

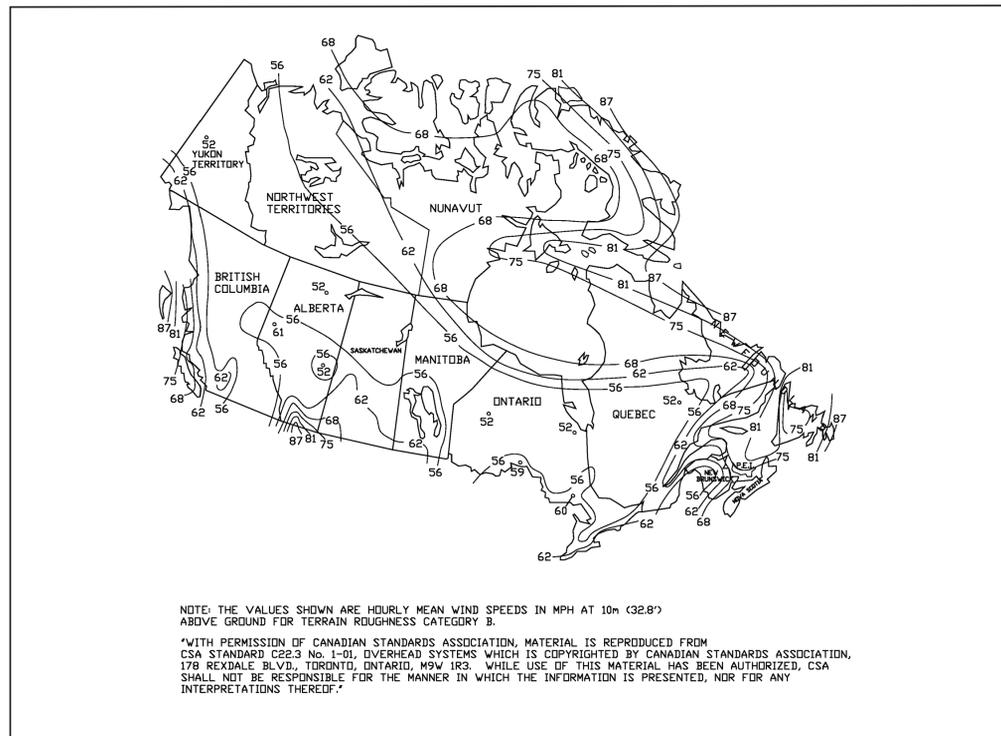
# UTILITY SHED PLANS

## ONTARIO - CANADA



### PORTABLE BUILDINGS

WIND CHART



**GENERAL NOTES:**

- NATIONAL BUILDING CODE OF CANADA 2020 AND PROVINCIAL CODE OF ONTARIO AND ALL SUPPLEMENTS AND REVISIONS/ERRATA.
- ALL MATERIALS AND LABOR SHALL BE IN ACCORDANCE WITH THE ABOVE CODE AND ALL OTHER APPLICABLE LOCAL CODES AT THE TIME OF MANUFACTURE.
- WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- THE FOUNDATION PLAN IS A SEPARATE SET OF PLANS FOR APPROVAL BY LOCAL MUNICIPALITIES.
- EXTERIOR DIMENSIONS CAN VARY BETWEEN LIMITS SHOWN @ 2'-0" o/c BUT MEMBER SPACING SHALL NOT EXCEED LIMITS AS INDICATED.
- ALL THE FOLLOWING LUMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA USE CATEGORY UC4B (GROUND CONTACT, HEAVY DUTY) SKIDS. TREATED SOUTHERN YELLOW PINE MAY BE USED AS AN APPROVED MATERIAL (SEE PAGE 11 OF DRAWINGS FOR APPROVAL LETTER).
- ALL THE FOLLOWING LUMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA USE CATEGORY UC3B (EXTERIOR ABOVE GROUND, UNCOATED OR POOR WATER RUNOFF), FLOORS JOISTS, PLYWOOD FLOOR DECKING, AND EXTERIOR RATED WOOD STRUCTURAL PANEL SIDING. TREATED SOUTHERN YELLOW PINE MAY BE USED AS AN APPROVED MATERIAL.
- LP PROSTRUCT SUB-FLOORING 1/2" MAY BE USED IN LIEU OF PRESSURE TREATED PLYWOOD FLOORING.
- P.T. PLYWOOD FLOORING NOT REQUIRED WHERE THE BOTTOM OF THE FLOORING IS OVER 18" ABOVE GROUND.
- ALL FASTENERS AND CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED (G185) OR STAINLESS STEEL.
- FOR ROOFS WITH ASPHALT SHINGLES AND A SLOPE BETWEEN 2 TO 12 AND 4 TO 12 SHALL HAVE A DOUBLE UNDERLAYMENT APPLICATION AS REQUIRED IN ACCORDANCE TO NBCC 2020.
- ASPHALT SHINGLES SHALL CONFORM TO NBCC 2020.
- FASTENERS FOR ASPHALT SHINGLES SHALL CONFORM TO NBCC 2020.
- TIE-DOWNS SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY AND PLACEMENT OF LAWN STORAGE UNIT TO INSURE THE INTEGRITY OF THE BUILDING AND ITS COMPONENT PARTS.
- NO FIELD REVISIONS TO ANY STRUCTURAL COMPONENT OR DEVIATION FROM THESE DRAWINGS SHALL BE MADE.
- THE OWNER AND THE CONTRACTOR SHALL HOLD HARMLESS THE ENGINEER FROM AND AGAINST ALL LIABILITY CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING LEGAL FEES ARISING OUT OF OR RESULTING FROM ERROR OR OMISSIONS IN THE PERFORMANCE OF THE WORK BY THE CONTRACTOR.
- SECTIONS AND DETAILS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY AT ALL SIMILAR LOCATIONS, UNLESS OTHER SECTIONS AND DETAILS ARE SPECIALLY REFERENCED.
- REFER TO SUPPLIED FASTENING SCHEDULE FOR FASTENING BASE ON CONNECTION AND LOCATION OF MEMBERS AS PER 2020 BUILDING CODE TABLE 2304.9.1 UNLESS NOTED OTHERWISE.
- BUILDINGS HAVE BEEN DESIGNED FOR LP SMARTSIDE PREVISION PANEL SIDING, LP SMARTSIDE PRECISION LAP SIDING SHALL NOT BE USED.
- FASTENERS IN LP SMARTSIDE PRECISION PANEL SIDING MUST NOT BE INSTALLED IN PANEL SIDING GROOVES IN THE FIELD OF THE PANEL SIDING OR WHEN THE PANEL SIDING GROOVES OCCUR AT CUT EDGES OF THE PANEL SIDING.
- REFER TO THE ICC-ES EVALUATION REPORT ESR-1301 FOR ADDITIONAL DATA AND SPECIFICATIONS OF LP SMARTSIDE PRECISION PANEL SIDING. MINNESOTA PRODUCT APPROVAL 9190.5 & 9190.6
- MAX OPENING WIDTHS MUST COMPLY WITH DESIGN RATIOS AS PER ANSI/AF&PA SDPWS-2008. BUILDING HAVE DESIGNED TO HAVE ONLY OPENINGS WITH MAX WIDTHS EQUAL TO THOSE IN THE ENDWALL SHEAR WALL CHART.
- THE DESIGN OF THESE BUILDING MEETS CNRC-NRC (CANADA NATIONAL RESEARCH COUNCIL), AND THE (PROVINCIAL BUILDING CODE).
- UNLESS NOTED OTHERWISE, ATTACH ALL MANUFACTURED PRODUCTS IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- THE SPECIFIED STRENGTHS & MODULUS OF ELASTICITY VALUES OF SOUTHERN YELLOW PINE-STRUCTURAL ARE SUBSTANTIALLY HIGH, SO THEY ARE SUITABLE TO USE AS A STRUCTURAL FLOOR JOISTS AND SKIDS FOR THE ABOVE MENTIONED PROJECT. THE LOADING CALCULATIONS USED FOR STP ARE EQUIVALENT TO VALUES FOR CANADIAN LUMBER SPF AS PER NBC 9.23.4.2.

**NOTES:**

THIS BUILDING DOES NOT HAVE RUNNING WATER OR SANITATION SERVICES. THIS BUILDING IS DESIGNED AS A UTILITY SHED TO STORE LAWN EQUIPMENT SUCH AS WHEEL BARROWS GARDENING SUPPLIES, FLOWER POTS, AD CARDBOARD BOXED WITH VARIOUS SMALL ITEMS.

**SITE INSTALLED ITEMS:**

- NOTE THAT THIS LIST DOES NOT NECESSARILY LIMIT THE ITEMS OF WORK AND MATERIALS THAT MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SITE RELATED ITEMS ARE SUBJECT TO LOCAL JURISDICTIONAL APPROVAL.
- THE COMPLETE FOUNDATION SUPPORT AND TIE-DOWN SYSTEM.
  - RAMPS, STAIRS, AND GENERAL ACCESS TO THE BUILDING IF NECESSARY.
  - GUTTERS AND DOWNSPOUTS ON ALL BUILDINGS WITH EAVES OF LESS THAN 6 INCHES HORIZONTAL PROJECTION EXCEPT FOR GABLE END RAKES.

**DESIGN CRITERIA:**

1. WIND VELOCITY	1/50 kPa. Column Div B App C 75 mph = 14.4 psf
2. BUILDING CATEGORY	I
3. WIND EXPOSURE	C
4. INT. PRESSURE COEFFICIENT	±0.18
5. ENCLOSURE CLASSIFICATION	ENCLOSED
6. BASED ON HEIGHT	15 FEET
7. OVERHANG	NO
8. FLOOR DESIGN LIVE LOAD FLOOR DESIGN DEAD LOAD	50 PSF 4 PSF
9. ROOF DESIGN LIVE LOAD ROOF DESIGN DEAD LOAD	20 PSF 7 PSF
10. WALL DESIGN DEAD LOAD	3 PSF
11. SNOW LOAD	S=0.8 (0.8SS+SR) Ss<4.4kpa IF Ss>4.4, (67 psf) SPECIAL ORDER. TRUSSES/ RAFTERS AT 12" FOR SNOW BETWEEN 67 & 85 PSF
12. CONSTRUCTION TYPE	IV B
13. BUILDING OCCUPANCY =	U
14. FIRE RATING EXT. WALLS	0
15. ALLOWABLE NUMBER OF FLOORS	1
16. THE CONTRACTOR / MANUFACTURER MUST COMPLY WITH THE FOLLOWING CODES AND ALL OF THEIR AMENDMENTS / SUPPLEMENTS.	
17. FOR GARAGE USE: FLOOR RATED AT 50 PSF & 1,000# OVER 20 SQ. IN.	

**CANADA CODE SUMMARY**

LATEST BUILDING CODE  
2020 NBCC

**SHEET LIST**

SHEET NUMBER	SHEET TITLE
C-1	COVER SHEET
C-2	FASTENING SCHEDULE / WIND LOADING / SHEARWALL CHART
A-1	FRAMING PLANS & DETAILS
A-2	FRAMING PLANS & DETAILS
A-3	SECTIONS
A-4	PLANS & DETAILS
A-5	TYPICAL DETAILS
A-6	TYPICAL DETAILS
A-7	OPTIONAL PORCH DETAILS
A-8	TRUSS DETAILS

AREA FOR APPROVAL STAMPS



PROJECT: UTILITY SHED

COVER SHEET & GENERAL NOTES

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER



ENGINEERING SERVICES PROVIDED FOR:  
**PREMIER PORTABLE BUILDINGS**  
317 EAST STATE LINE ROAD  
SOUTH FULTON, TN 38257  
WWW.PREMIERBUILDINGS.US

REVISION	DESCRIPTION	DATE	BY
▲			
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DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG

DWG NO.: C-1

FASTENING SCHEDULE (2304.9.1 MBC)			SHEARWALL CHART				
CONNECTION	FASTENING	LOCATION	BUILDING WIDTH	OPENING WIDTHS IN ENDWALL	MAX. LENGTH OF BUILDING		
					19/32" T1-11 <sup>1</sup>	3/8" LP SMARTSIDE PANEL <sup>2</sup>	ALUMINUM OVER 7/16" OSB <sup>4</sup>
1. JOIST TO SILL OR GIRDER	3 - 8d COMMON (2 1/2"x0.131") 3 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	TOE-NAIL	8'-0"	3'-0" MAX.	40'-0"	20'-0"	40'-0"
2. BRIDGING TO JOIST	2 - 8d COMMON (2 1/2"x0.131") 2 - 3"x0.131" NAILS 2 - 3" 14 GAGE STAPLES	TOE-NAIL EACH END	10'-0"	3'-0" MAX.	60'-0"	30'-0"	60'-0"
3. SOLE PLATE TO JOIST OR BLOCKING	16d (3/8"x0.135") @ 16" o/c 3"x0.131" NAILS @ 8" o/c 3" 14 GAGE STAPLES @ 12" o/c	TYPICAL FACE NAIL	11'-2"	6'-0"	60'-0"	16'-0"	60'-0"
4. SOLE PLATE TO JOIST OR BLOCKING @ BRACED WALL PANEL	3 - 16d (3/8"x0.135") @ 16" o/c 4 - 3"x0.131" NAILS @ 16" o/c 4 - 3" 14 GAGE STAPLES @ 16" o/c	BRACED WALL PANELS		3'-0" MAX.	60'-0"	36'-0"	60'-0"
5. TOP PLATE TO STUD	2 - 16d (3/8"x0.162") 3 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	END NAIL		6'-0"	60'-0"	24'-0"	60'-0"
6. STUD TO SOLE PLATE	4 - 8d COMMON (2 1/2"x0.131") 4 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	TOE-NAIL	14'-0"	3'-0" MAX.	60'-0"	40'-0"	60'-0"
	2 - 16d COMMON (3/8"x0.162") 3 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	END NAIL	16'-0"	6'-0"	60'-0"	34'-0"	60'-0"
				10'-0"	60'-0"	20'-0"	60'-0"
				12'-0"	60'-0"	40'-0"	60'-0"
7. DOUBLE STUDS	16d (3/8"x0.135") @ 24" o/c 3"x0.131" NAILS @ 8" o/c 3" 14 GAGE STAPLES @ 8" o/c	FACE NAIL		6'-0" MAX.	60'-0"	40'-0"	60'-0"
8. DOUBLE TOP PLATES	16d (3/8"x0.135") @ 16" o/c 3"x0.131" NAILS @ 12" o/c 3" 14 GAGE STAPLES @ 12" o/c	TYPICAL FACE NAIL		10'-0"	60'-0"	30'-0"	60'-0"
	8 - 16d COMMON (3/8"x0.162") 12 - 3"x0.131" NAILS 12 - 3" 14 GAGE STAPLES	LAP SPLICE		12'-0"	60'-0"	30'-0"	60'-0"
9. BLOCKING BETWEEN JOISTS OR TRUSSES TO TOP PLATE	3 - 8d COMMON (2 1/2"x0.131") 3 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	TOE-NAIL					
10. TOP PLATES, LAPS AND INTERSECTIONS	2 - 16d (3/8"x0.162") 3 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	FACE NAIL					
11. CONTINUOUS HEADER (2) PIECES	8 - 16d COMMON (3/8"x0.162")	16" o/c ALONG EDGE					
12. CONTINUOUS HEADER TO STUD	4 - 8d COMMON (2 1/2"x0.131")	TOE-NAIL					
13. BUILT-UP CORNER STUDS	16d (3/8"x0.135") @ 24" o/c 3"x0.131" NAILS @ 16" o/c 3" 14 GAGE STAPLES @ 16" o/c	@ 24" o/c @ 16" o/c @ 16" o/c					
14. DOUBLE TOP PLATES	20d (4"x0.192") @ 32" o/c 3"x0.131" NAILS @ 24" o/c 3" 14 GAGE STAPLES @ 24" o/c	FACE NAIL @ TOP & BOTTOM STAGGERED ON OPP. SIDES					
	2 - 20d COMMON (4"x0.192") 3 - 3"x0.131" NAILS 3 - 3" 14 GAGE STAPLES	FACE NAIL @ ENDS AND AT EACH SPLICE					
15. JOIST TO BAND JOIST	3 - 16d COMMON (3/8"x0.162") 4 - 3"x0.131" NAILS 4 - 3" 14 GAGE STAPLES	FACE NAIL					
16. WOOD STRUCTURAL PANELS AND PARTICLE BOARD SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)	1/2" AND LESS 6d <sup>J</sup> 2 3/8"x0.113" NAIL <sup>L</sup> 1 3/4" 16 GAGE <sup>M</sup> 1 3/2" TO 3/4" 8d <sup>J</sup> OR 2 3/8"x0.113" NAIL <sup>N</sup> 2" 16 GAGE <sup>M</sup> 8d <sup>J</sup> 7/8" TO 1" 10d <sup>J</sup> OR 8d <sup>J</sup> 1/8" TO 1/4"						
SINGLE FLOOR (COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING)	3/4" AND LESS 6d <sup>J</sup> 7/8" TO 1" 8d <sup>J</sup> 1/8" TO 1/4" 10d <sup>J</sup> OR 8d <sup>J</sup>						
17. 29ga. STEEL SIDING (TO FRAMING)	1/2" OR LESS 6d <sup>J</sup> 3/8" 8d <sup>J</sup>	NAILS @ 6" o/c IN FIELD AND 3" o/c ALONG ALL PANEL EDGES.					
18. FIBERBOARD SHEATHING <sup>9</sup>	1/2" NO. 11 GAGE ROOFING NAIL <sup>h</sup> 6d COMMON NAIL (2"x0.113") NO 16 GAGE STAPLE <sup>i</sup>  2 5/2" NO. 11 GAGE ROOFING NAIL <sup>h</sup> 8d COMMON NAIL (2 1/2"x0.131") NO 16 GAGE STAPLE <sup>i</sup>						

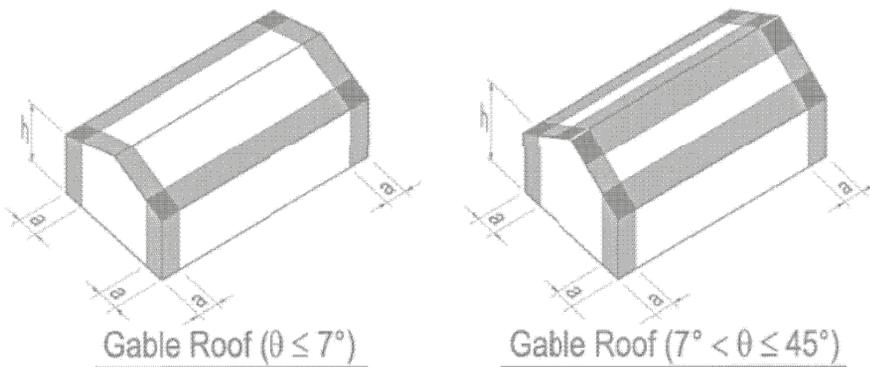
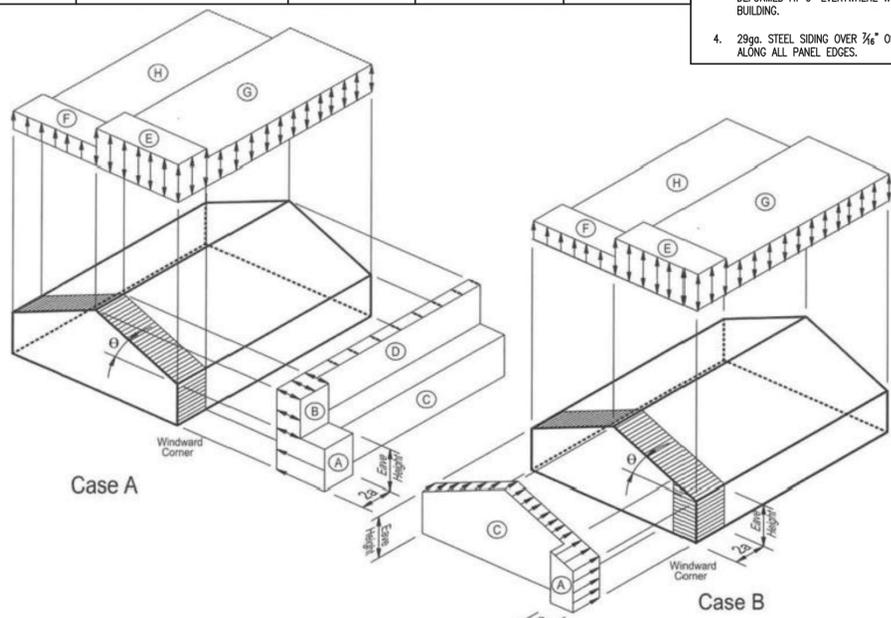
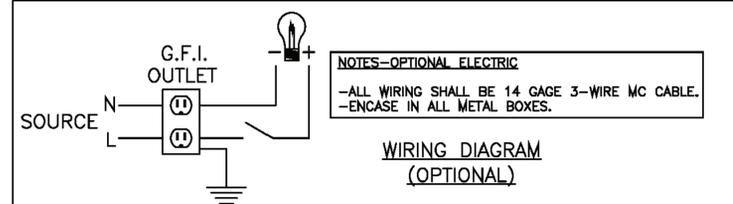
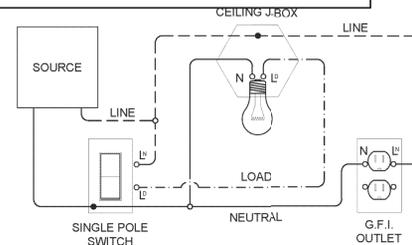


FIGURE 1609.6.2.2 COMPONENT AND CLADDING PRESSURE



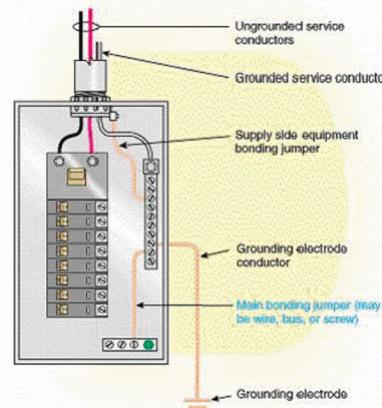
- COMMON OR BOX NAIL ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED.
- NAILS SPACED @ 6" o/c AT EDGES, 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT SUPPORTS WHERE SPANS ARE 48" OR MORE, FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLE BOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305 FBC. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.
- COMMON OR DEFORMED SHANK (6d - 2"x0.113"; 8d - 2 1/2"x0.131"; 10d 3"x0.148").
- COMMON (6d - 2"x0.113"; 8d - 2 1/2"x0.131"; 10d 3"x0.148").
- DEFORMED SHANK (6d - 2"x0.113"; 8d 2 1/2"x0.131" 10d 3"x0.148").
- CORROSION-RESISTANT SIDING (6d - 1 1/2"x0.106; 8d 2 1/2"x0.128") OR CASING (6d 2"x0.099; 8d 2 1/2"x0.113") NAIL. FASTENERS SPACED 3" o/c AT EXTERIOR EDGES AND 6" o/c AT INTERMEDIATE SUPPORTS WHEN USED AS STRUCTURAL SHEATHING.
- CORROSION-RESISTANT ROOFING NAILS w/ 7/16" DIAMETER HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 3/8" SHEATHING.
- CORROSION-RESISTANT STAPLES WITH NOMINAL 3/16" CROWN OR 1" CROWN AND 1 1/4" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 3/8" SHEATHING. PANEL SUPPORTS @ 16" o/c (20" IF STRENGTH AXIS IS THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED.)
- FOR ROOF SHEATHING APPLICATIONS, 8d NAILS (2 1/2"x0.113") ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 1/4".
- FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4" o/c AT EDGES, 8" o/c AT INTERMEDIATE SUPPORTS.
- FASTENERS SPACED 4" o/c AT EDGES, 8" o/c AT INTERMEDIATE SUPPORTS FOR SUBFLOOR AND WALL SHEATHING AND 3" o/c AT EDGES, 6" AT INTERMEDIATE SUPPORTS FOR ROOF SHEATHING.
- FASTENERS SPACED 4" o/c AT EDGES, 8" AT INTERMEDIATE SUPPORTS.
- 1 1/2" T1-11 SHALL BE FASTENED USING 8d COMMON OR DEFORMED NAILS @ 6" o/c IN FIELD AND 3" o/c ALONG ALL PANEL EDGES.
- 3/8" LP SMARTPANEL SHALL BE FASTENED USING 8d COMMON OR DEFORMED NAILS @ 6" o/c IN FIELD AND 3" o/c ALONG ALL PANEL EDGES.
- LIMITATIONS ON THE TOTAL OPENING DIMENSIONS SHALL BE BASED ON THE SHEAR WALL HEIGHT TO WIDTH RATION OF 3.5:1 AND SHALL NOT EXCEED (2/3) OF TOTAL LENGTH OF BUILDING. NAILING IN SIDEWALL USE 8d NAILS COMMON OR DEFORMED AT 6" EVERYWHERE WHEN TOTAL OPENING WIDTHS IN SIDE WALL ARE LESS THAN (2/3) OF TOTAL LENGTH OF BUILDING.
- 29ga. STEEL SIDING OVER 7/16" OSB FASTENED USING 8d COMMON OR DEFORMED NAILS @ 6" o/c IN FIELD AND 3" o/c ALONG ALL PANEL EDGES.



ELECTRICAL NOTES & OPTIONS:  
- AS PER NEX ARTICLE 330.30(B) SECURING OF MC TYPE CABLE. UNLESS OTHERWISE PROVIDED, CABLES SHALL BE SECURED AT INTERVALS NOT EXCEEDING 6FT. CABLES CONTAINING FOUR OR FEWER CONDUCTORS SIZED NO LARGER THAN 10 AWG SHALL BE SECURED WITHIN 12 IN. OF EVERY BOX, CABINET, FITTING, OR OTHER CABLE TERMINATION.  
- ALL WIRING SHALL BE 14 GAUGE 3-WIRE MC CABLE.  
- ENCASE IN ALL METAL BOXES.

MAXIMUM NO. OF OUTLETS: 7  
MAXIMUM NO. OF LIGHTS: 8

ELECTRICAL WIRING DIAGRAM SCALE: NOT TO SCALE



AREA FOR APPROVAL STAMPS

PROJECT: UTILITY SHED

FASTENING SCHEDULE / WIND LOADING

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER

ADS ALTERNATE DESIGN SOLUTIONS  
STRUCTURAL ENGINEERING DESIGN & CONSTRUCTION SERVICES  
PHONE: 215.355.4684  
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317 EAST STATE LINE ROAD  
SOUTH FULTON, TN 38257  
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REVISION	DESCRIPTION	DATE	BY
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DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG  
DWG NO.: C-2



PROJECT: UTILITY SHED

GABLE & GAMBREL SHEDS  
FLOOR DECK FRAMING PLANS & DETAILS

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER

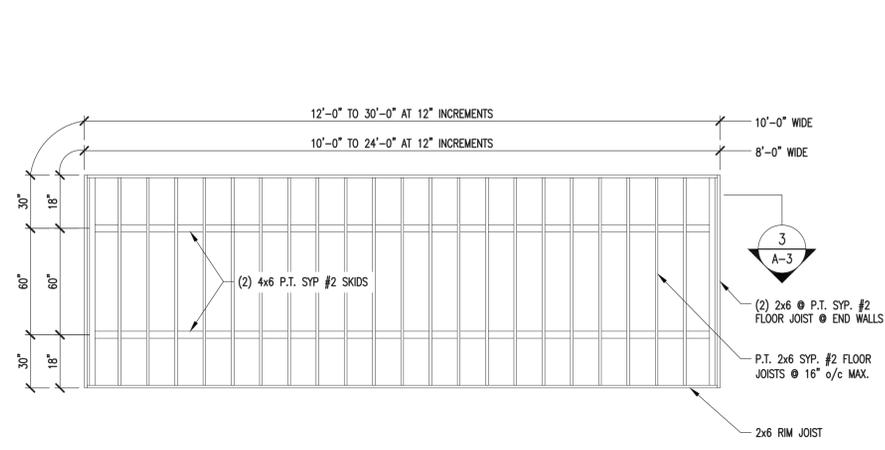


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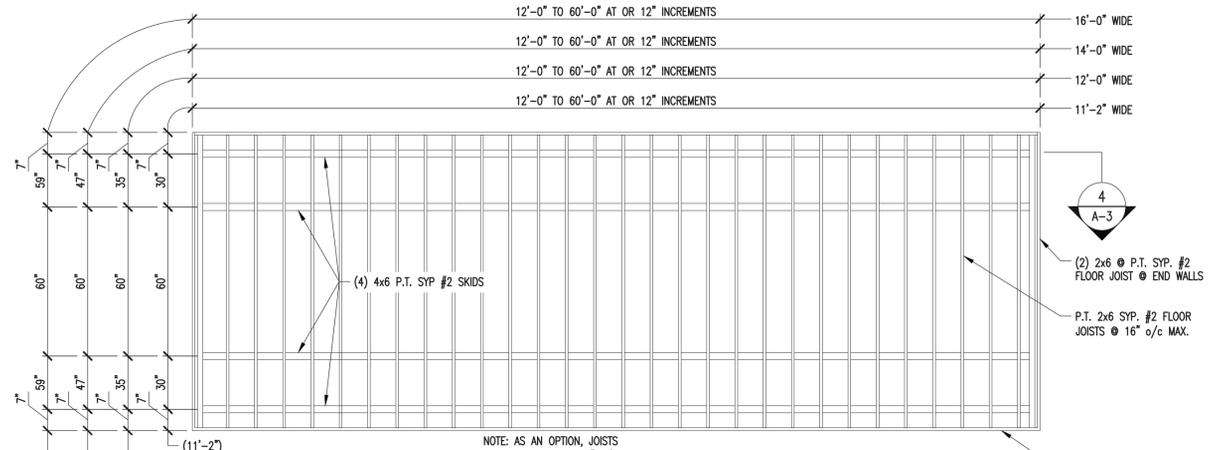
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DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
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DWG NO.: A-1

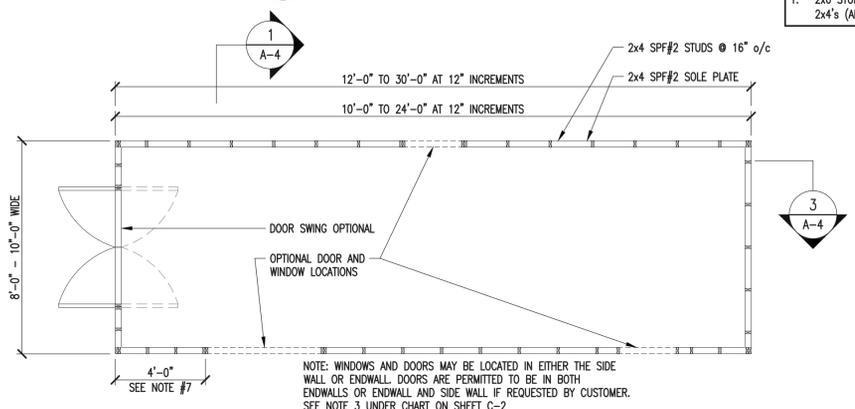


1 FLOOR FRAMING PLAN  
SCALE: 1/4"=1'-0" (DO NOT SCALE DRAWING)

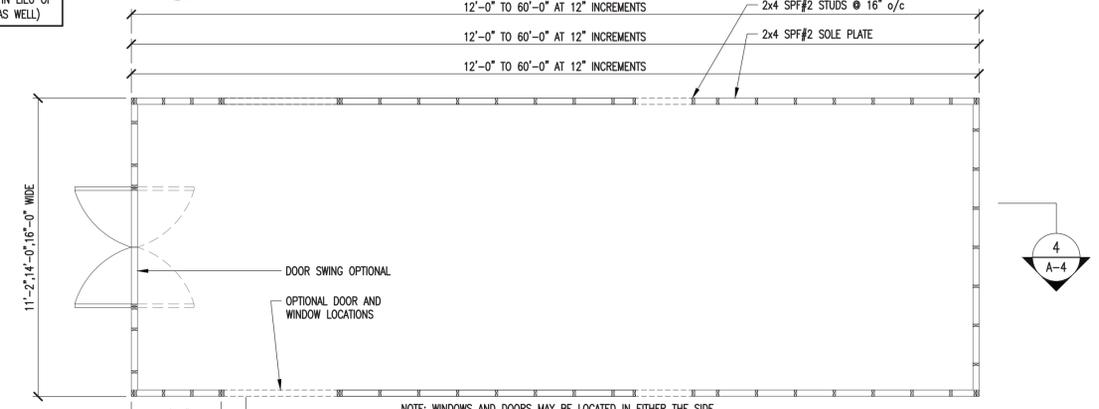


2 FLOOR FRAMING PLAN  
SCALE: 1/4"=1'-0" (DO NOT SCALE DRAWING)

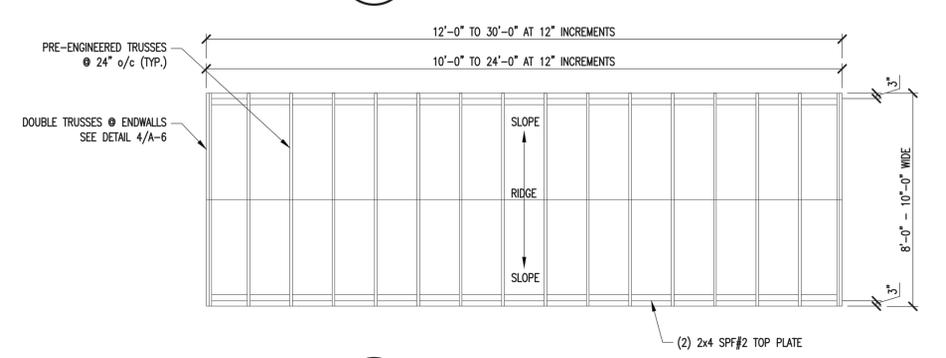
NOTE:  
1. 2x6 STUD FRAMING MAY BE USED IN LIEU OF 2x4s (ALSO FOR ROOF TRUSSES AS WELL)



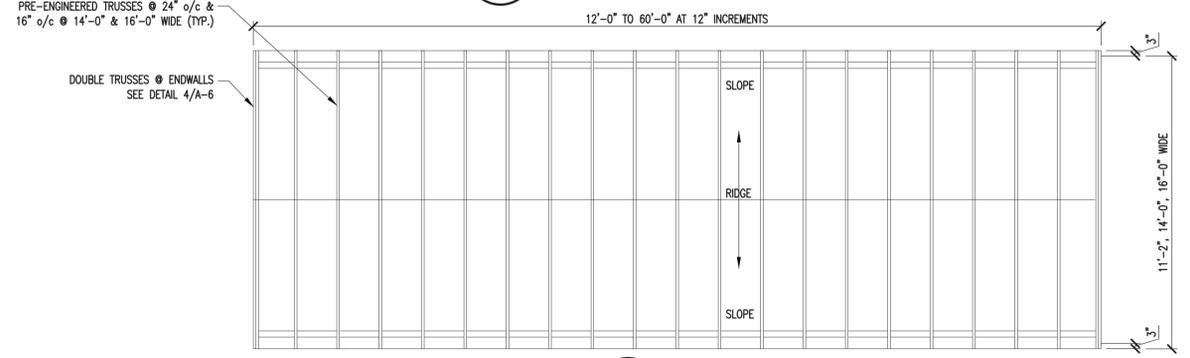
3 FLOOR DECK PLAN  
SCALE: 1/4"=1'-0"



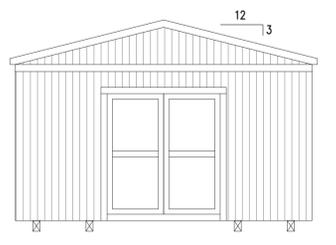
4 FLOOR DECK PLAN  
SCALE: 1/4"=1'-0"



5 ROOF PLAN  
SCALE: 1/4"=1'-0"

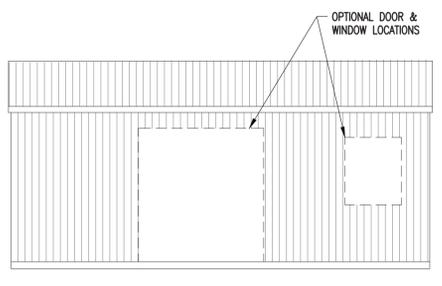


6 ROOF PLAN  
SCALE: 1/4"=1'-0"

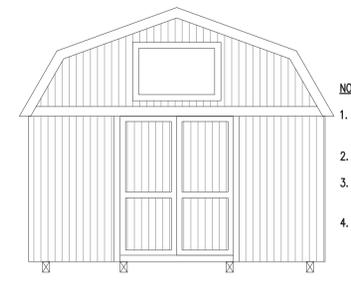


7 GABLE ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"

NOTE:  
1. DOUBLE WALL STUDS SHALL BE FASTENED AS PER FASTENING SCHEDULE PROVIDED.  
2. SEE 14/A-5 FOR CORNER STUD DETAIL. FOR ALL FASTENING NOT SHOWN, SEE FASTENING SCHEDULE ON SHEET C-2.  
3. AS AN OPTION, STUDS CAN BE PLACED @ 16" o/c.  
4. ALL BUILDING w/ TRUSSES AND STUDS 2'-0" o/c CAN ONLY USE SINGLE TOP PLATE.  
5. STUDS SHALL FALL IN LINE w/ TRUSSES.  
6. STUDS @ 16" o/c FOR FIRST 4' FOR ALL CORNERS.

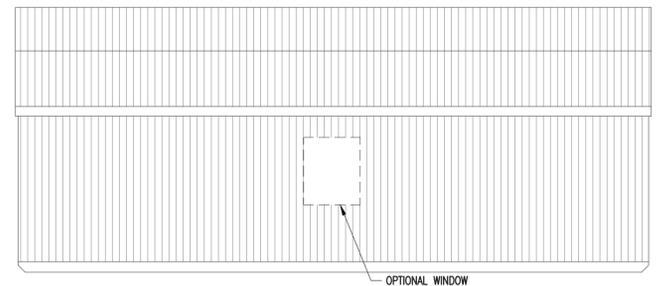


8 SIDEWALL ELEVATION  
SCALE: 1/4"=1'-0"

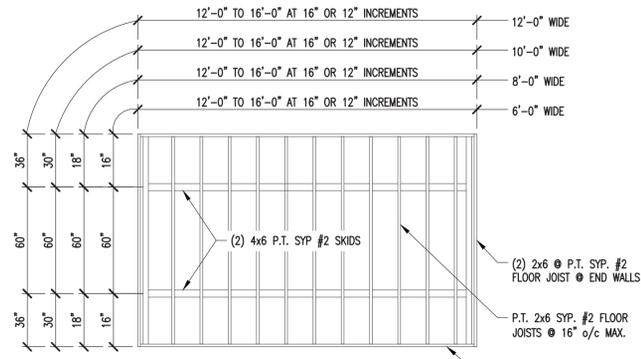


9 GAMBREL ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"

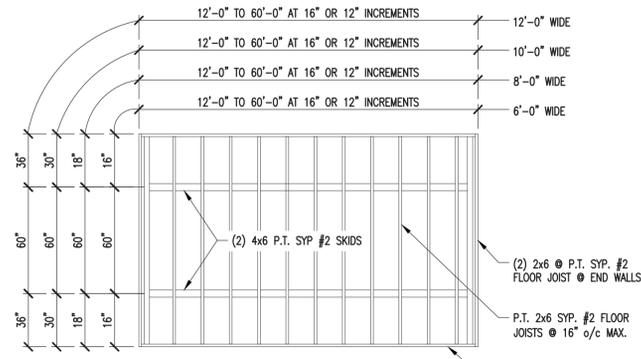
NOTE:  
1. DOUBLE WALL STUDS SHALL BE FASTENED AS PER FASTENING SCHEDULE PROVIDED.  
2. SEE 14/A-5 FOR CORNER STUD DETAIL.  
3. FOR ALL FASTENING NOT SHOWN, SEE FASTENING SCHEDULE ON SHEET C-2.  
4. AS AN OPTION, STUDS CAN BE PLACED @ 16" o/c.



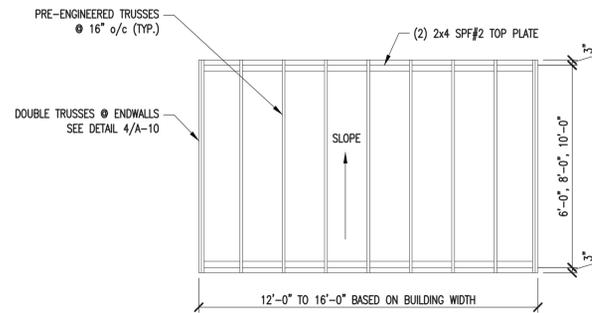
10 SIDEWALL ELEVATION  
SCALE: 1/4"=1'-0"



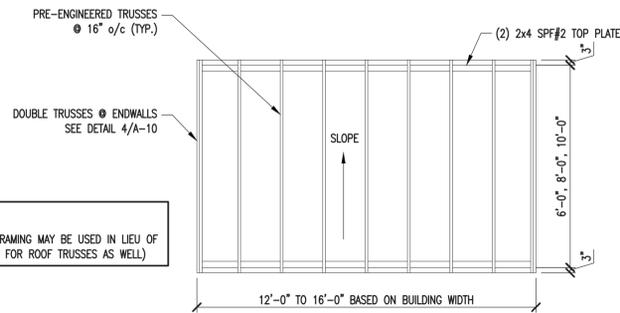
**1 GARDEN SHED FLOOR FRAMING PLAN**  
SCALE: 1/4"=1'-0" (DO NOT SCALE DRAWING)



**2 COTTAGE SHED FLOOR FRAMING PLAN**  
SCALE: 1/4"=1'-0" (DO NOT SCALE DRAWING)

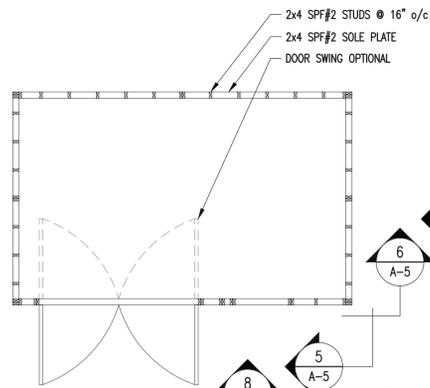


**3 ROOF FRAMING PLAN**  
SCALE: 1/4"=1'-0"

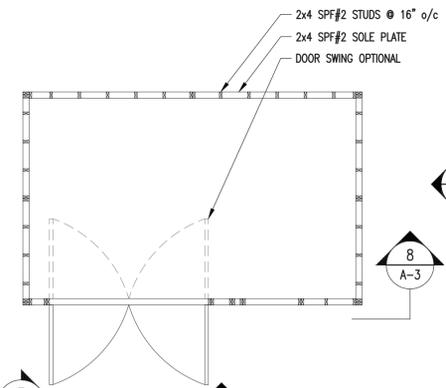


**4 ROOF FRAMING PLAN**  
SCALE: 1/4"=1'-0"

**NOTE:**  
1. 2x6 STUD FRAMING MAY BE USED IN LIEU OF 2x4's (ALSO FOR ROOF TRUSSES AS WELL)

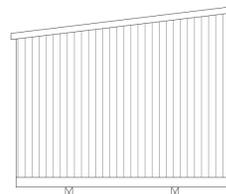


**5 FLOOR DECK PLAN**  
SCALE: 1/4"=1'-0"

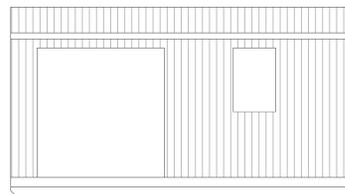


**6 FLOOR DECK PLAN**  
SCALE: 1/4"=1'-0"

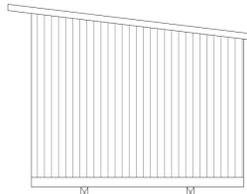
**NOTE:**  
1. DOUBLE WALL STUDS SHALL BE FASTENED AS PER FASTENING SCHEDULE PROVIDED.  
2. SEE 12/A-5 FOR CORNER STUD DETAIL.  
3. FOR ALL FASTENING NOT SHOWN, SEE FASTENING SCHEDULE ON SHEET C-2.  
4. AS AN OPTION, STUDS CAN BE PLACED @ 16" o/c.  
5. ALL BUILDING W/ TRUSSES AND STUDS 2'-0" o/c CAN ONLY USE SINGLE TOP PLATE.  
6. STUDS SHALL FALL IN LINE W/ TRUSSES.



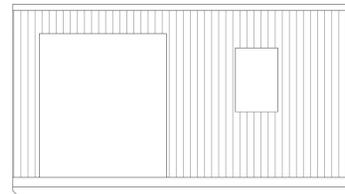
**7 ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



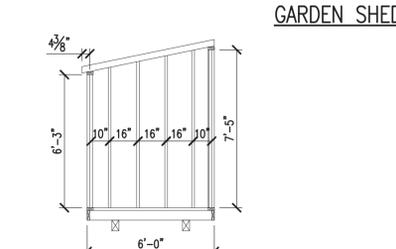
**8 SIDEWALL ELEVATION**  
SCALE: 1/4"=1'-0"



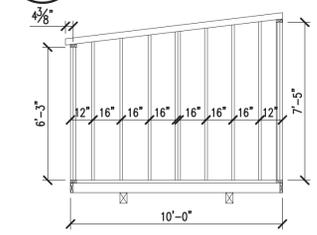
**9 ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



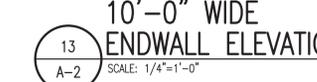
**10 SIDEWALL ELEVATION**  
SCALE: 1/4"=1'-0"



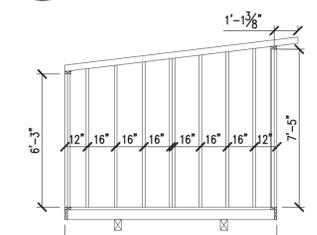
**11 6'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



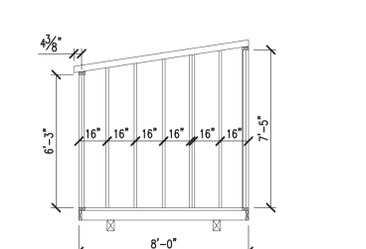
**13 10'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



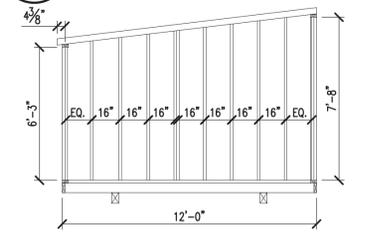
**15 6'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



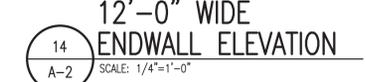
**17 10'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



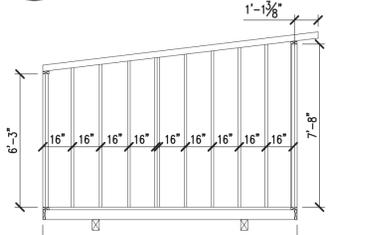
**12 8'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



**14 12'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



**16 8'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



**18 12'-0" WIDE ENDWALL ELEVATION**  
SCALE: 1/4"=1'-0"



PROJECT: UTILITY SHED

GARDEN & COTTAGE SHEDS  
FLOOR DECK FRAMING PLANS & DETAILS

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER

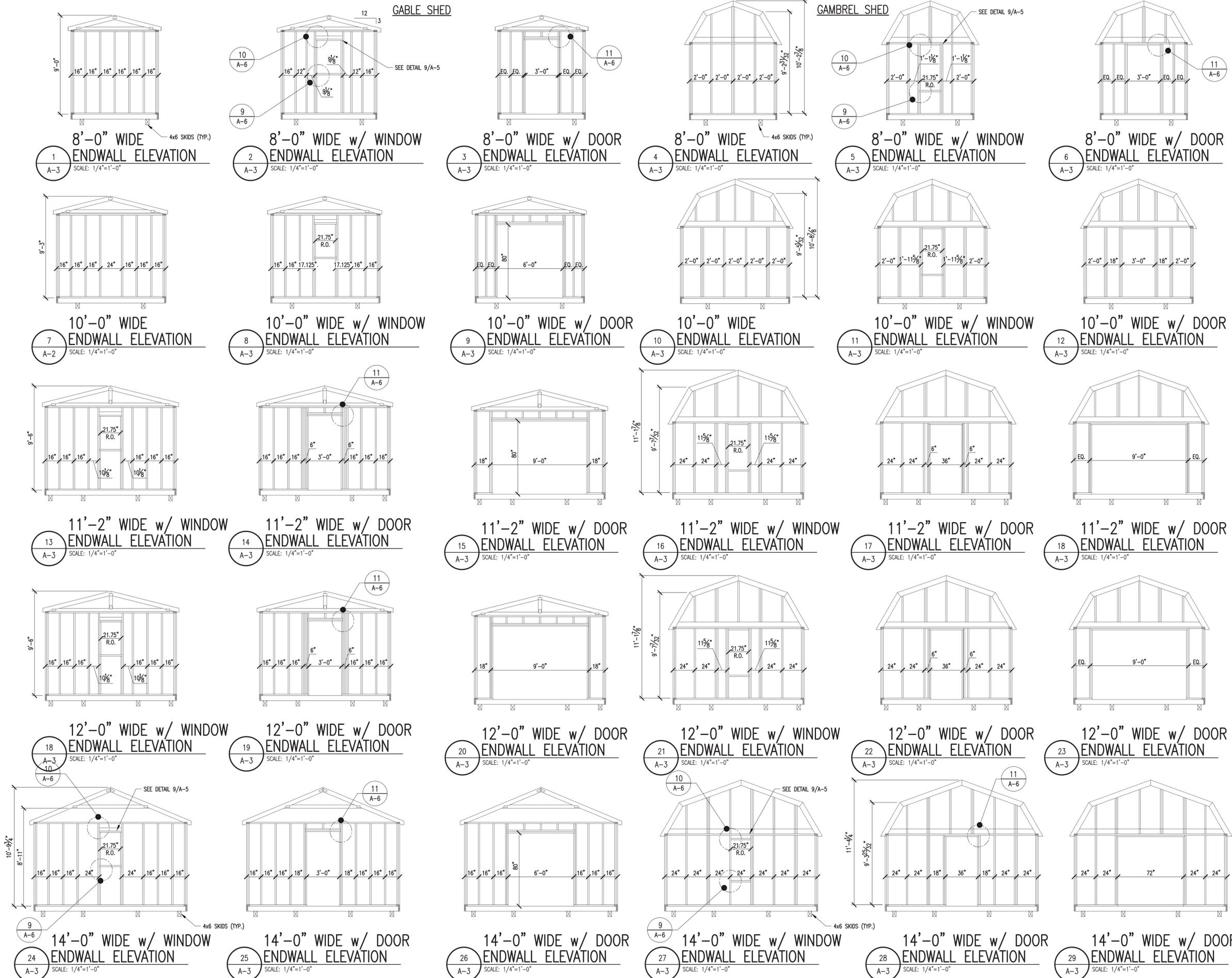


ENGINEERING SERVICES PROVIDED FOR:  
PREMIER PORTABLE BUILDINGS  
317 EAST STATE LINE ROAD  
SOUTH FULTON, TN 38257  
WWW.PREMIERBUILDINGS.US

REVISION	DESCRIPTION	DATE	BY

DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG

DWG NO.: **A-2**



AREA FOR APPROVAL STAMPS



PROJECT: UTILITY SHED

SECTIONS

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER

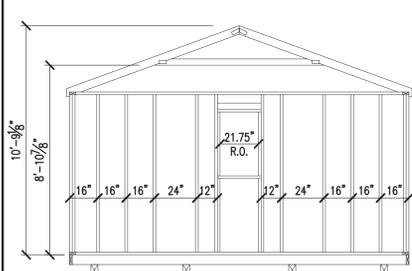


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SOUTH FULTON, TN 38257  
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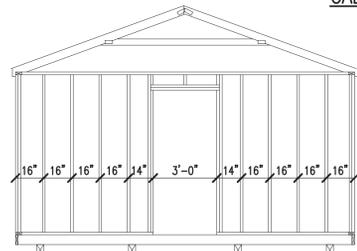
REVISION	DESCRIPTION	DATE	BY
▲			
▲			
▲			
▲			

DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG  
DWG NO.:

A-3

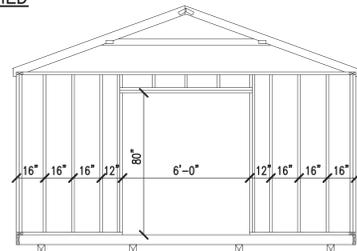


1  
A-4  
16'-0" WIDE w/ WINDOW  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"

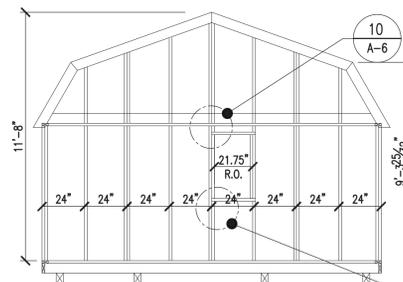


2  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"

GABLE SHED

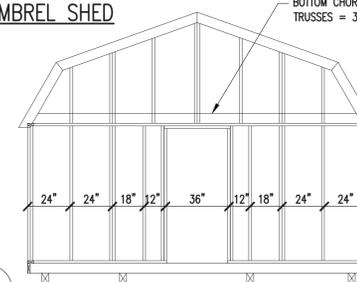


3  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"

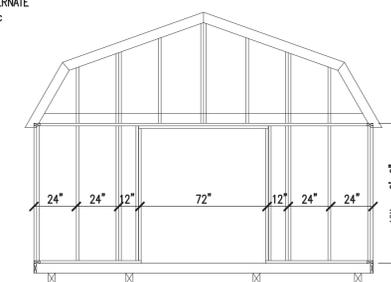


4  
A-4  
16'-0" WIDE w/ WINDOW  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"

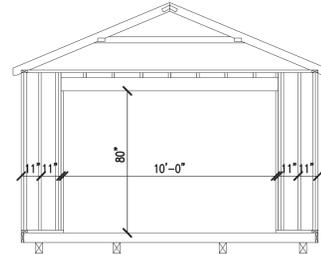
GAMBREL SHED



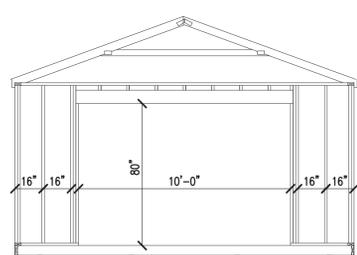
5  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



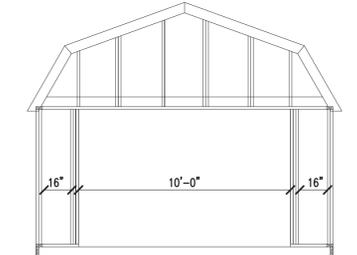
6  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



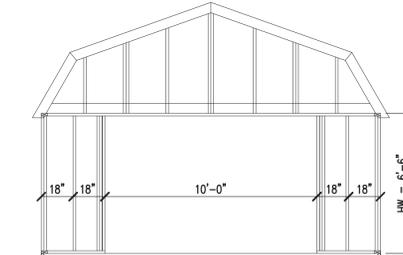
7  
A-4  
14'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



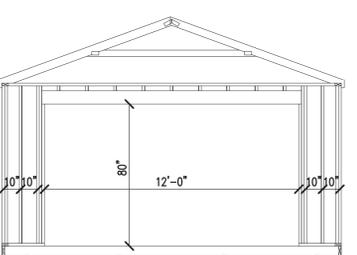
8  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



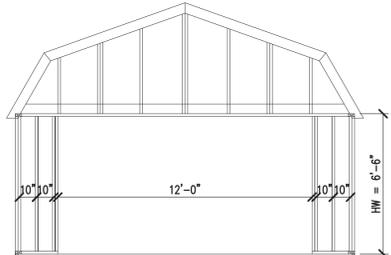
9  
A-4  
14'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



10  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



11  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



12  
A-4  
16'-0" WIDE w/ DOOR  
ENDWALL ELEVATION  
SCALE: 1/4"=1'-0"



PROJECT: UTILITY SHED

SECTION CUTS  
CRAFTSMAN & TOOL SHED

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER

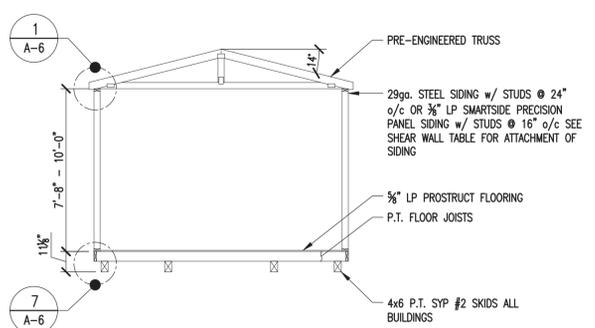


ENGINEERING SERVICES PROVIDED FOR:  
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SOUTH FULTON, TN 38257  
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REVISION	DESCRIPTION	DATE	BY
▲			
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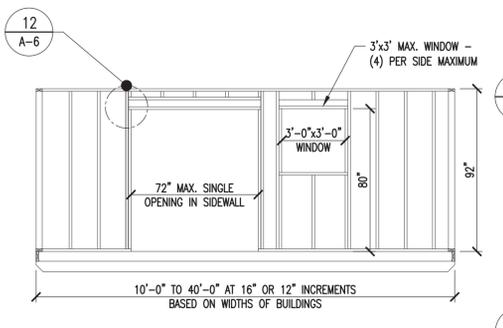
DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG  
DWG NO.: A-4

6 of 10



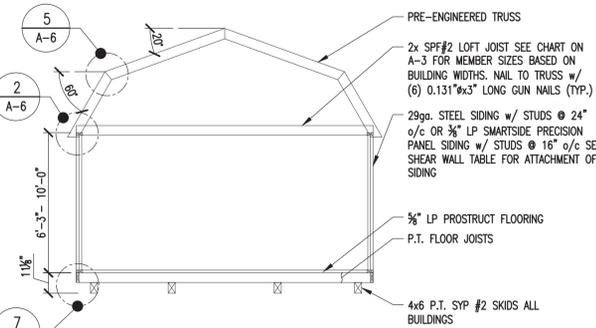
**1 GABLE SECTION**  
SCALE: 1/4"=1'-0"

**NOTES:**  
1. SEE NOTES ON SHEETS A-1 & C-2 FOR ANY INFORMATION NOT SHOWN.  
2. SEE FASTENING SCHEDULE FOR ALL FASTENING NOT NOTED ON THIS SHEET.



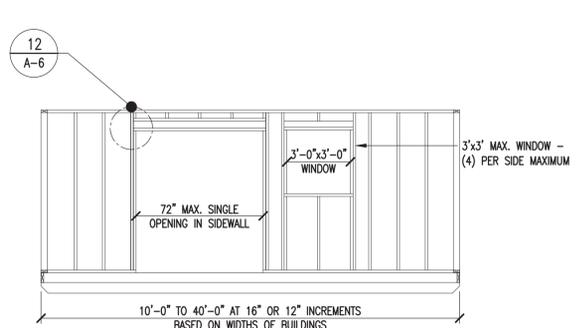
**2 SIDEWALL FRAMING**  
SCALE: 1/4"=1'-0"

**NOTES:**  
MAX. OPENING MAY BE INCREASED TO 9'-0" WITH HEADER PROVIDED THE BUILDING LENGTH IS OVER 16' IN LENGTH AND THE CRITERIA IN NOTE NUMBER 3 OF THE SHEARWALL CHART IS MET.



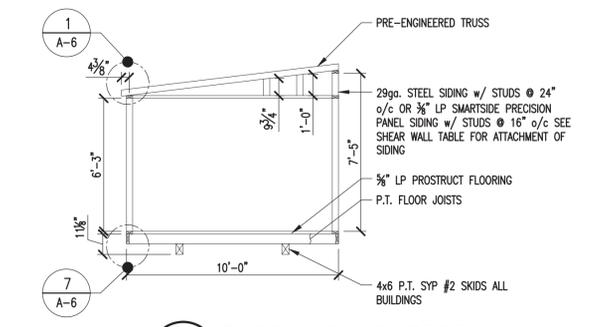
**3 GAMBREL SECTION**  
SCALE: 1/4"=1'-0"

**NOTES:**  
1. SEE NOTES ON SHEETS A-1 & C-2 FOR ANY INFORMATION NOT SHOWN.  
2. SEE FASTENING SCHEDULE FOR ALL FASTENING NOT NOTED ON THIS SHEET.



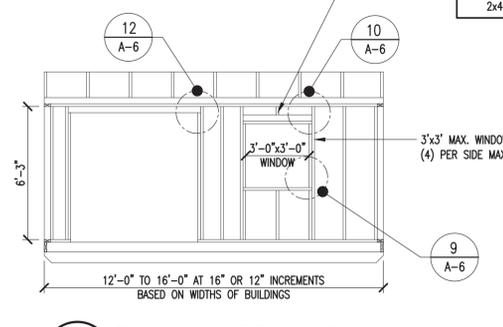
**4 SIDEWALL FRAMING**  
SCALE: 1/4"=1'-0"

**NOTES:**  
MAX. OPENING MAY BE INCREASED TO 9'-0" WITH HEADER PROVIDED THE BUILDING LENGTH IS OVER 16' IN LENGTH AND THE CRITERIA IN NOTE NUMBER 3 OF THE SHEARWALL CHART IS MET.



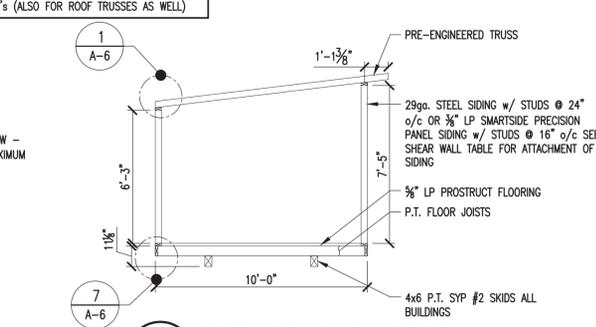
**5 GARDEN SHED SECTION**  
SCALE: 1/4"=1'-0"

**NOTES:**  
1. SEE NOTES ON SHEETS A-1 & A-2 FOR ANY INFORMATION NOT SHOWN.  
2. SEE FASTENING SCHEDULE FOR ALL FASTENING NOT NOTED ON THIS SHEET.



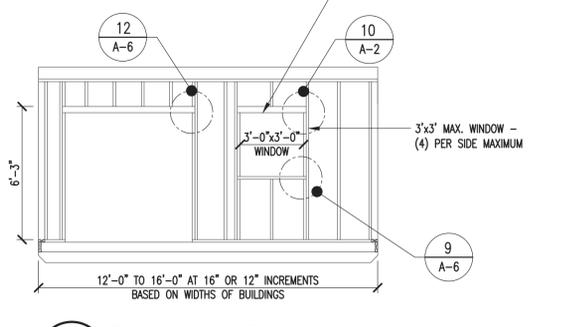
**6 SIDEWALL FRAMING**  
SCALE: 1/4"=1'-0"

**NOTES:**  
MAX. OPENING MAY BE INCREASED TO 9'-0" WITH HEADER 8/A-11 PROVIDED THE BUILDING LENGTH IS OVER 16' IN LENGTH AND THE CRITERIA IN NOTE NUMBER 3 OF THE SHEARWALL CHART IS MET.

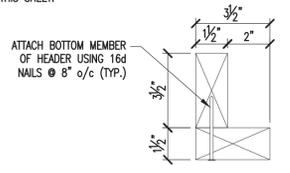


**7 COTTAGE SHED SECTION**  
SCALE: 1/4"=1'-0"

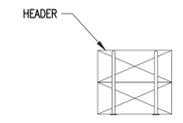
**NOTES:**  
1. SEE NOTES ON SHEETS A-1 & A-2 FOR ANY INFORMATION NOT SHOWN.  
2. SEE FASTENING SCHEDULE FOR ALL FASTENING NOT NOTED ON THIS SHEET.



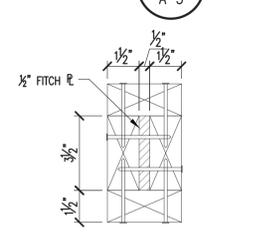
**8 SIDEWALL FRAMING**  
SCALE: 1/4"=1'-0"



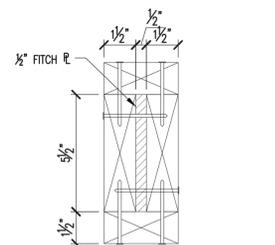
**9 WINDOW HEADER DETAIL**  
SCALE: 3"=1'-0"



**10 DOOR HEADER DETAIL**  
SCALE: 3"=1'-0"



**11 DOOR HEADER DETAIL**  
SCALE: 3"=1'-0"

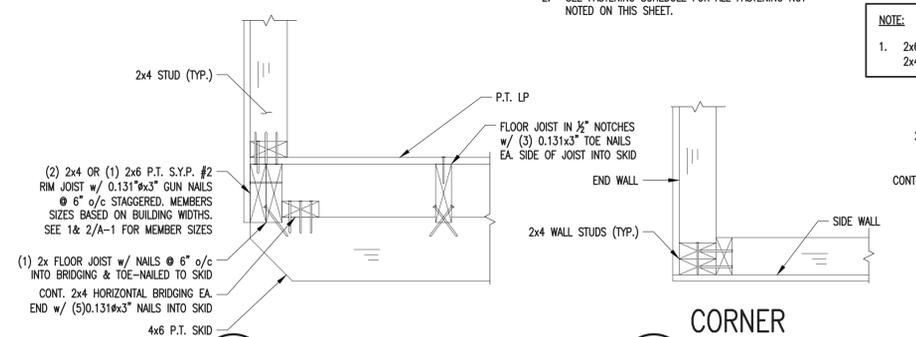


**12 DOOR HEADER DETAIL**  
SCALE: 3"=1'-0"

**NOTE:**  
1. SEE NOTES ON SHEETS A-1 & A-2 FOR ANY INFORMATION NOT SHOWN HERE.  
2. SEE FASTENING SCHEDULE FOR ALL FASTENING NOT NOTED ON THIS SHEET.

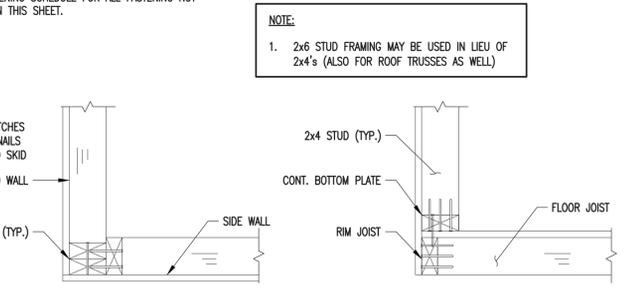
**NOTE:**  
1. 2x6 STUD FRAMING MAY BE USED IN LIEU OF 2x4's (ALSO FOR ROOF TRUSSES AS WELL)

**NOTE:**  
1. 2x6 STUD FRAMING MAY BE USED IN LIEU OF 2x4's (ALSO FOR ROOF TRUSSES AS WELL)

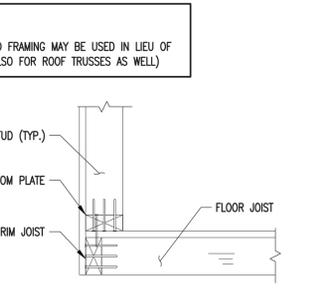


**13 SKID TO JOIST DETAIL**  
SCALE: 1-1/2"=1'-0"

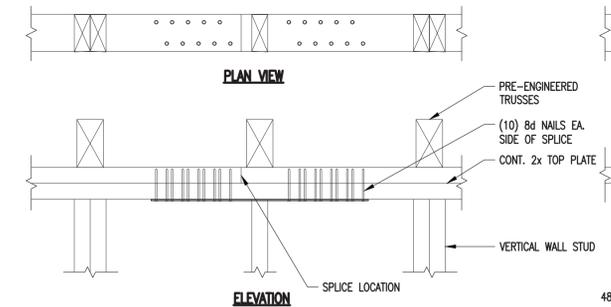
**NOTES:**  
1. SEE NOTES ON SHEETS A-1 & C-2 FOR ANY INFORMATION NOT SHOWN HERE.  
2. SEE FASTENING SCHEDULE FOR ALL FASTENING NOT NOTED ON THIS SHEET.



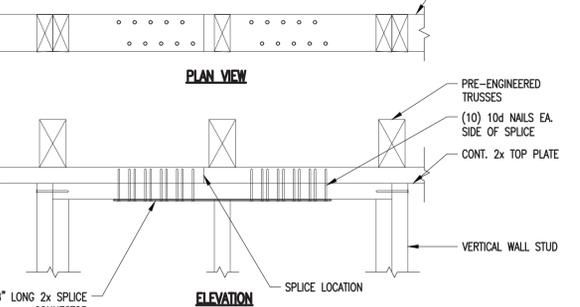
**14 CORNER CONNECTION DETAIL**  
SCALE: 1-1/2"=1'-0"



**15 WALL TO RIM JOIST**  
SCALE: 1-1/2"=1'-0"



**16 TOP PLATE SPLICE DETAIL**  
SCALE: 1-1/2"=1'-0"



**17 SPLICE CONNECTION DETAIL**  
SCALE: 1-1/2"=1'-0"



PROJECT: UTILITY SHED

TYPICAL DETAILS

DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER

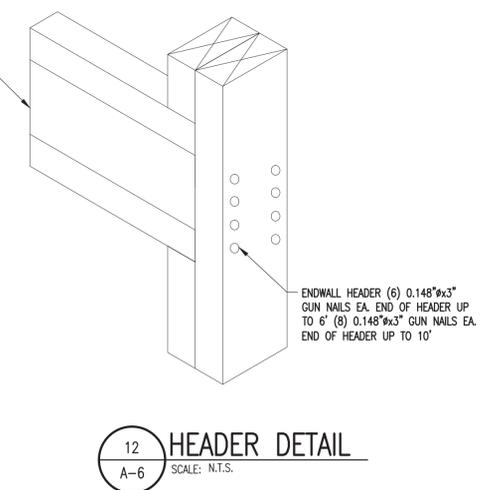
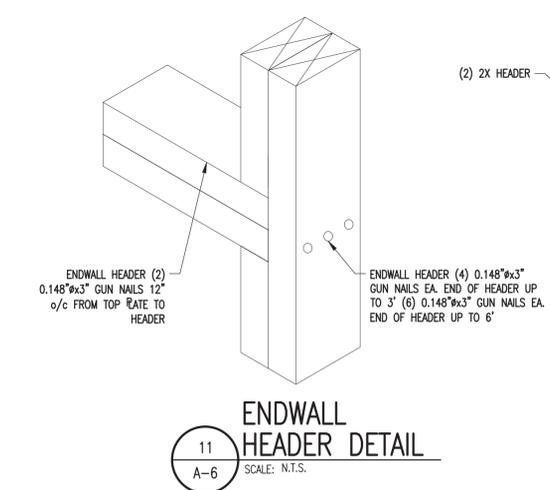
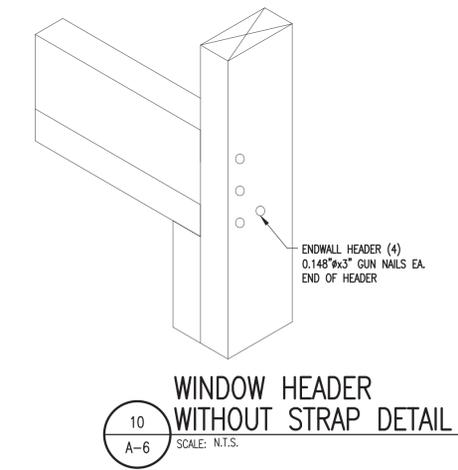
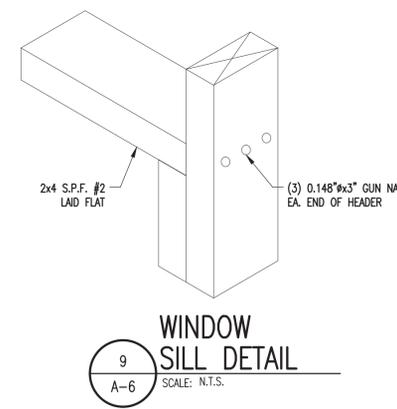
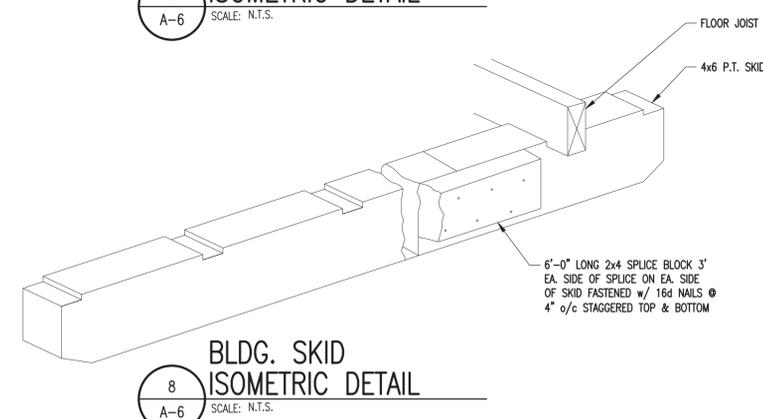
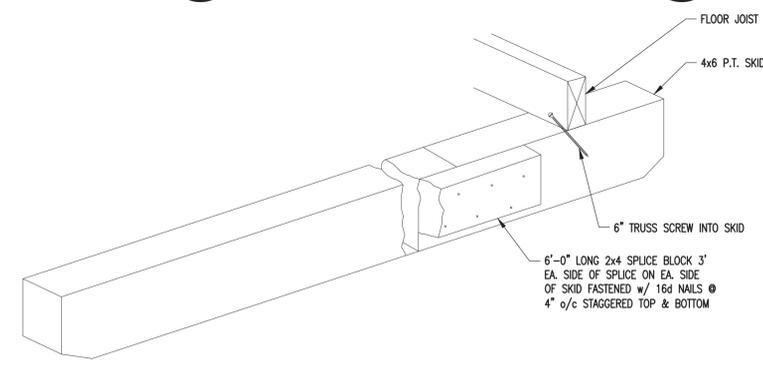
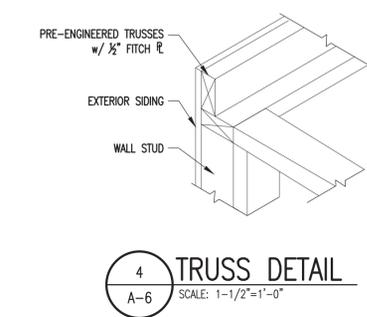
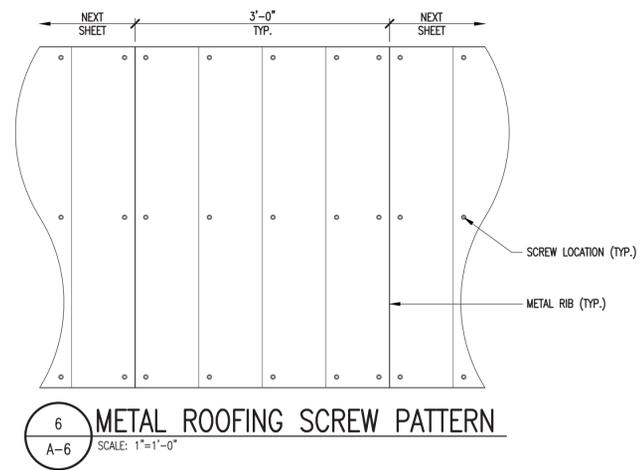
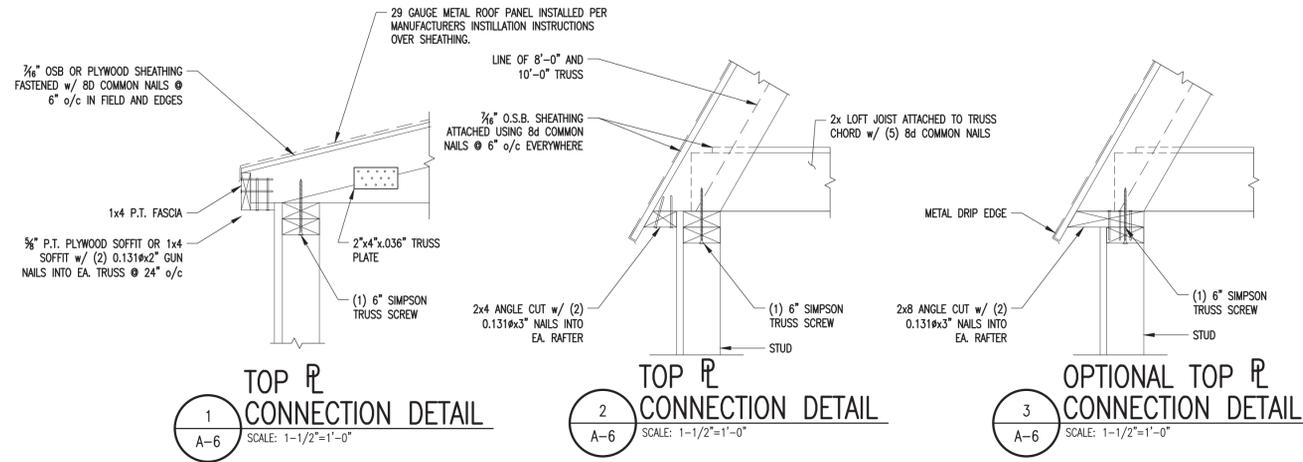


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PREMIER PORTABLE BUILDINGS  
317 EAST STATE LINE ROAD  
SOUTH FULTON, TN 38257  
WWW.PREMIERBUILDINGS.US

REVISION	DESCRIPTION	DATE	BY

DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG  
DWG NO.:

A-5



PROJECT: UTILITY SHED

TYPICAL DETAILS

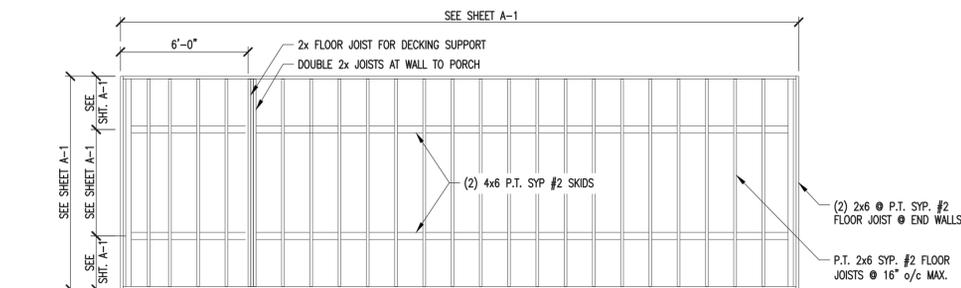
DON VAN GERVE, P.E.  
SPECIALTY STRUCTURAL ENGINEER



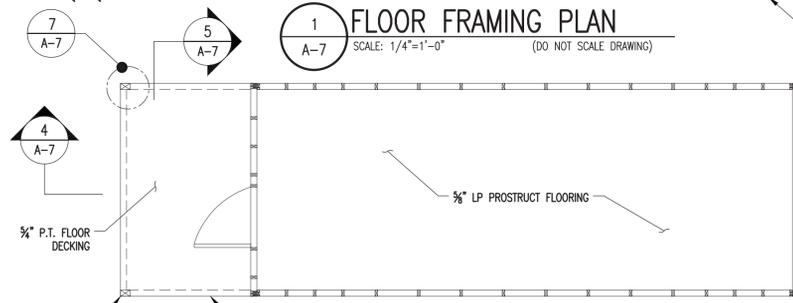
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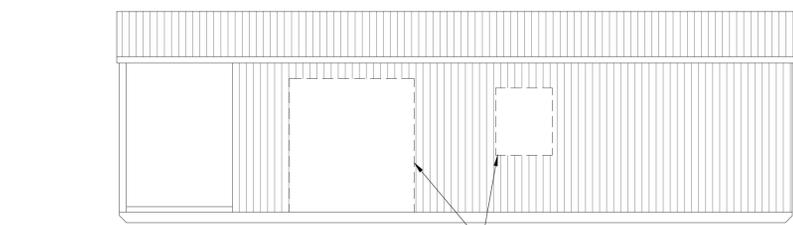
DATE: 2.13.25  
PROJECT NO.: 18285  
DRAWING BY: JH  
CHK BY: DVG  
DWG NO.: **A-6**



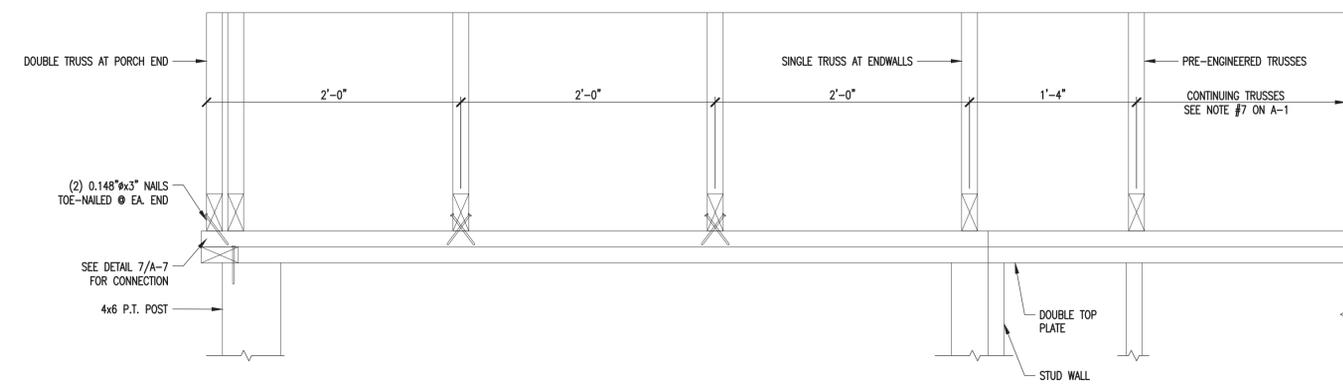
**1 FLOOR FRAMING PLAN**  
SCALE: 1/4"=1'-0"  
(DO NOT SCALE DRAWING)



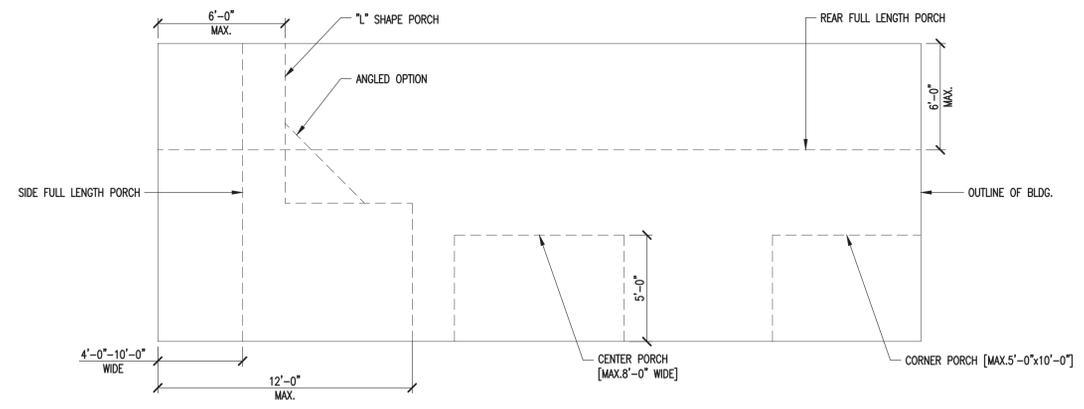
**2 FLOOR FRAMING PLAN**  
SCALE: 1/4"=1'-0"  
(DO NOT SCALE DRAWING)



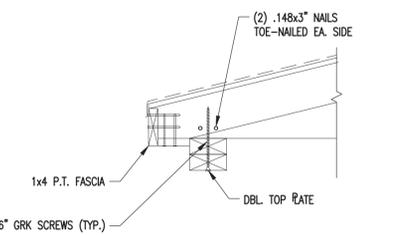
**3 SIDEWALL ELEVATION**  
SCALE: 1/4"=1'-0"



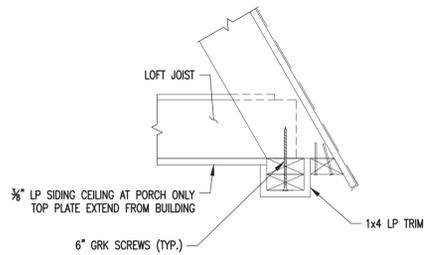
**4 OPTIONAL PORCH SECTION DETAIL**  
SCALE: 1-1/2"=1'-0"



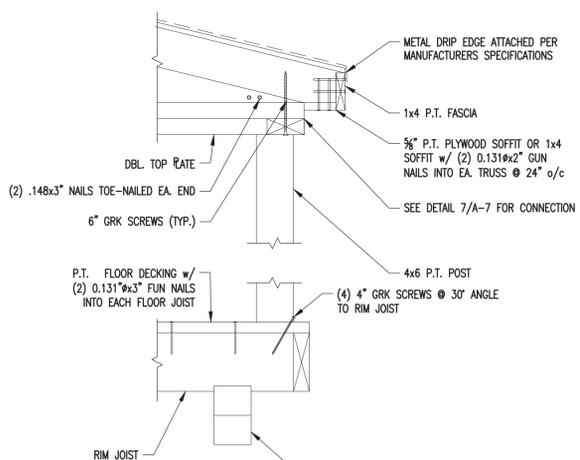
**8 BUILDING PORCH OPTIONS**  
SCALE: 1/4"=1'-0"  
(DO NOT SCALE DRAWING)



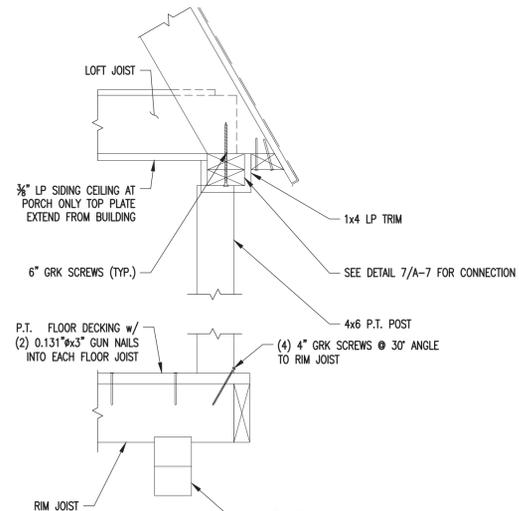
**5 PORCH TOP PLATE DETAIL**  
SCALE: 1-1/2"=1'-0"



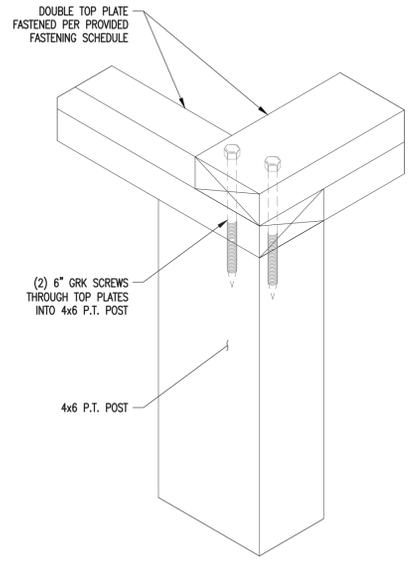
**5A PORCH TOP PLATE DETAIL**  
SCALE: 1-1/2"=1'-0"



**6 POST TO RIM JOIST DETAIL**  
SCALE: 1-1/2"=1'-0"



**6A POST TO RIM JOIST DETAIL**  
SCALE: 1-1/2"=1'-0"



**7 OPTIONAL PORCH POST TO TOP PLATE DETAIL**  
SCALE: N.T.S.



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OPTIONAL PORCH PLANS, SECTIONS & DETAILS

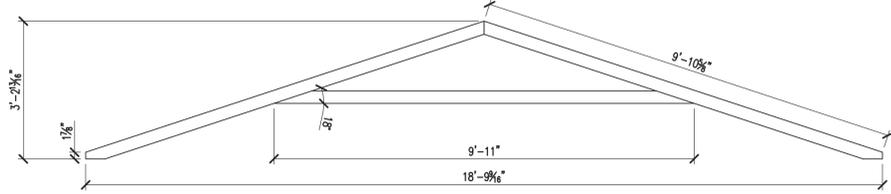
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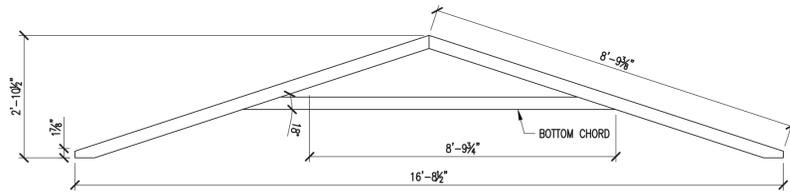
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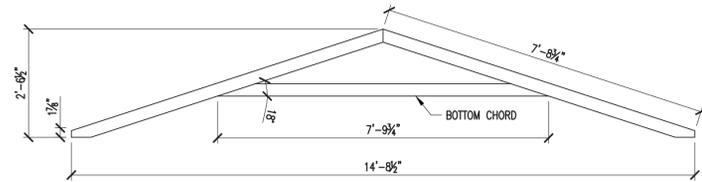
DATE: 2.13.25  
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DWG NO.: A-7



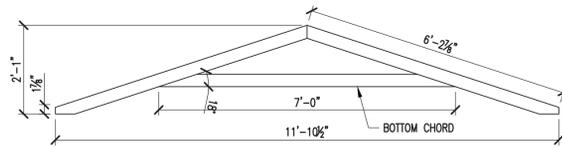
18' UTILITY TRUSS



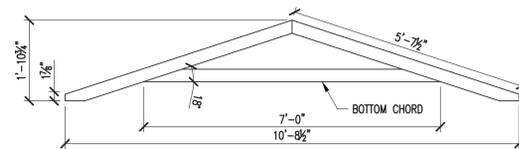
16' UTILITY TRUSS



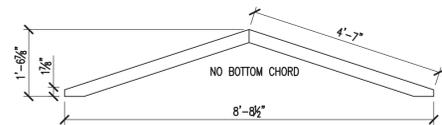
14' UTILITY TRUSS



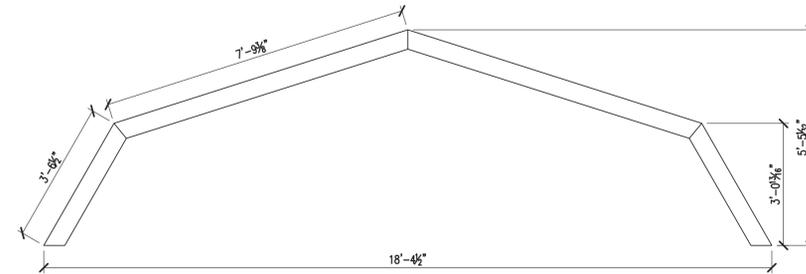
12' UTILITY TRUSS



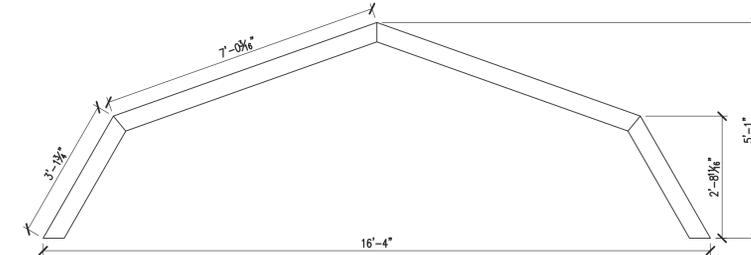
10' UTILITY TRUSS



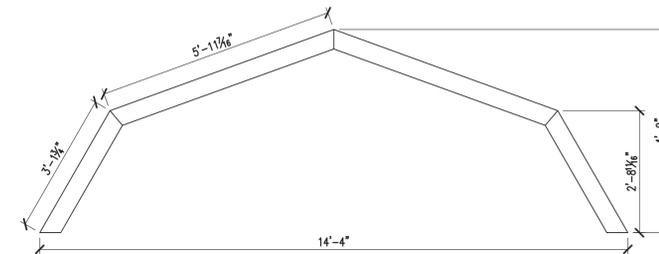
8' UTILITY TRUSS



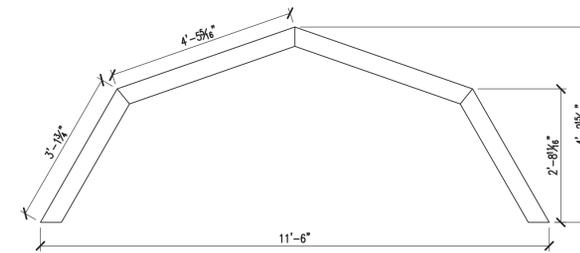
18' LOFTED TRUSS



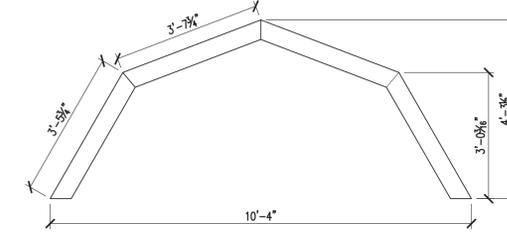
16' LOFTED TRUSS



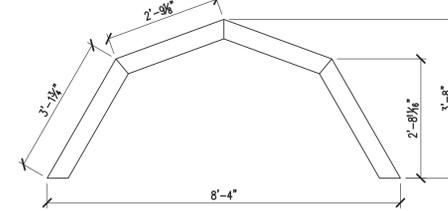
14' LOFTED TRUSS



12' LOFTED TRUSS



10' LOFTED TRUSS



8' LOFTED TRUSS

**TRUSS DESIGN: LRFD V=180mph**  
 Design based : the NATIONAL BUILDING CODE of CANADA 2020.  
 Provincial Building Code, current. With reference to  
 ASCE 7-22; 83 psf uplift x 0.85(Kd) x 0.85(Kh expC) = 60 psf uplift.  
 add internal pressure 18% = 71 psf design (LRFD)  
 Utility: Lmax=5.25 ft. 2x4@24"; w=142 plf  
 M=wL^2/8x12=5871 in-lbs; s=3.06in^3; fb=1919psi  
 Fb(LRFD)=3000 psi - this value is met by lumber.

Lofted: Lmax=7.01 ft; 16' truss@16" o/c; w= 95 plf;  
 M=7002 in-lbs; fb= 2288 psi < 3000 psi LRFD

Wall Calculations: 5/8" LP nailed 6" edges, 10" interior, 2x4x7ft@16"o/c;  
 Pressure= 58.1 psfExternal= 10.5 psfInternal Total p= 68.6 psf  
 I=18.74 in^4 per 16" o/c; S=6.03 in^3.

M=68.6(1.33)(7^2)/8 x(12) = 6657.1 in-lbs;  
 fb= 1104 psi < 3000 psi LRFD OK

**FLOOR 100 PSF REQ'D**  
 5/8" LP Prostruct Fl 16 in spans; capacity = 150 psf min  
 2x6 @ 16"; w plf= 133.33 plf S= 7.56 in^3  
 Lmax= 6 ft; use simple span; Mb= 7200 in-lbs  
 fb= 952.07 psi Fb of lumber >= 1000 psi OK



PROJECT: UTILITY SHED

TRUSS DETAILS

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 SPECIALTY STRUCTURAL ENGINEER



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A-8