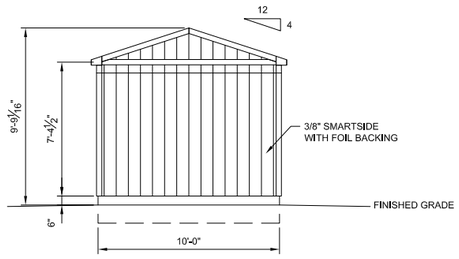
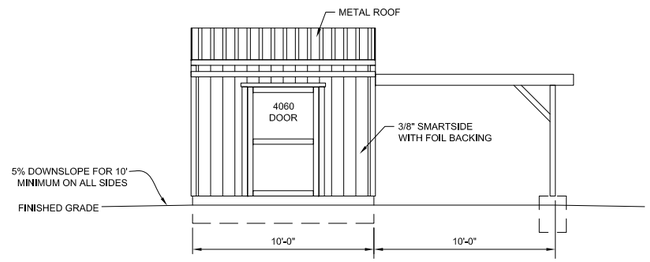
OBSERVATORY
10' X 10' = 100 SQ FT

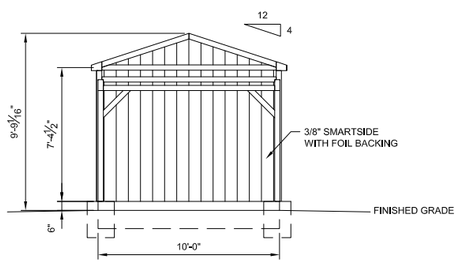
DRAWING INDEX
A1 - PROJECT NOTES, ELEVATIONS
A2 - PLANS, SHEAR WALL SCHEDULE
A3 - SECTIONS, DETAILS



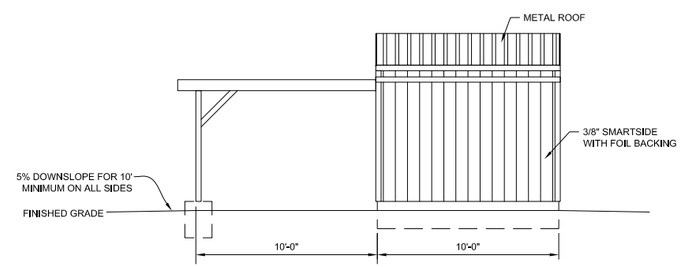
WALL A ELEVATION



WALL B ELEVATION



WALL C ELEVATION



WALL D ELEVATION

PROJECT NOTES

DESIGN REQUIREMENTS

1. GOVERNING CODES: 2012 IBC
   OCCUPANCY REQUIREMENTS: GROUP U
   CONSTRUCTION TYPE: V-B

2. DESIGN SCHEDULE
   A. BUILDING SIZE
      WIDTH: 10'-0"
      LENGTH: 8'-0"
      SIDE WALL HEIGHT: 7'-4 1/2"
      TOTAL HEIGHT: 9'-9 1/8"
   B. BUILDING LOADS
      ROOF LIVE LOAD: 30 PSF
      ROOF DEAD LOAD: 10 PSF
   C. DESIGN WIND
      3 SECOND GUST, V_{3s} : 115 MPH
      WIND EXPOSURE: C
   D. SEISMIC DESIGN CATEGORY: C
   E. SITE CLASS: D
   F. ROOF PITCH: 4/12

3. ROOFING SCHEDULE
   A. ROOF SHEATHING SHALL BE APA RATED 7/16" THICK OSB WITH FOIL BACKING. STAGGER LAYOUT PER APA CONDITION 1.
   B. PI #24/16 MIN UNBLOCKED.
   C. SHEATHING NAILING SHALL BE PER NAILING SCHEDULE.
   D. METAL ROOFING.
   E. 15 LB. ROOFING FELT.
   F. TYPE 'D' METAL DRIP EDGE FLASHING REQUIRED ALL SIDES.
   G. TRUSSES SHALL BE SPACED @ 24" OC.
   H. SEE SEPARATE TRUSS SHEETS FOR TRUSS FRAMING AND MATERIALS.
   I. TRUSS CONNECTION PLATES 'EAGLE METAL PLATES' ICC #ESR 1082.
   J. THE TRUSS PLATE INSTITUTE (TPI) (NER QA 430) IS THE INSPECTION AGENCY RESPONSIBLE FOR IN-PLANT INSPECTIONS.
   K. TRUSS MANUFACTURER: TUFF SHED, INC.

4. WOOD FRAMING
   A. ALL WALL FRAMING MEMBERS SHALL BE STUD GRADE OR BETTER WITH THE FOLLOWING DESIGN VALUES: Fb = 675 PSI, Ft = 400 PSI, Fv = 150 PSI, Fc = 800 PSI PARALLEL TO GRAIN, E = 1,200,000 PSI.
   B. STUDS SHALL BE SPACED @ 16" OC.
   C. FASTEN EXTERIOR WALL SHEATHING TO FRAMING PER NAILING SCHEDULE.
   D. PROVIDE SOLID BLOCKING AT ALL HORIZONTAL JOINTS OCCURRING IN BRACED WALL PANELS PER 2308.9.3.
   E. SHEAR WALL MATERIAL SHALL BE AS SPECIFIED IN SHEAR WALL SCHEDULE.
   F. SHEAR WALL NAILING SHALL BE AS SPECIFIED IN SHEAR WALL SCHEDULE.

5. SOIL
   A. MIN. REQUIRED SOIL TYPE SHALL BE CLAY, SANDY CLAY, SILTY CLAY, OR CLAYEY SILT (CL, ML, MH & CH). PRESCRIPTIVE ALLOWABLE SOIL BEARING PRESSURE USED IN DESIGN IS 1500 PSF AT 12" DEEP. VALUES ARE PER TABLE 1804.2.
   B. IN THE EVENT OF THE DISCOVERY OF EXPANSIVE SOILS, FOUNDATION WILL EXTEND MIN. 2'-0" BELOW GRADE.
   C. ALL FOOTINGS SHALL BE FOUNDED ON UNDISTURBED NATURAL SOIL.
   D. IN THE EVENT EXCAVATIONS REVEAL UNFAVORABLE CONDITIONS, THE SERVICES OF A SOILS ENGINEER MAY BE REQUIRED.

6. PERMIT
   A. PERMIT APPLICATIONS, WHERE NO PERMIT IS ISSUED, SHALL EXPIRE PER LIMITATIONS SET BY LOCAL CODES. SECTION 105.5.
   B. JOB CARD REQUIRED TO BE AVAILABLE FOR SIGNATURE AT JOB SITE

GENERAL NOTES

1. GENERAL:
   A. ERECTION PROCEDURES SHALL CONFORM TO OSHA STANDARDS. BUILDER SHALL PROTECT ALL ADJACENT PROPERTY, STRUCTURES, TREES, UTILITIES, ETC.
   B. BUILDER IS RESPONSIBLE FOR SAFETY OF BUILDING DURING CONSTRUCTION. PROVIDE ALL SHORING OR BRACING AS REQUIRED AND PER GOVERNING REGULATIONS.
   C. ALL WOOD CONSTRUCTION CONNECTORS REFERENCED IN THIS DRAWING SHALL BE SIMPSON 'STRONG-TIE' OR EQUIVALENT INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
   D. GREEN VINYL SINKER NAILS DO NOT MEET THE NAILING REQUIREMENTS OF COMMON NAILS.

2. PLYWOOD DIAPHRAGMS
   15/32" CDX PLYWOOD OR 7/16" OSB

3. MATERIAL EVALUATION REPORT IDENTIFICATION
   A. TRUSS CONNECTION PLATES BY EAGLE METAL PLATES PER ICC-ES REPORT #ESR-1082.
   B. DURATEMP SIDING BY ROSEBURG FOREST PRODUCTS IS APPROVED FOR USE WITHOUT UNDERLAYMENT PER ICC-ES REPORT #ESR-2760.
   C. HARDIPANEL SIDING BY JAMES HARDIE BLDG PRODUCTS PER NES REPORT #NER-405
   D. SMARTSIDE SIDING BY LP CORPORATION PER ICC-ES REPORT #ESR-1301.
   E. LAMINATED VENEER LUMBER (LVL) PER ICC-ES REPORT #ESR-1387.
   F. CLASS A SHINGLES BY OWENS CORNING ROOFING PER ICC-ES REPORT #ESR-1372.
   G. HDU PRE-DEFLECTED HOLDOWNS BY SIMPSON PER ICC-ES REPORT #ESR-2330.
   H. SSTB ANCHOR BOLTS BY SIMPSON PER ICC-ES REPORT #ESR-2611.

PRELIMINARY

STRUCTURAL DRAWINGS BY:
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IN HOUSE DRAFTING DEPARTMENT
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DENVER, COLORADO 80210
(303) 753-TUFF

PO No. Presale Inv No. Presale
Customer: ASTRONOMY GROUP
Description: OBSERVATORY
10' X 10' = 100 SQ FT
Site Address:

TUFF SHED
Storage Buildings & Garages
TUFF SHED, INC.
3310 EAST GAS ROAD
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(520) 889-8833
CONTRACTORS LICENSE #ROC 142570
STORE 040

Drawn By: SJ
Date: 9/10/15
Checked By:
Date:
Revised:
Revised:

Title:
-
PROJECT NOTES

ELEVATIONS
-
Scale: 1/4" = 1'-0"

Sheet:
A1
Sheet 1 of 3

NAILING SCHEDULE

CHORD SPLICE NAILING: 8 - 16d NAILS EACH SIDE OF SPLICE.
TRUSS BLOCKING: (4) - 16d (TOENAILED)

FRAMING NAILING:
STUD TO TOP PLATE, 2-16d END NAIL
STUD TO SILL PLATE, 2-16d END NAIL OR 4-8d TOENAIL
DBL. HEADER 16d @ 16" OC ALONG EACH EDGE
HEADER TO KING STUD 4-8d TOENAIL OR 4-16d END NAIL
DOUBLE TOP PLATES, 16d @ 16" FACENAIL

UNLESS SPECIFIED HEREIN, ALL NAILING SHALL BE PER 2012 IBC TABLE 2304.9.1.

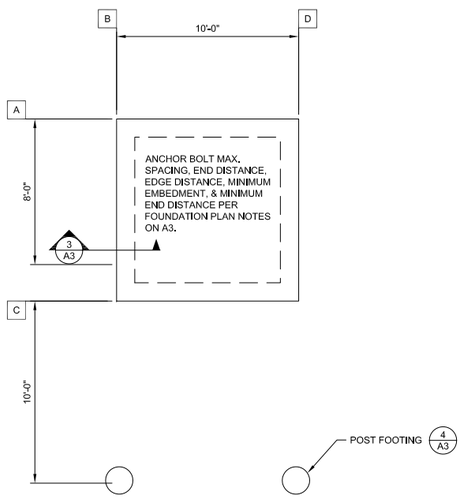
PROVIDE 2X4 SOLID BLOCKING ON ALL UNSUPPORTED EDGES OF PLYWOOD ON SHEAR WALLS.

UNBLOCKED ROOF DIAPHRAGM ROOF SHEATHING NAILING: BORDER: 8d COMMON @ 6" OC EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC	X	197

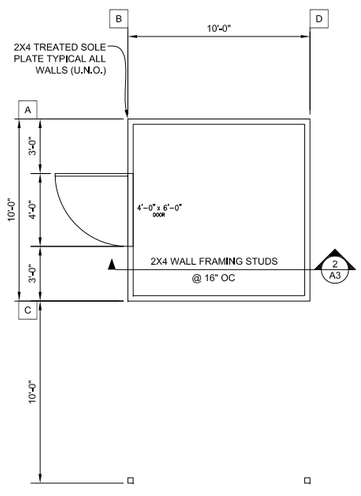
SHEAR WALL SCHEDULE	CALC. SHEAR LOAD (lb/ft)	ALLOW SHEAR LOAD (lb/ft)
2X4 FRAMING. SHEATHE EXTERIOR WITH 3/8" SMARTSIDE WITH FOIL BACKING. 10'-0" LONG TOTAL. 8' USED FOR SHEAR. NAILING: A EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC NO HOLDOWNS REQUIRED.	X	230
2X4 FRAMING. SHEATHE EXTERIOR WITH 3/8" SMARTSIDE WITH FOIL BACKING. 10'-0" LONG TOTAL. 8' USED FOR SHEAR. NAILING: C EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC NO HOLDOWNS REQUIRED.	X	230

SHEAR WALL SCHEDULE	CALC. SHEAR LOAD (lb/ft)	ALLOW SHEAR LOAD (lb/ft)
2X4 FRAMING. SHEATHE EXTERIOR WITH 3/8" SMARTSIDE WITH FOIL BACKING. 10'-0" LONG TOTAL. (4'+4') = 8' USED FOR SHEAR. NAILING: B EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC NO HOLDOWNS REQUIRED.	X	230 150
2X4 FRAMING. SHEATHE EXTERIOR WITH 3/8" SMARTSIDE WITH FOIL BACKING. 10'-0" LONG TOTAL. 12' USED FOR SHEAR. NAILING: D EDGE: 8d COMMON @ 6" OC FIELD: 8d COMMON @ 12" OC NO HOLDOWNS REQUIRED.	X	230 150

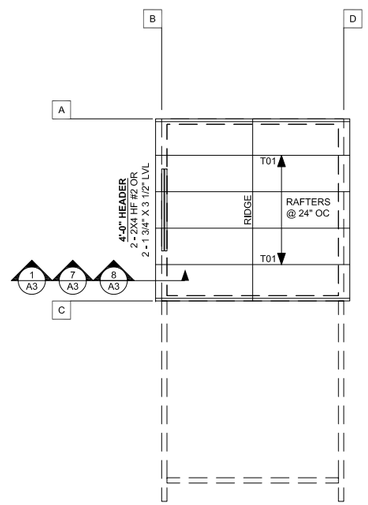
WHEN PERFORATED SHEAR WALL DESIGN IS DESIGNATED, AREAS ABOVE AND BELOW OPENINGS ARE USED IN SHEAR CALCULATIONS.



FOUNDATION PLAN



FLOOR PLAN



ROOF FRAMING PLAN

PRELIMINARY

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Drawn By: SJ
Date: 9/10/15
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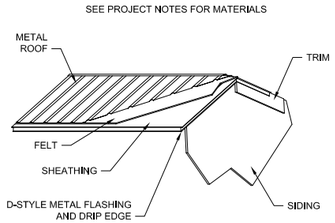
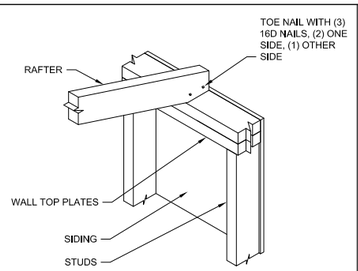
Revised:

Title:
-
PLANS
SHEAR WALL SCHED
NAILING SCHEDULE
-
Scale: 1/4" = 1'-0"

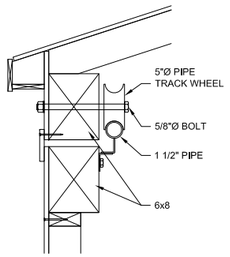
Sheet:
A2
Sheet 2 of 3



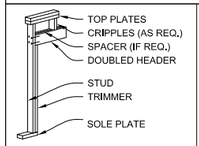
6 METAL ROOFING DETAIL



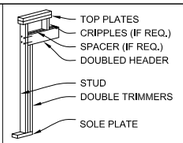
7 SHED RAFTER TOE NAILING DETAIL



8 ROOF TRACK DETAIL



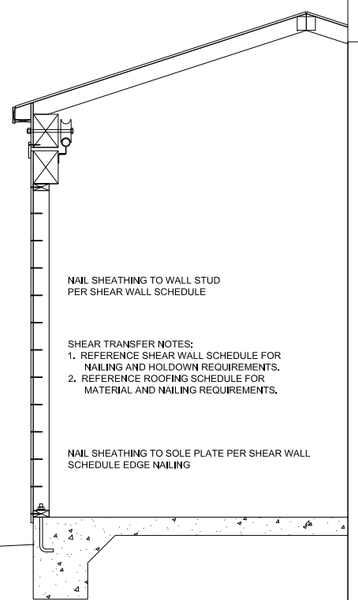
FOR OPENINGS UP TO 5'-11 1/2" UNLESS OTHERWISE NOTED



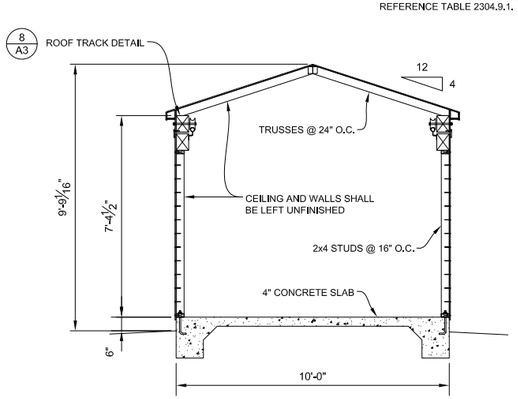
FOR OPENINGS 6'-0" AND WIDER UNLESS OTHERWISE NOTED

NAILING:
HEADER TO STUD - 4-8d TOENAIL OR 4-16d END NAIL
DOUBLED HEADER - 16d @ 16" STAGGERED FACE NAIL
REFERENCE TABLE 2304.9.1

5 HEADER DETAIL
NOT TO SCALE

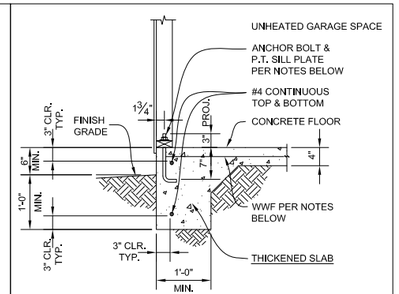


1 SHEAR TRANSFER DETAIL
3/4" = 1' - 0"



2 BUILDING SECTION
3/8" = 1' - 0"

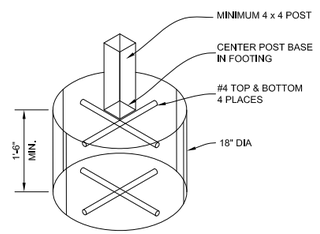
ATTACH EACH END OF EACH TRUSS TO TOP PLATES WITH H2.5 OR EQUIV CLIPS.
WALL FRAMING TO BE 2X4 HF STUD GRADE @ 16" OC.



MONOLITHIC FOUNDATION

CONTINUOUS FOOTING NOTES
1. TOP OF SLAB TO BE 6" MIN. ABOVE GRADE. SLAB REINFORCEMENT SHALL BE WWF 6X6 W10xW10 PER ASTM A185, LOCATE AT MID-DEPTH OF SLAB.
-OR-
SLAB REINFORCEMENT SHALL BE FIBERMESH 150 OR BLENDED FIBERMESH150. FIBERMESH SHOULD BE DISPERSED UNIFORMLY THROUGH CONCRETE W/ MIN. 1 POUND PER CUBIC YARD OF CONCRETE.
2. ALL FOOTING FORMS SHALL BE INSPECTED FOR SIZE AND REINFORCING BEFORE POURING CONCRETE.
3. FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL, COMPETENT SOIL OR PROPERLY COMPACTED STRUCTURAL FILL. ALLOWABLE SOIL BEARING PRESSURE IS 1500 PSF AT 12" BELOW GRADE.
4. CONCRETE: MINIMUM 28 DAY COMPRESSIVE STRENGTH, fc = 2500 PSI.
5. REINFORCING STEEL: A615, GRADE 40 OR GRADE 60. ALL REINFORCING STEEL SHOWN TO BE CONTINUOUS MAY BE LAPPED A MINIMUM OF 38 BAR DIAMETERS OR 24".
6. SEISMIC DESIGN CATEGORY: C
   A. ATTACH PRESSURE TREATED SOLE PLATE TO THE FOOTING USING 1/2" DIA X 10" LONG 'L' BOLTS WITH NUTS AND WASHERS.
   B. ANCHOR BOLTS SHALL BE EMBEDDED AT LEAST 7" INTO THE CONCRETE AND SHALL BE SPACED NOT MORE THAN 6' OC.
   C. THERE SHALL BE A MINIMUM OF 2 BOLTS PER SOLE PLATE PIECE WITH 1 BOLT LOCATED NOT MORE THAN 12" NOR LESS THAN 7 BOLT DIAMETERS FROM EACH END OF EACH PIECE.

3 CF-1 FOUNDATION DETAIL
3/4" = 1'-0" or 1/16 scale IBC



4 POST FOOTING DETAIL
NOT TO SCALE

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Checked By:
Date:
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Revised:
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SECTIONS
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Sheet 3 of 3