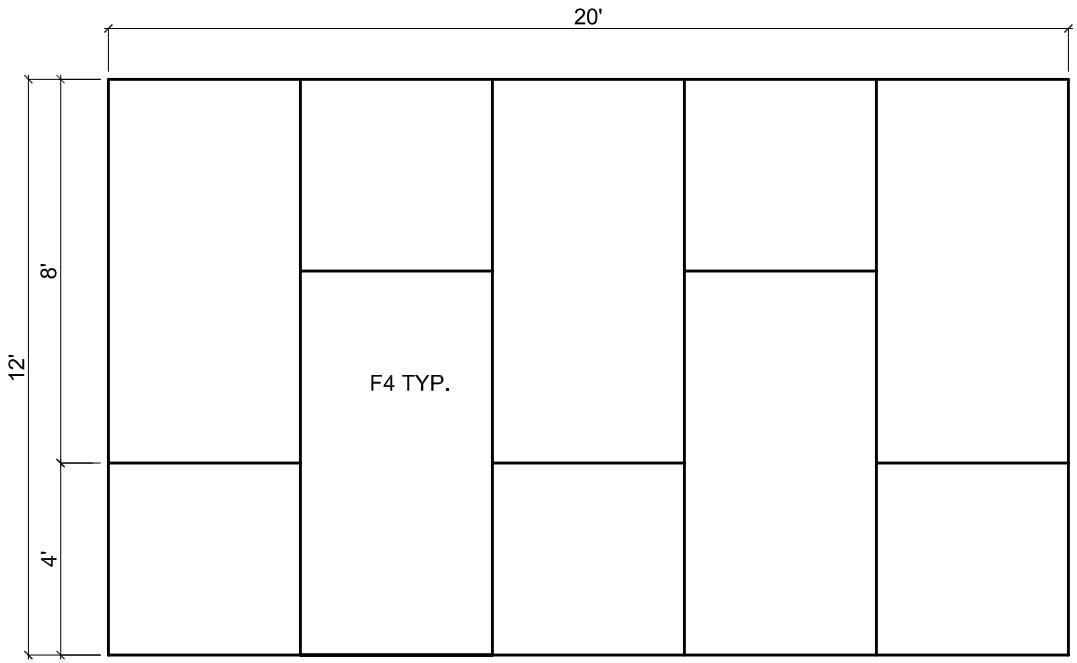

FLOOR SHEETING PLAN

Skid Floor Sheeting Plan 5.1

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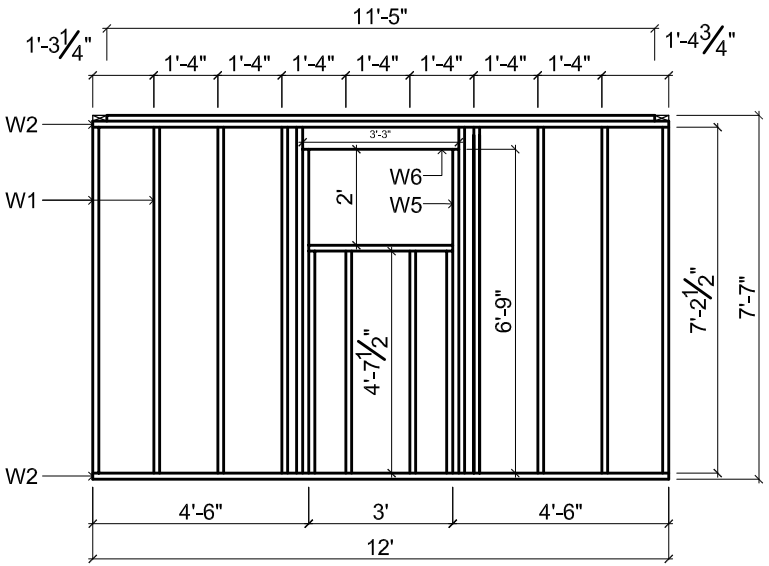
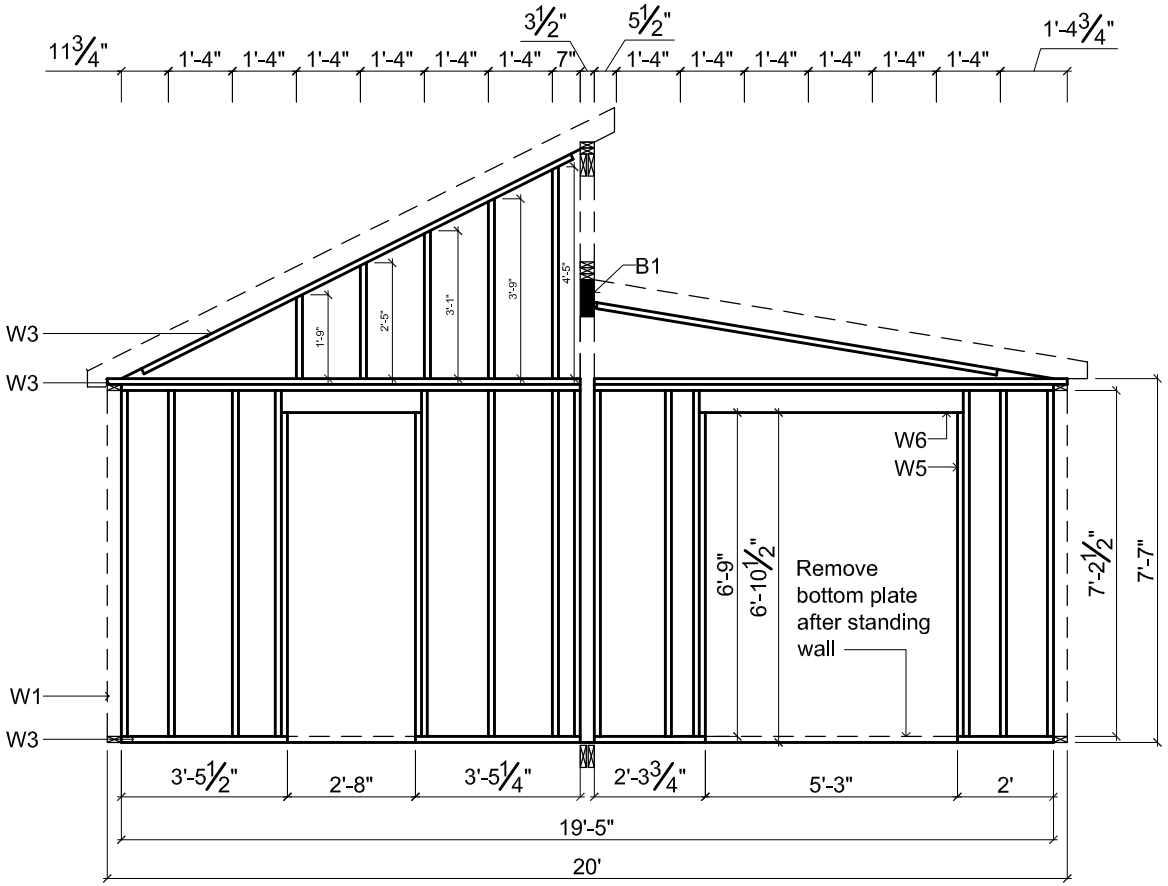


RIGHT WALL FRAMING PLAN



FRONT WALL FRAMING PLAN

WALL FRAMING MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
W1	2x4 Wall Stud	92 5/8"	70
W1.1	2x4 Wall Stud	9'-0"	4
W2	2x4 Wall Plate, Short	12'-0"	6
W3	2x4 Wall Plate, Long	10'-0"	16
W5	2x4 Trimmer	92 5/8"	10
W6	2x6 Header	8'-0"	4
W6.1	2x6 Header	12'-0"	2
B1	[redacted] Revised to 2 ply 9.25 LVL	12'-0"	2

BEAM TO BE STRAPPED TO WALL FRAMING USING SIMPSON ST12 STRAPS.

Door Header:
-The door header is made by nailing together 2 - 2x6's with a piece of O.S.B. sheeting between them. Put 2 nails every 6 inches and 2 inches from the ends.

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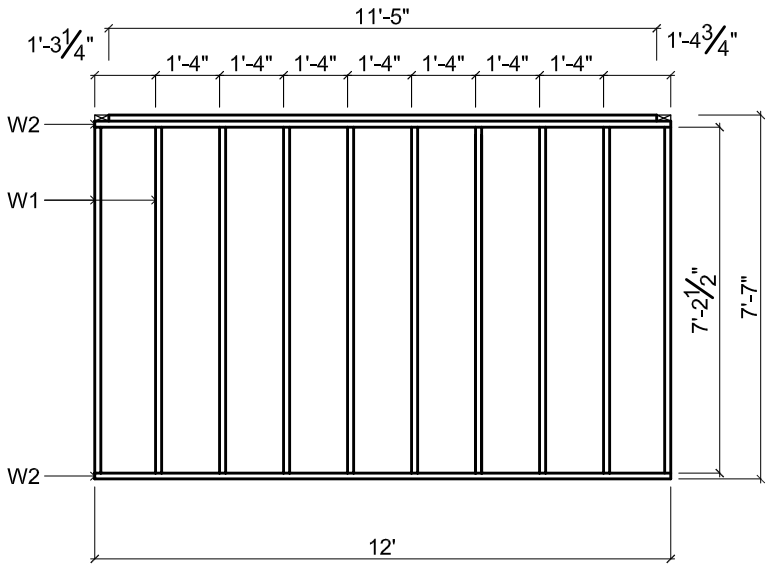
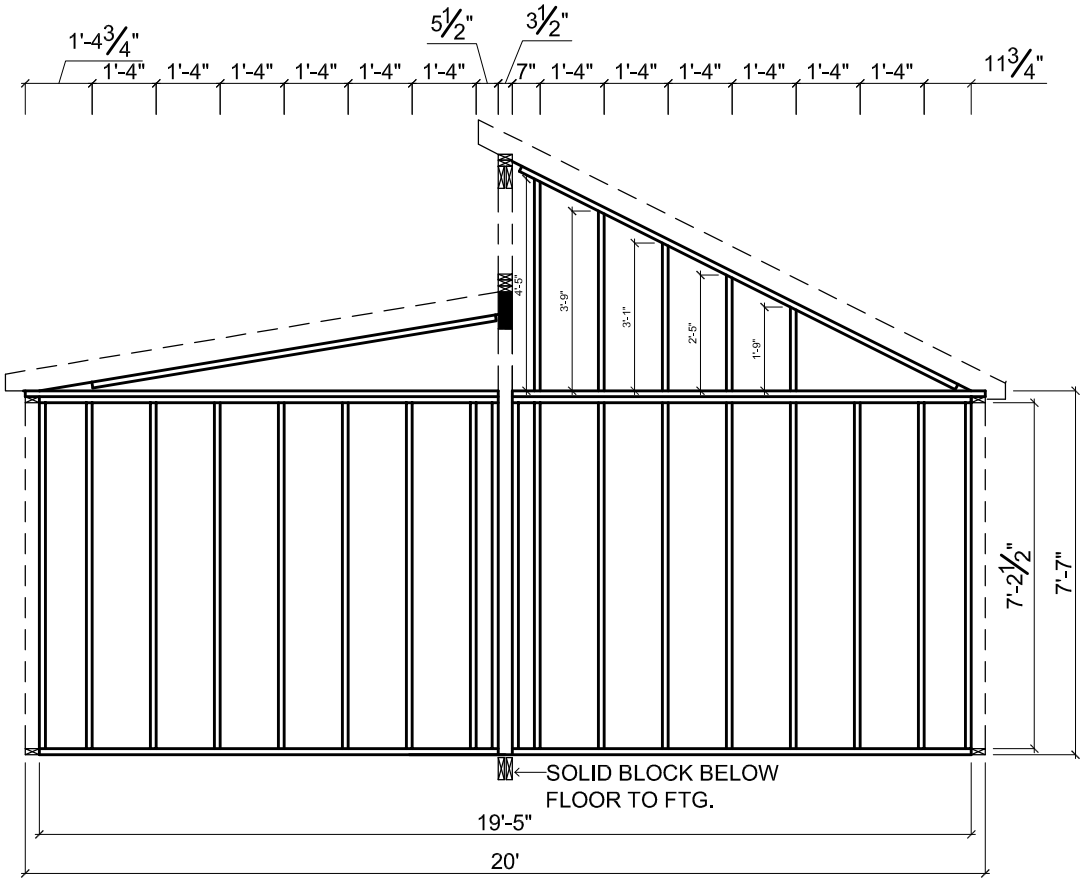


LEFT WALL FRAMING PLAN



REAR WALL FRAMING PLAN

Wall Framing Plans 6.1

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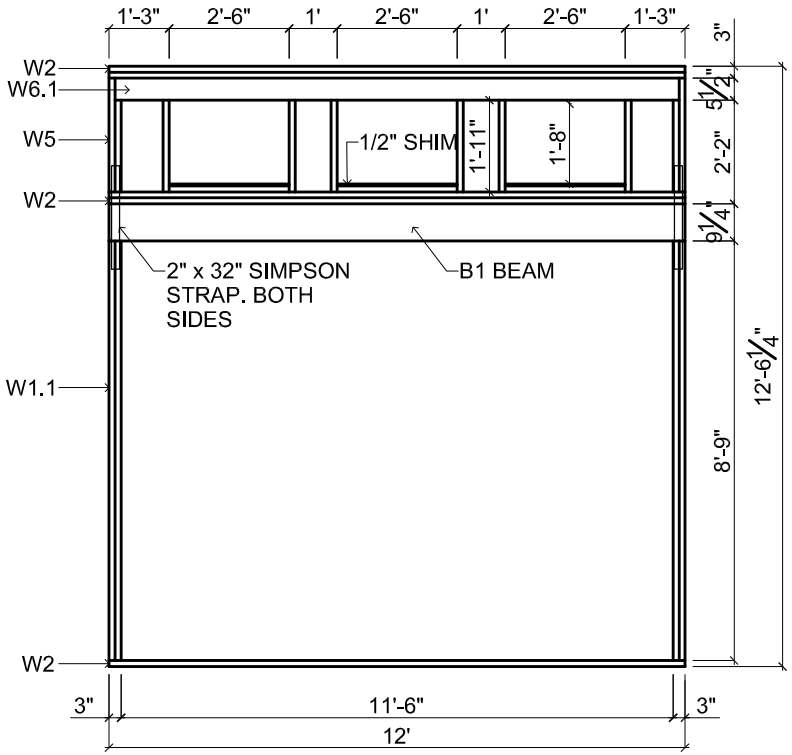

CENTER WALL FRAMING PLAN

Wall Framing Plans 6.2

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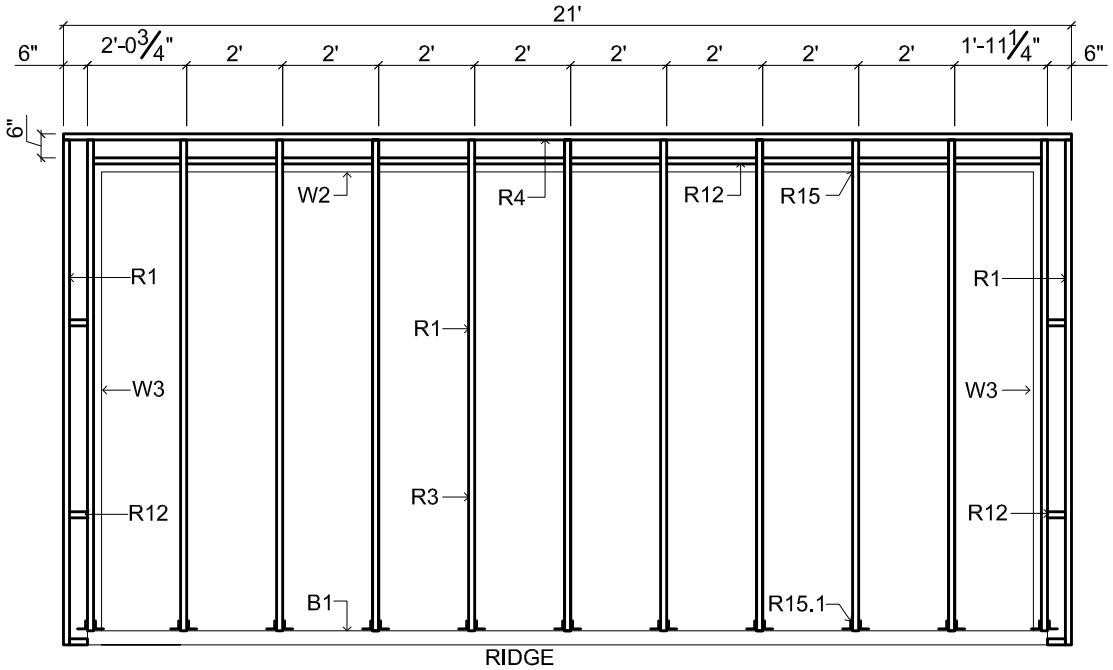
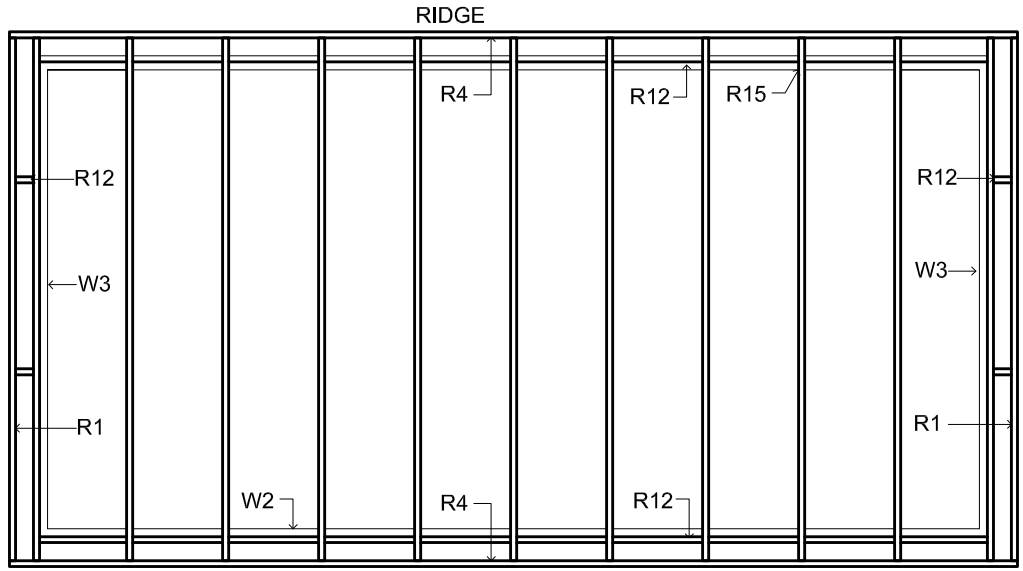


LOWER ROOF FRAMING PLAN



UPPER ROOF FRAMING PLAN

ROOF FRAMING MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
R1	2x6 Rafter	12'-0"	11
R1.1	2x6 Rafter	14'-0"	11
R2	Plywood Roof Decking	4'x8'x $\frac{1}{2}$"	18
R4	2x6 Fascia	16'-0"	3
R4.1	2x6 Fascia Fill in ends	8'-0"	3
R12	2x6 Blocking	10'-0'	6
R15	Simpson H2.5 Hurricane Tie		27
R15.1	Simpson LRU26Z Hanger		11

See exterior elevations for roofing materials.

Roof Framing Plan
Roof Sheeting Plan 7

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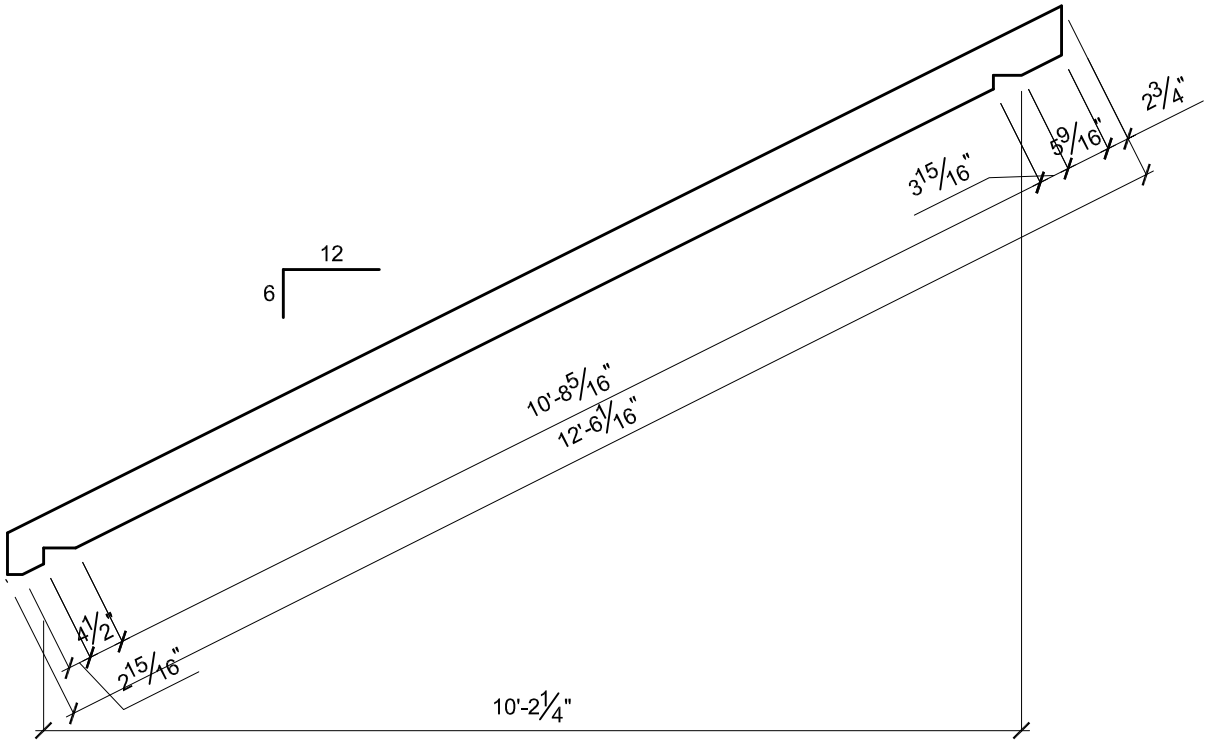
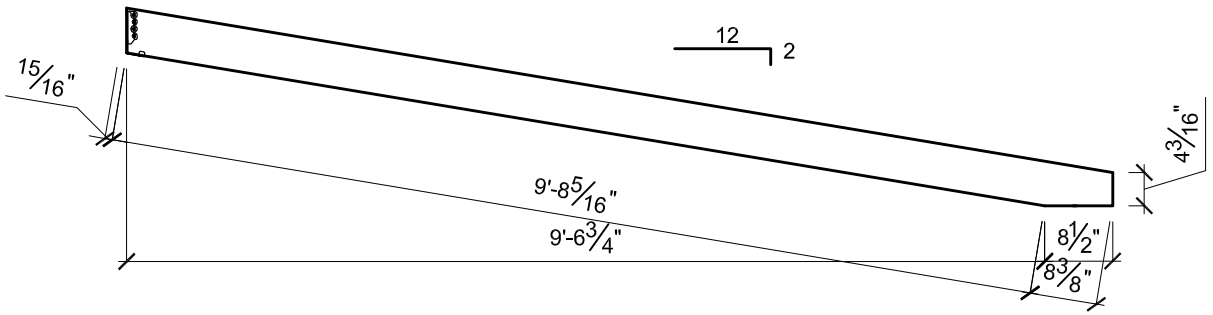


RAFTER DETAIL (R1) - 20' CLERESTORY - 2X6

½"= 1'-0" SEE THE ROOF TRUSS TEMPLATE DETAIL FOR ANGLE CUTTING INFORMATION



RAFTER DETAIL (R2) - 20' CLERESTORY - 2X6

½"= 1'-0" SEE THE ROOF TRUSS TEMPLATE DETAIL FOR ANGLE CUTTING INFORMATION

Roof Rafter Details 7.1

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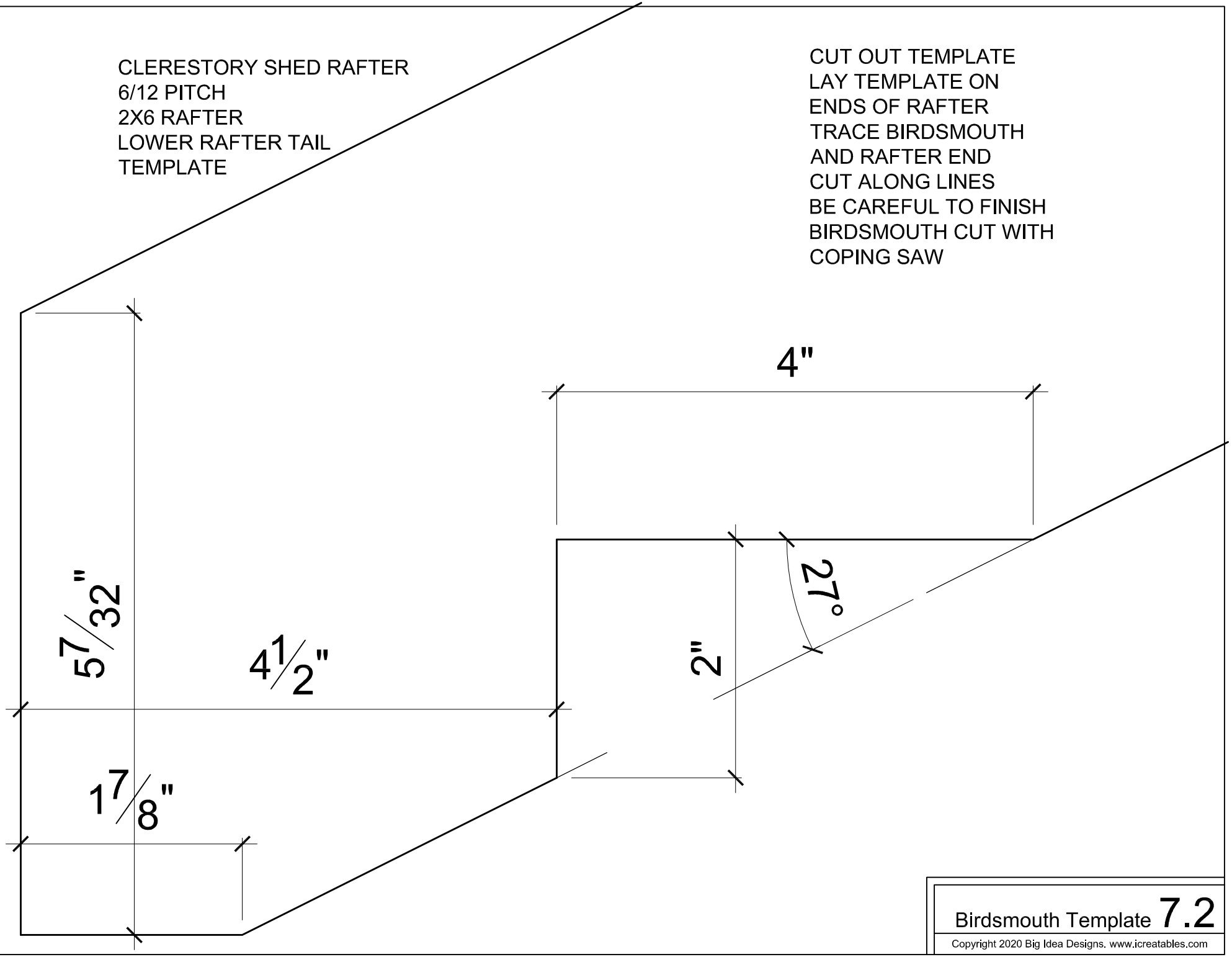
CLERESTORY SHED RAFTER
6/12 PITCH
2X6 RAFTER
LOWER RAFTER TAIL
TEMPLATE

CUT OUT TEMPLATE
LAY TEMPLATE ON
ENDS OF RAFTER
TRACE BIRDSMOUTH
AND RAFTER END
CUT ALONG LINES
BE CAREFUL TO FINISH
BIRDSMOUTH CUT WITH
COPING SAW



Birdsmouth Template 7.2

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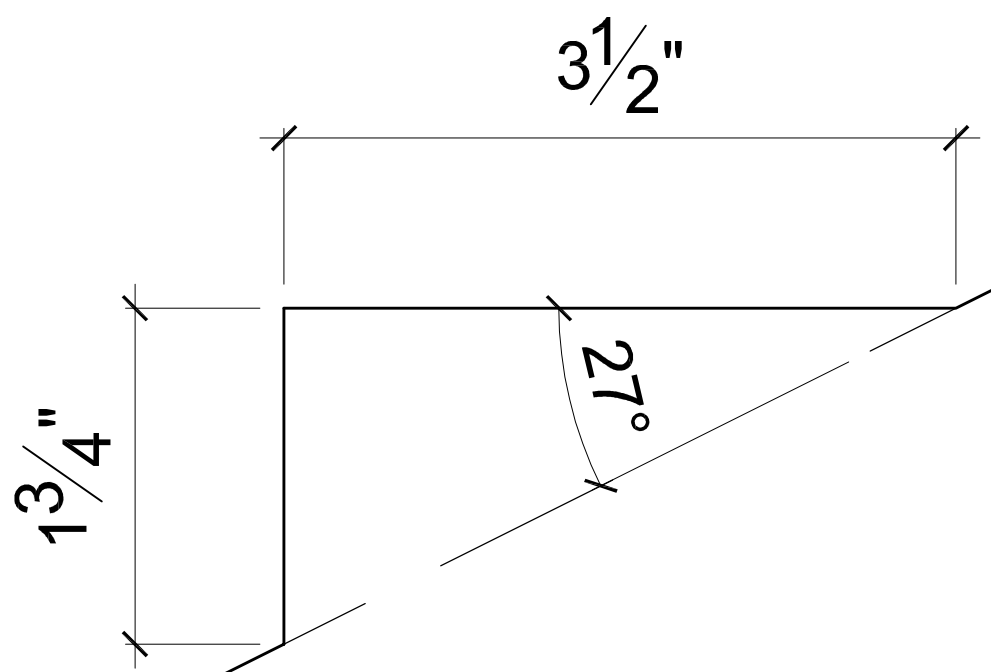
CLERESTORY SHED RAFTER
6/12 PITCH
2X6 RAFTER
UPPER RAFTER TAIL TEMPLATE



Birdsmouth Template 7.3

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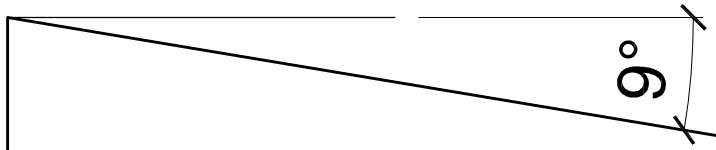

CLERESTORY SHED RAFTER
2/12 PITCH
2X6 RAFTER
UPPER RAFTER TAIL TEMPLATE

Birdsmouth Template 7.4

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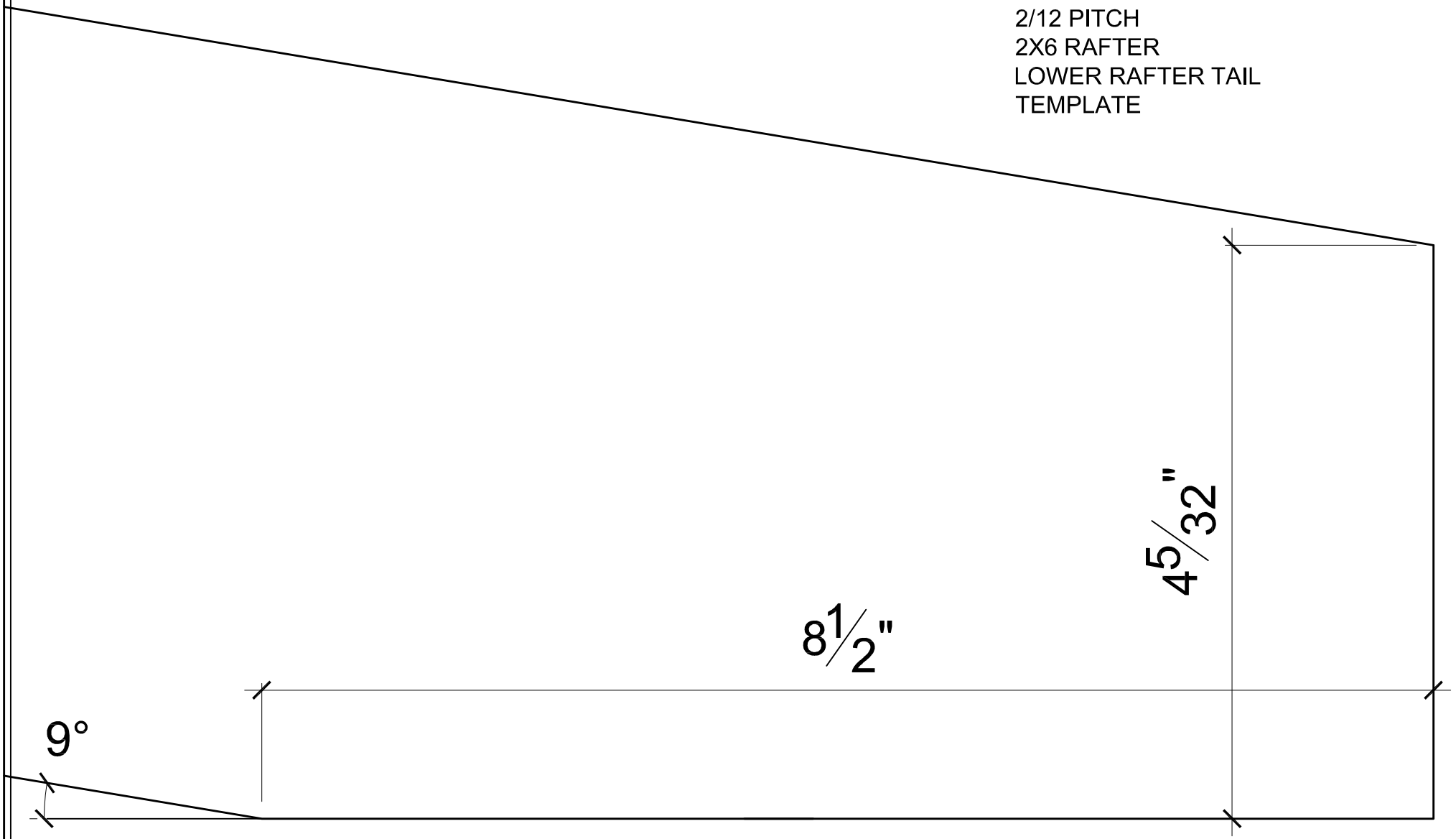
CLERESTORY SHED RAFTER
2/12 PITCH
2X6 RAFTER
LOWER RAFTER TAIL
TEMPLATE



Birdsmouth Template 7.5

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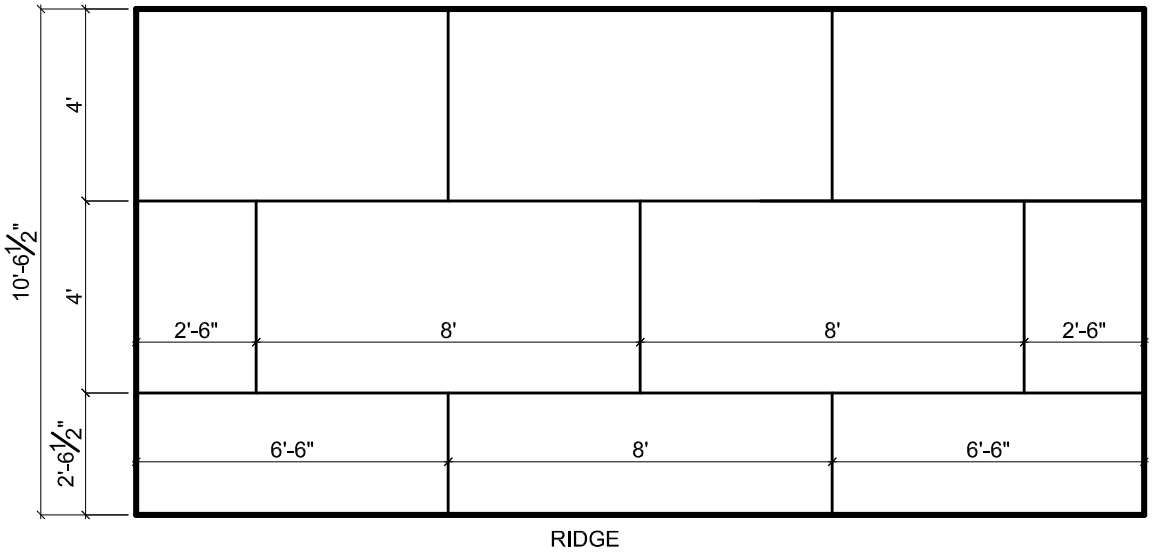
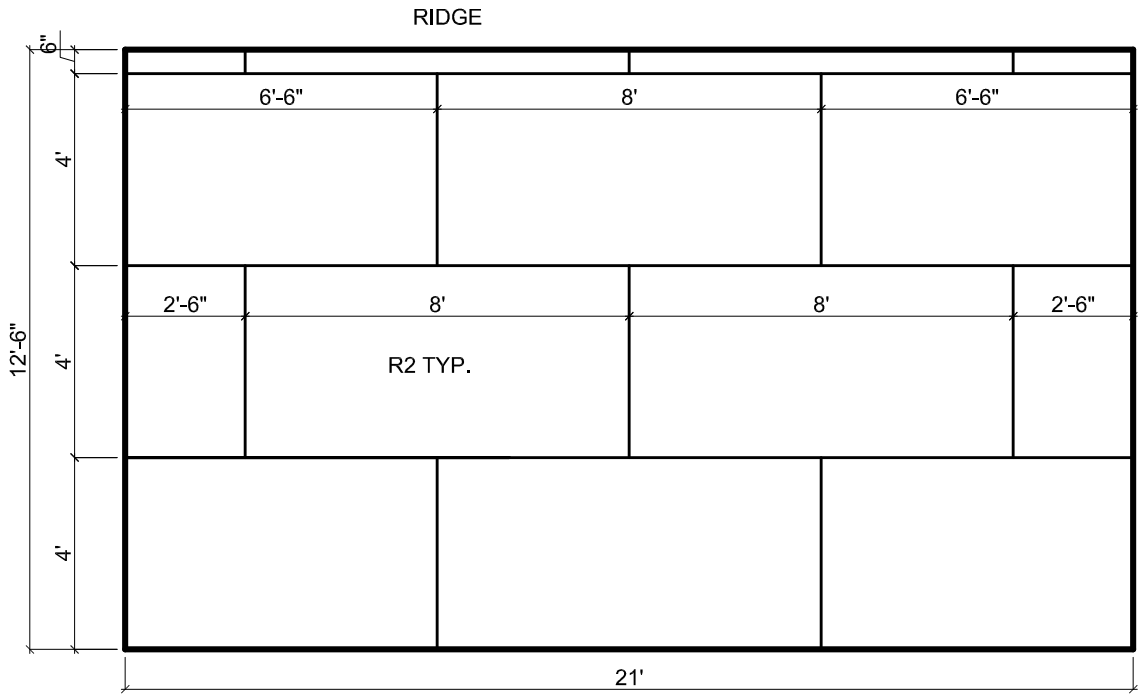


LOWER ROOF SHEETING PLAN



UPPER ROOF SHEETING PLAN

Roof Sheeting Plan 7.6

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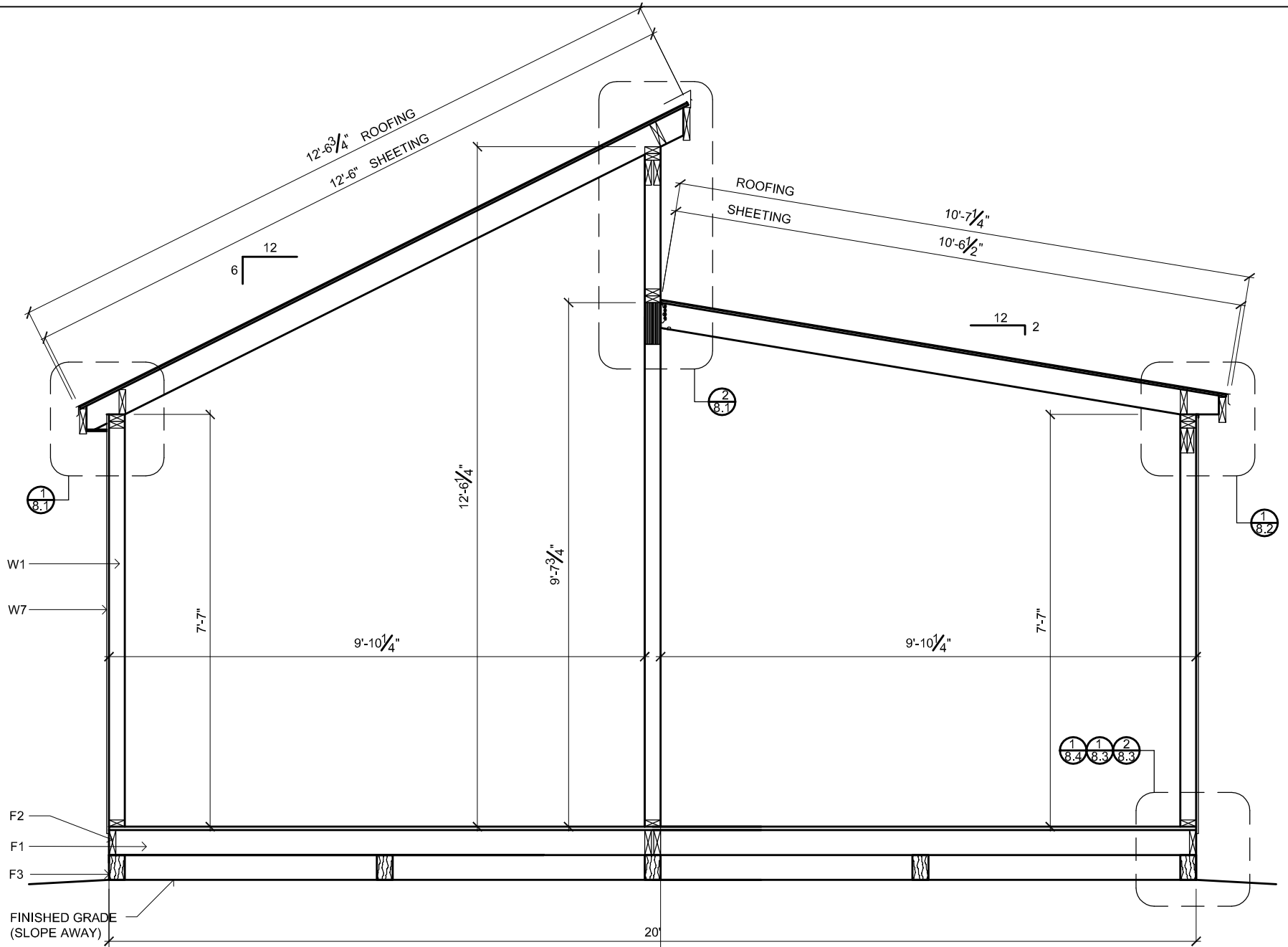

BUILDING SECTION

N.T.S. See floor and wall plans for material call out deffinitions.

10'-1 3/4"

Section 8

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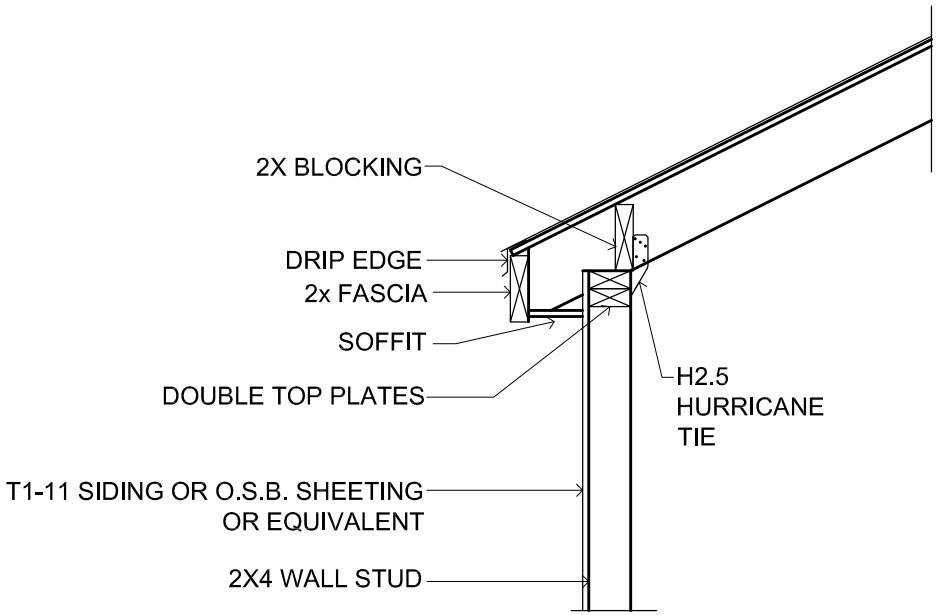
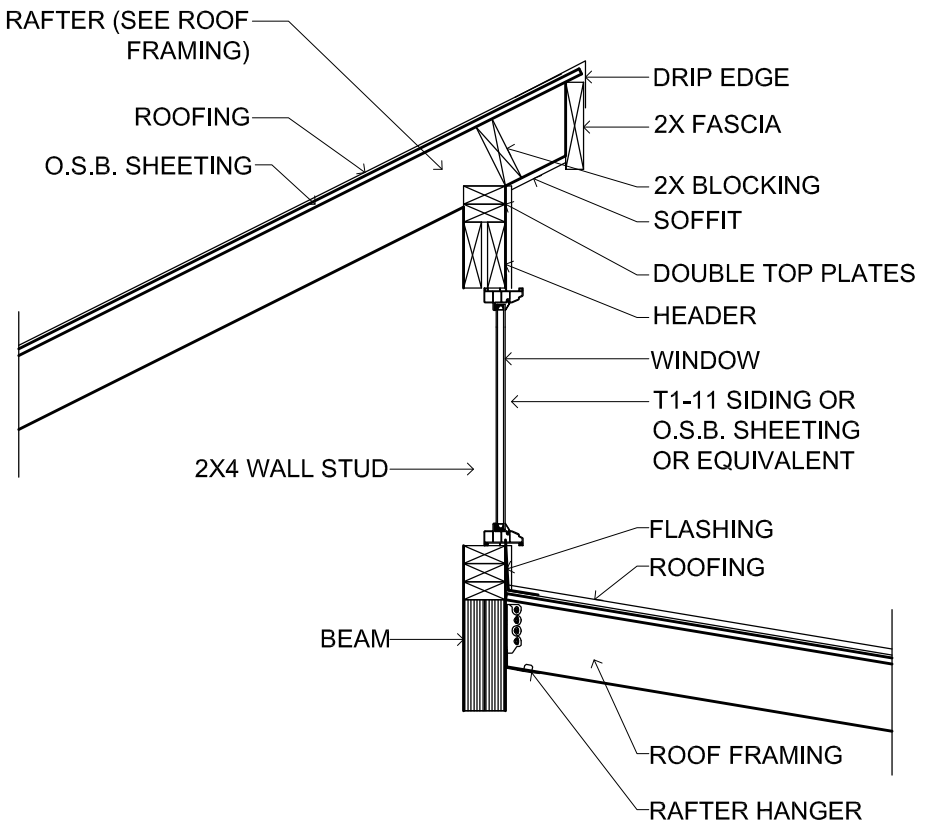


1 RAFTER LOWER EVE DETAIL - CLERESTORY

¾" = 1'-0"



2 CENTER WALL EVE DETAIL - CLERESTORY

¾" = 1'-0"

Roof Details 8.1

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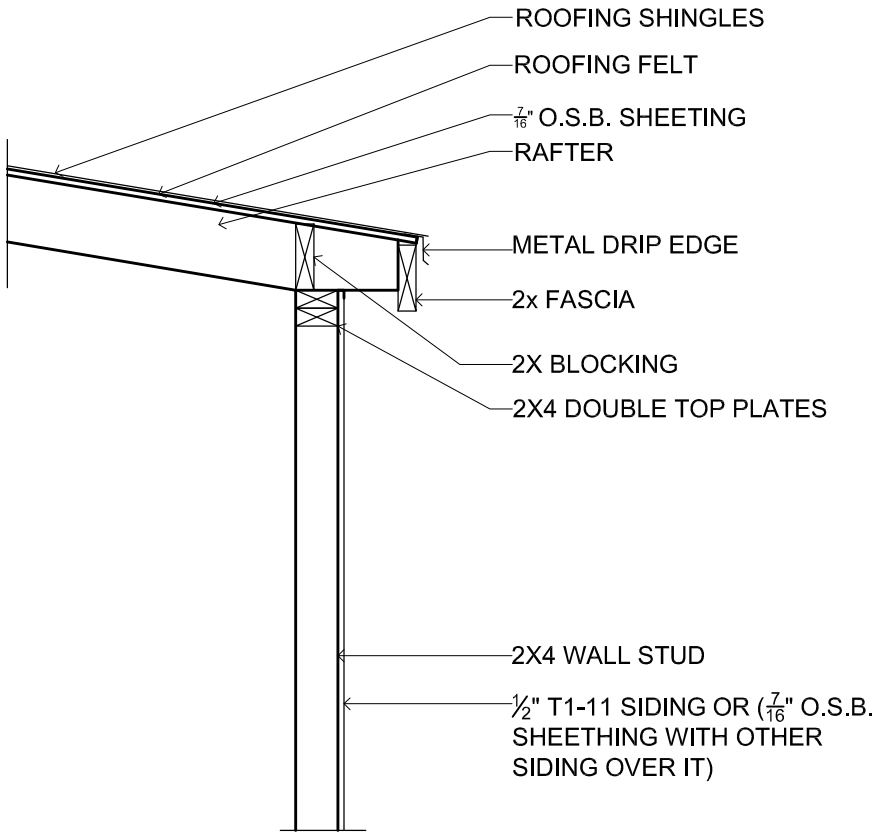
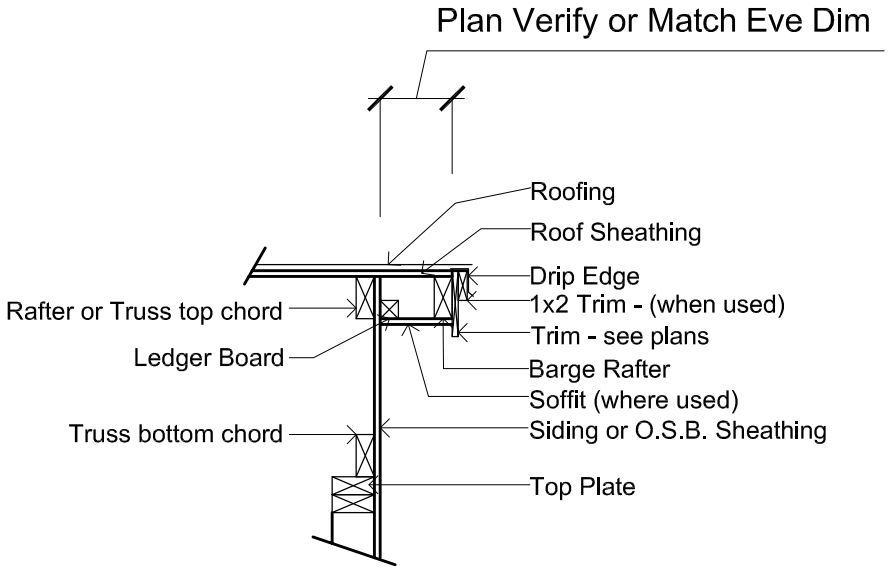


3 LOWER ROOF EVE DETAIL - CLERESTORY

¾" = 1'-0"



NOTE: This design is optional on plans showing no gable overhang. Adjust the roof sheeting to accomodate the overhang by installing it with the overhang and then nailing the fascia to the underside.

2 BOXED RAKE DETAIL - OVERHANG

¾" = 1'-0"

Roof Details 8.2

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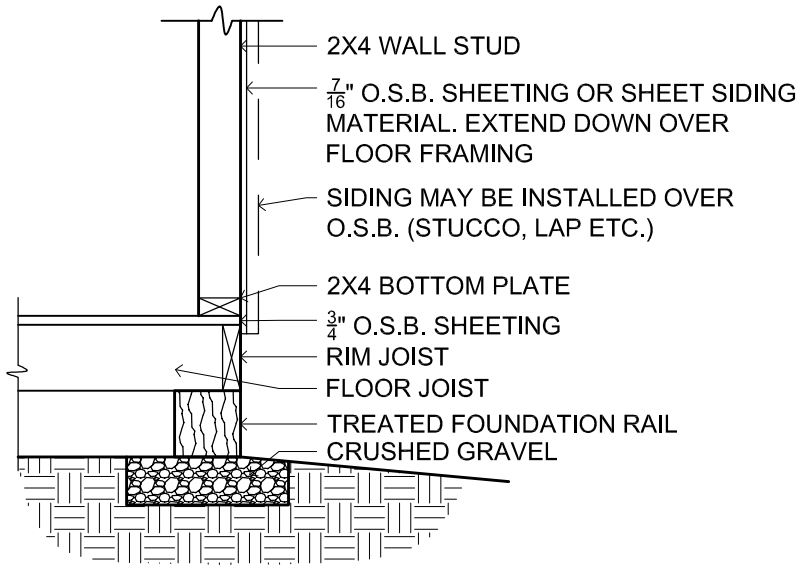
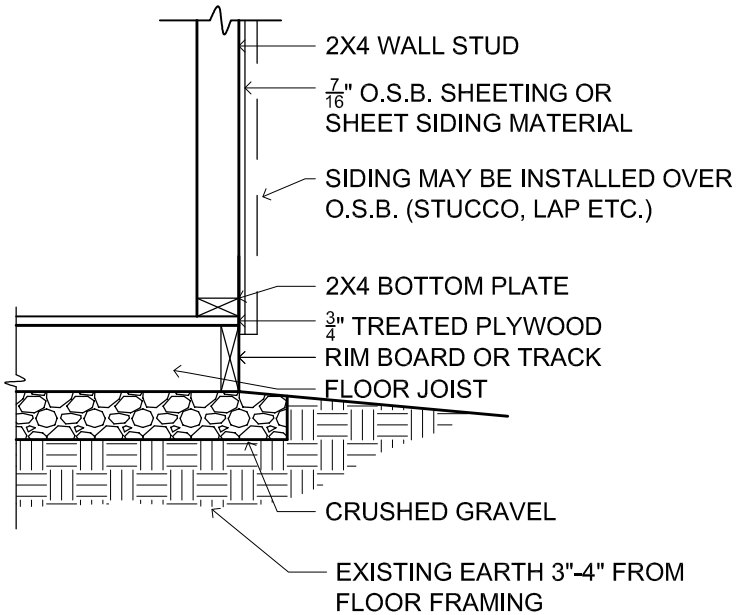


1 FRAMED FLOOR AND WOOD RAIL FOUNDATION

3/4" = 1'-0" See floor and foundation framing for lumber sizes



STEEL STUD REQUIREMENTS:
6" 16 GAUGE STEEL TRACK
6" 16 GAUGE STEEL C STUD

TREATED LUMBER REQUIREMENTS:
PRESSURE TREATED LUMBER

2 TREATED OR STEEL FLOOR JOIST FOUNDATION

3/4" = 1'-0"

Section 8.3

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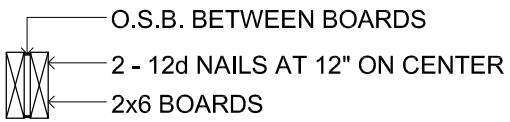
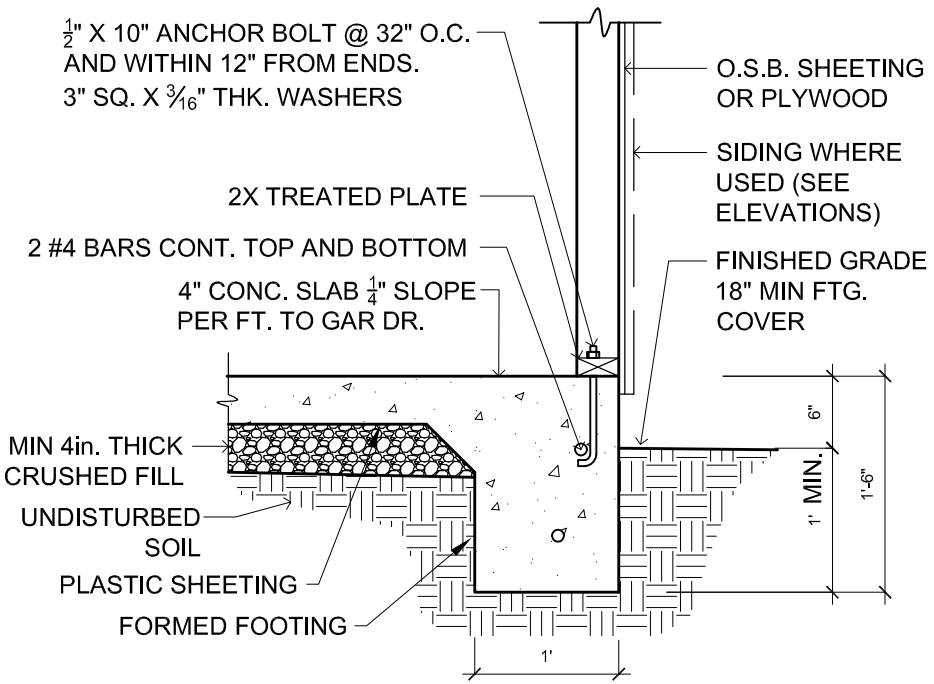


W6 2X6 HEADER DETAILS

¾" = 1'-0"



1 MONOLITHIC SLAB WITH FOOTINGS

¾" = 1'-0" Verify Footing Size With Local Building Offical

Section 8.4

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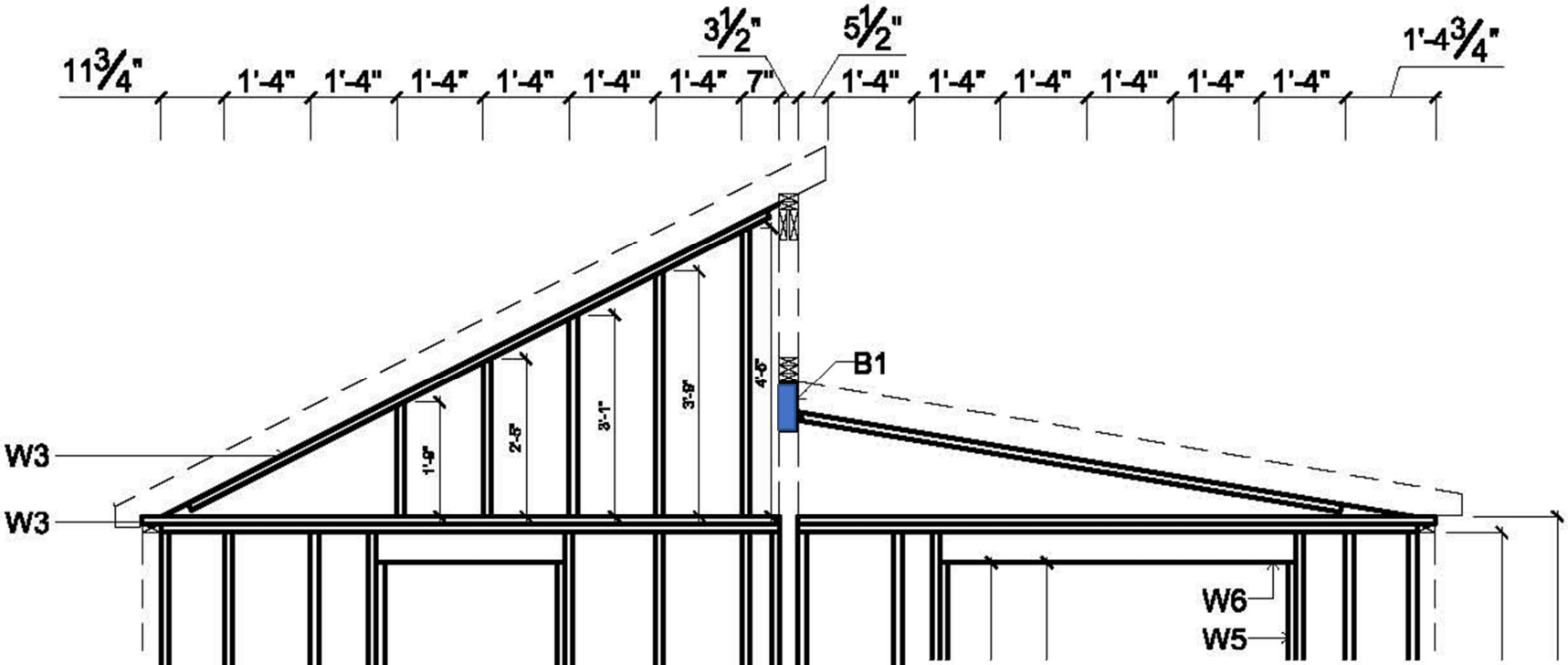

FRONT WALL FRAMING PLAN

WALL FRAMING MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
W1	2x4 Wall Stud	92 5/8"	70
W1.1	2x4 Wall Stud	9'-0"	4
W2	2x4 Wall Plate, Short	12'-0"	6
W3	2x4 Wall Plate, Long	10'-0"	16
W5	2x4 Trimmer	92 5/8"	10
W6	2x6 Header	8'-0"	4
W6.1	2x6 Header	12'-0"	2
B1	LVL 9 ¼ 2ply	12'0	

BEAM TO BE STRAPPED TO WALL FRAMING USING SIMPSON ST12 STRAPS.

Door Header:
-The door header is made by nailing together 2 - 2x6's with a piece of O.S.B. sheeting between them. Put 2 nails every 6 inches and 2 inches from the ends.

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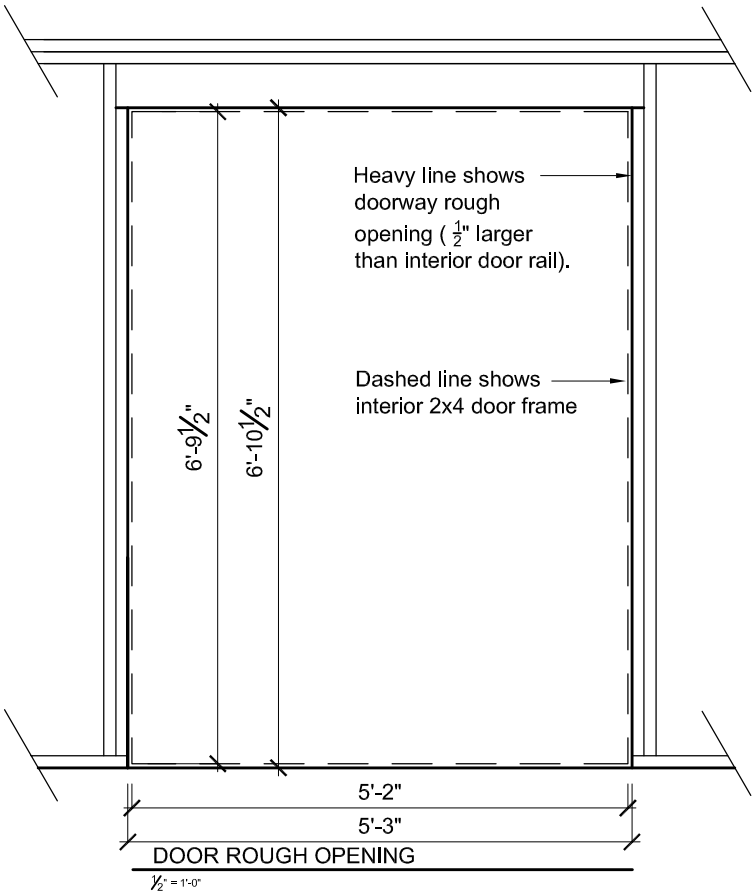

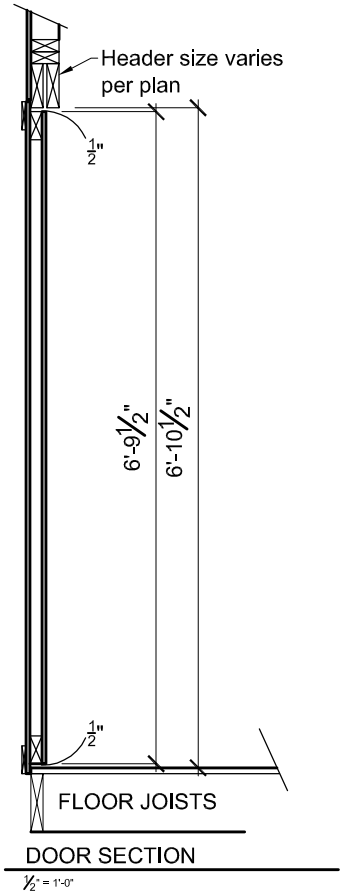

DOOR MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
D1	Hinges	6"	6
D2	Lock per owner		
D3	O.S.B.	4x8x⅜"	2
D4	T1-11 Siding	4x8x½"	2
D5	2x4x8' lumber		6
D6	Spring Latch		2
T1	1x4 Trim	8'	6

FASTENERS

#9 flat head, Polymer 2 ½"" Exterior deck screws — 2 lb.
(Used to install trim to exterior.)

#8 flat head, Polymer 1 ⅝" Exterior deck screws — 2 lb.
(Used to install exterior and interior panels to door.)

#9 flat head, Polymer 3" Exterior deck screws — ½ lb.
(Used to install hinges.)

DOOR BUILDING NOTES:

- The shed door should be built after the shed door opening is framed and sheeted to ensure that the door will fit the finished opening. Modify the door plan as necessary to ensure that it will fit the opening that is built on the jobsite.

The door is built by sandwiching a 2x4 frame between a sheet of O.S.B. on the inside of the shed and a sheet of T1-11 siding on the outside. The following steps correspond to the steps shown below.

FASTENERS - Attach all boards and trim using exterior grade screws. The length of the screws varies depending on the thickness of the boards being used.

STEP 1 - Cut out the interior sheet of O.S.B. Make sure that the panel is square by checking the diagnals across the panel. The diagonals should be the same.

STEP 2 - Cut out the 2x4 rails using the dimensions shown. Screw the rails to the rough side of the O.S.B. Using 1 ⅝" deck screws. Make sure that the edges are flush.

STEP 3 - Cut out the exterior panel to the dimensions shown in the step 3 drawings. Attach the exterior panel to the rail and panel assemby you put together in step 2 sandwiching the 2x4 rails in between the O.S.B. and the T1-11 siding. Make sure the reveals match the dimensions shown on the plans.

STEP 4 - Install trim on top of the T1-11 or rough cut plywood panel per your shed design using 2 ½" deck screws.

STEP 5 - Install the door(s) by putting a shim along the bottom of the shed door opening that is approximately ½" thick. Rest the door on the shim and make sure the reveal between the interior door rails and the shed door opening are all the same, adjust the size of the shim to make the reveals match.

HINGES: With the door in place, screw the hinges to the doors and on top of the trim on the shed and doors. Install the hinges so that the screws go into the 2x4 door rails using 3" screws. Remove the shims and the door should swing freely. Install door locking hardware per manufacturers instructions. Double doors will require two spring latches to hold the inner door in place while the second door locks to it.

5068 Door 1

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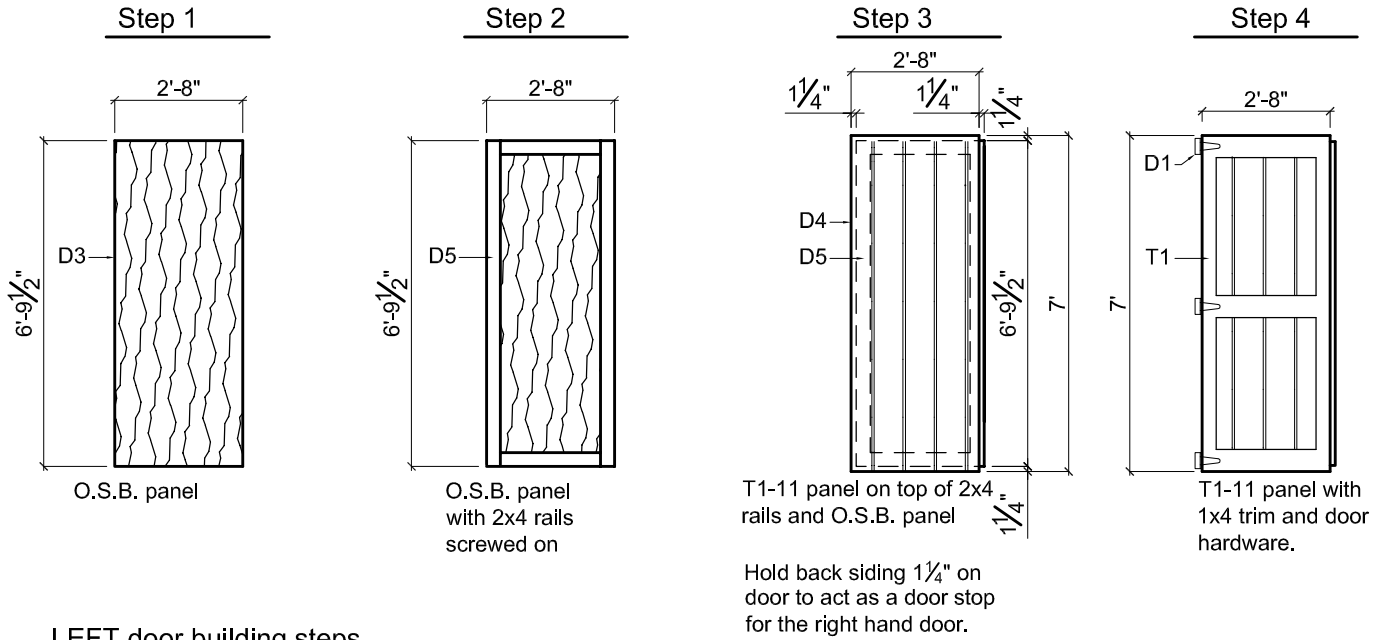
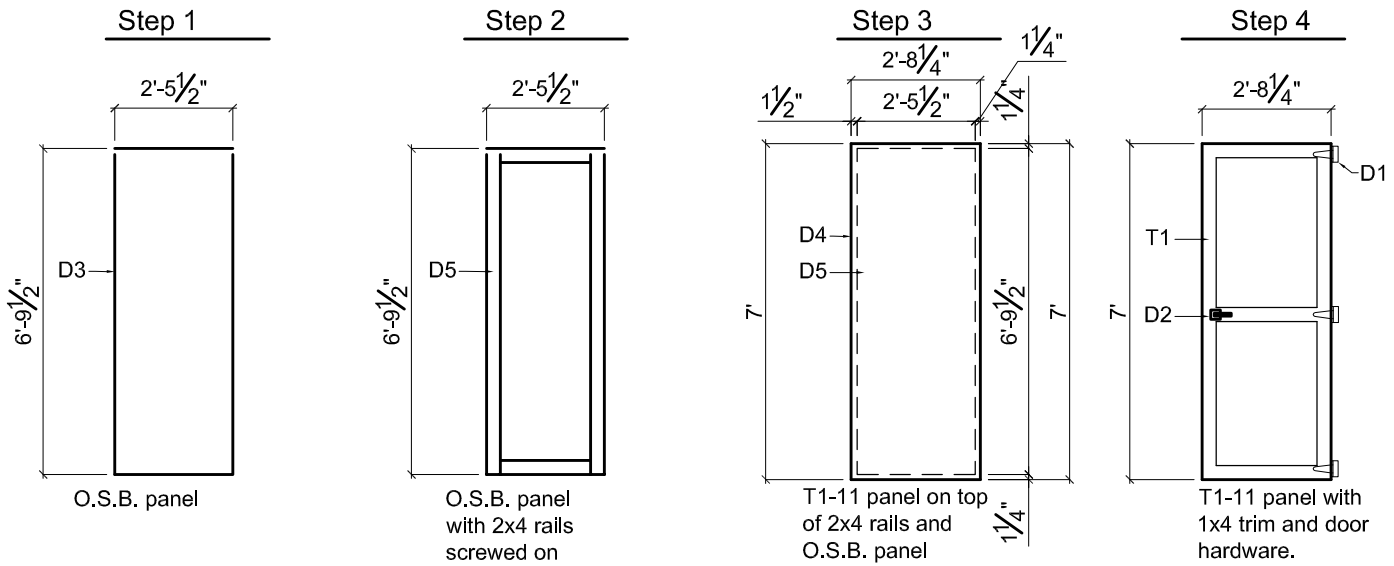


LEFT door building steps

¼"= 1'-0"



RIGHT door building steps

¼"= 1'-0"

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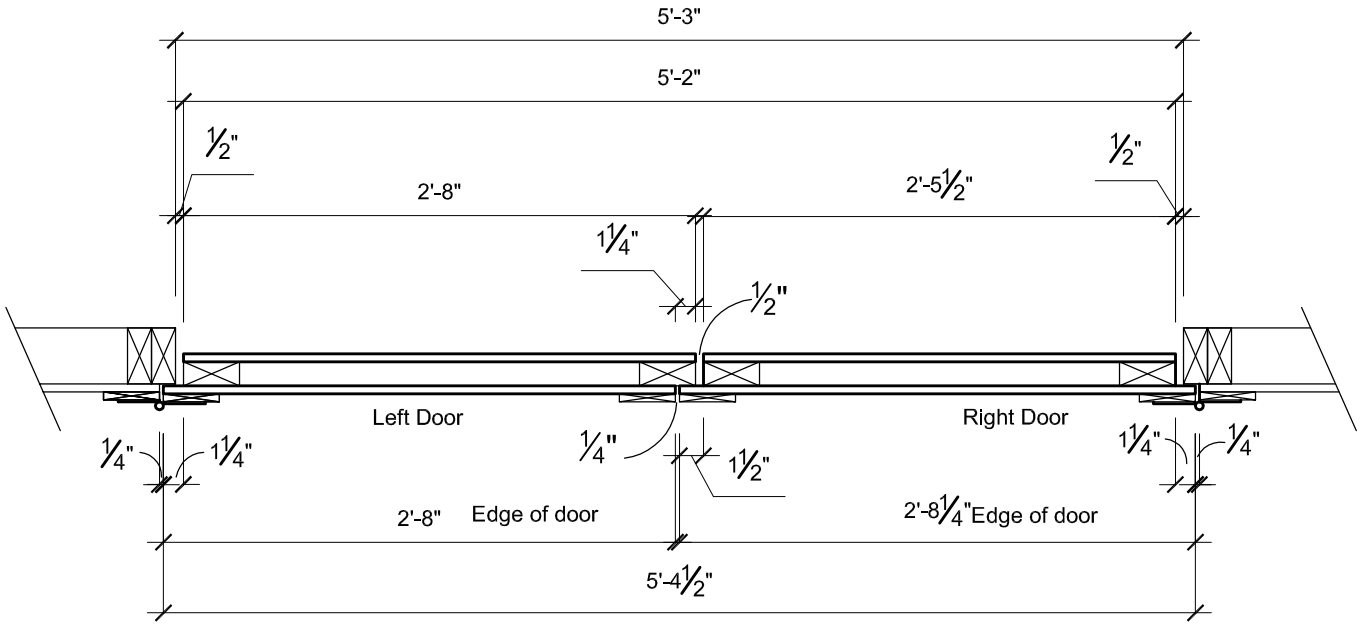
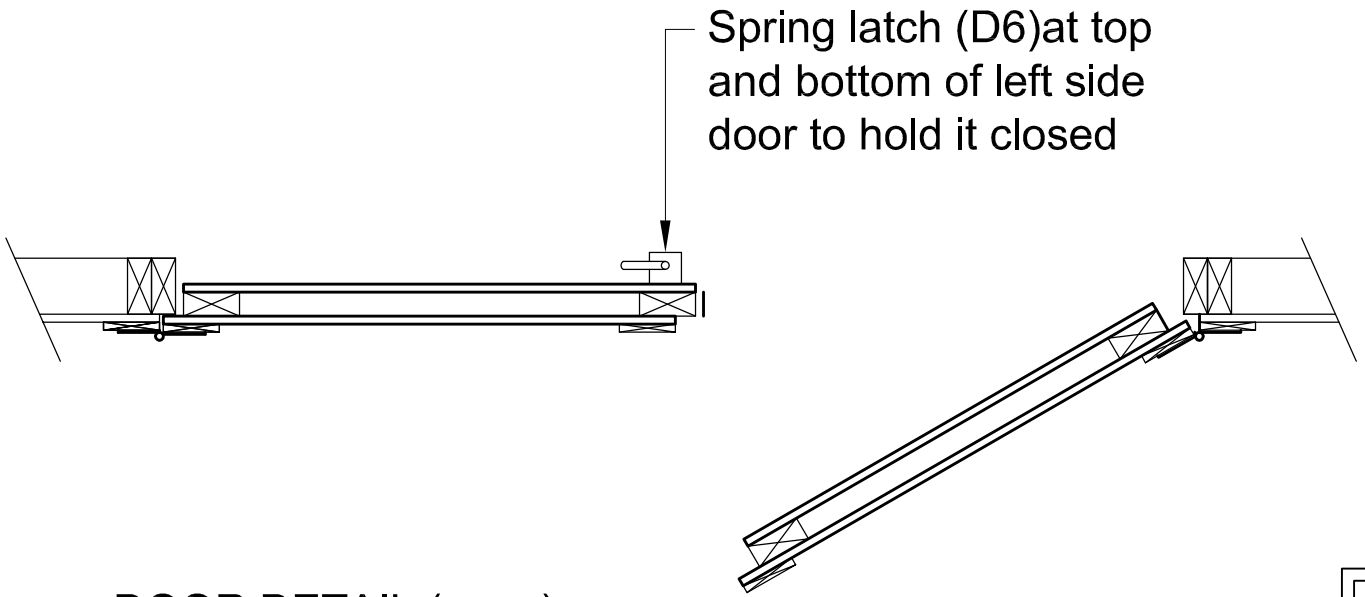


DOOR DETAIL (closed)

1" = 1'-0"



DOOR DETAIL (open)

1" = 1'-0"

5068 Door 3

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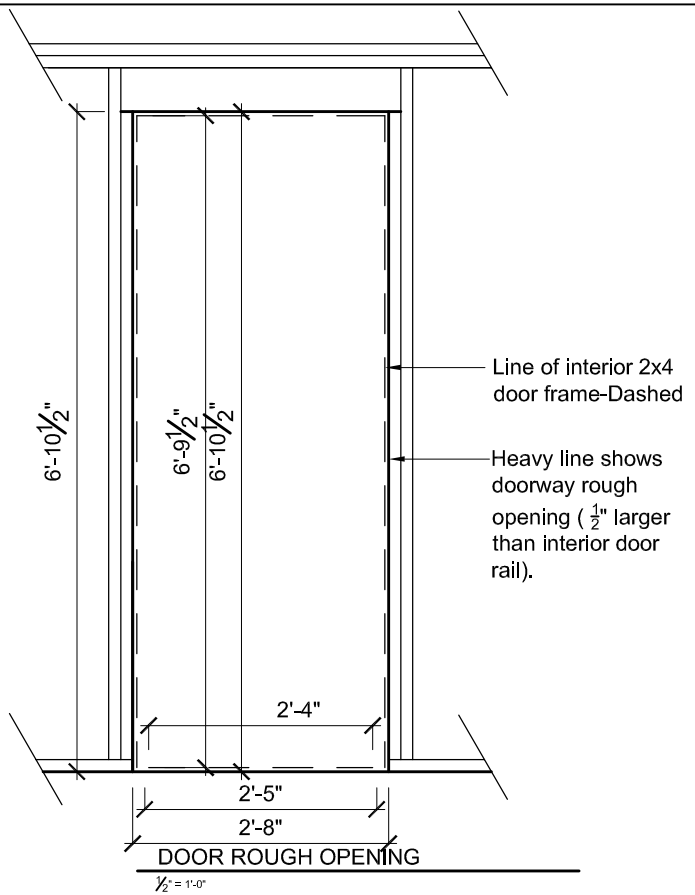

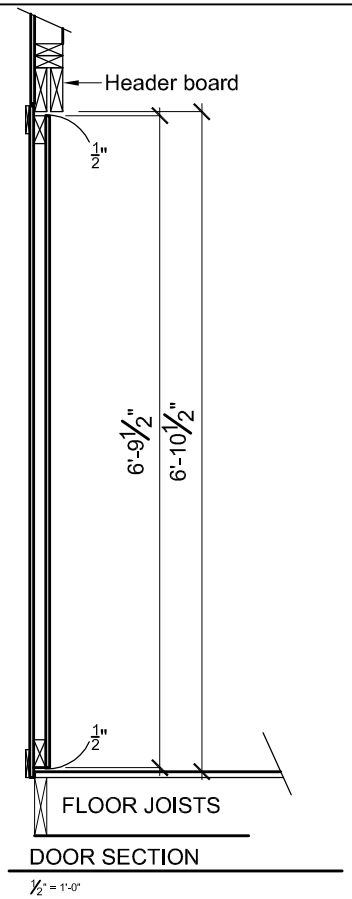

DOOR BUILDING NOTES:

- The shed door should be built after the shed door opening is framed and sheeted to ensure that the door will fit the finished opening. Modify the door plan as necessary to ensure that it will fit the opening that is built on the jobsite.

The door is built by sandwiching a 2x4 frame between a sheet of O.S.B. on the inside of the shed and a sheet of T1-11 siding on the outside. The following steps correspond to the steps shown below.

FASTENERS - Attach all boards and trim using exterior grade screws. The length of the screws varies depending on the thickness of the boards being used.

STEP 1 - Cut out the interior sheet of O.S.B. Make sure that the panel is square by checking the diagnals across the panel. The diagonals should be the same.

STEP 2 - Cut out the 2x4 rails using the dimensions shown. Screw the rails to the rough side of the O.S.B. Using 1 ⅝" deck screws. Make sure that the edges are flush.

STEP 3 - Cut out the exterior panel to the dimensions shown in the step 3 drawings. Attach the exterior panel to the rail and panel assemby you put together in step 2 sandwiching the 2x4 rails in between the O.S.B. and the T1-11 siding. Make sure the reveals match the dimensions shown on the plans.

STEP 4 - Install trim on top of the T1-11 or rough cut plywood panel per your shed design using 2 ½" deck screws.

STEP 5 - Install the door(s) by putting a shim along the bottom of the shed door opening that is approximately ½" thick. Rest the door on the shim and make sure the reveal between the interior door rails and the shed door opening are all the same, adjust the size of the shim to make the reveals match.

HINGES: With the door in place, screw the hinges to the doors and on top of the trim on the shed and doors. Install the hinges so that the screws go into the 2x4 door rails using 3" screws. Remove the shims and the door should swing freely. Install door locking hardware per manufacturers instructions. Double doors will require two spring latches to hold the inner door in place while the second door locks to it.

DOOR MATERIALS

CODE	DESCRIPTION	LENGTH	QTY.
D1	Hinges	6"	3
D2	Lock per owner		
D3	O.S.B.	4x8X⅜"	1
D4	T1-11 Siding	4x8X½"	1
D5	2x4x8' lumber		3
T1	1x4 Trim	8'	3
T2	1x6 Trim	8'	2

FASTENERS

#9 flat head, Polymer 2 ½"" Exterior deck screws (Used to install trim to exterior.) — 1lb.

#8 flat head, Polymer 1 ⅝" Exterior deck screws (Used to install exterior and interior panels to door.) — 1lb.

#9 flat head, Polymer 3" Exterior deck screws (Used to install hinges.) — ½ lb.

2668 Door 1

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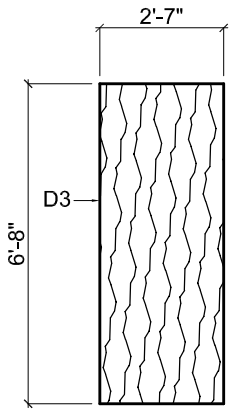
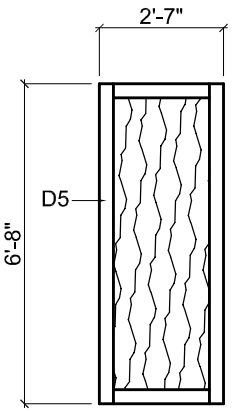
Layer 1



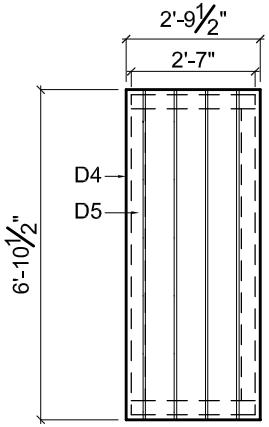
O.S.B. panel

Layer 2



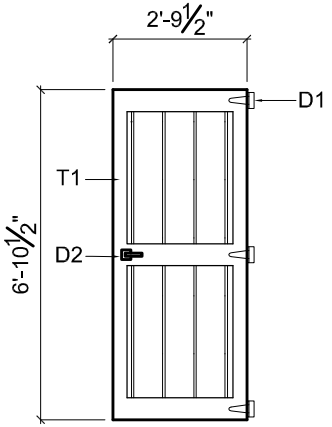
O.S.B. panel with 2x4 rails screwed on

Layer 3



T1-11 panel on top of 2x4 rails and O.S.B. panel

Layer 4



T1-11 panel with 1x4 trim

SINGLE DOOR BUILDING STEPS

¼"= 1'-0"

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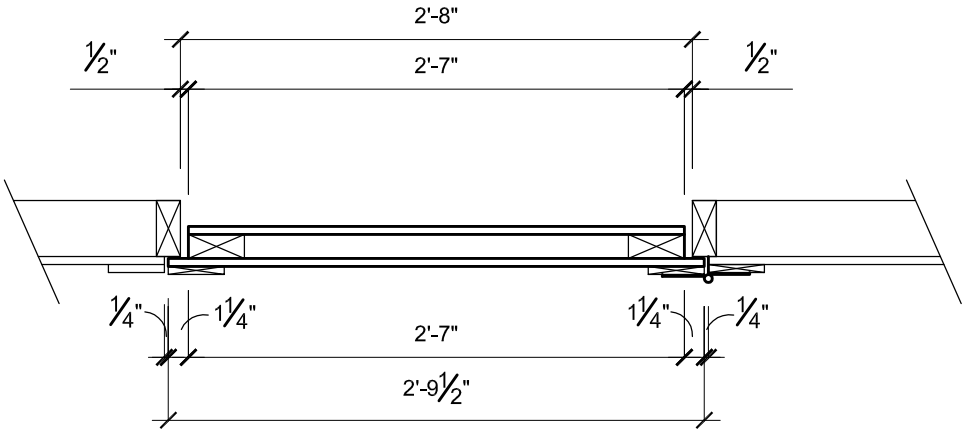
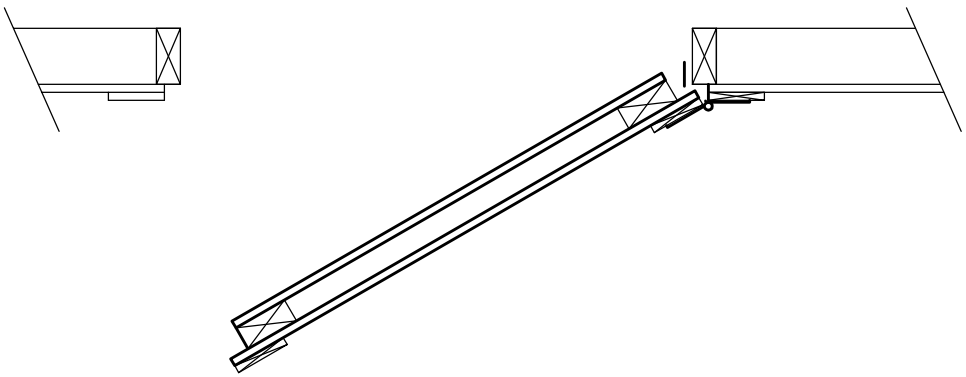


DOOR DETAIL (closed)

1" = 1'-0"



DOOR DETAIL (open)

1" = 1'-0"

2668 Door 3

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