

October 20, 2014

Mr. Jim Richmond  
Florida Department of Business and Professional Regulation  
Manufactured Building Program  
1940 North Monroe Street  
Suite 90A  
Tallahassee, Florida 32399-0772

**RE: Plan Approval: Residential Lawn Storage Shed**  
**Manufacturer: MCS Portable Buildings, LLC**  
**Plan Number: PG-150 AL**

---

Dear Mr. Richmond,

Pursuant to the requirements of the Florida Department of Business and Professional Regulations, the above referenced documents have been reviewed for compliance with:

2010 Florida Building Code with 2012 Supplements  
2008 National Electrical Code (NFPA-70)

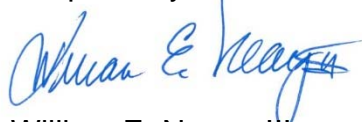
These plans comply with Florida Product Approval Rule 61G20-3.006 (FAC)

A signed and sealed set of plans are maintained on file in the Third Party Agency office of PSI.

All mandatory comments have been satisfied and plans are approved for construction by a modular building manufacturer that is currently approved by the Department of Business and Professional Regulations.

If you have any questions or require my assistance in any way, please do not hesitate to contact me.

Respectfully submitted,



William E. Neary, III  
Department Manager  
Modular Facilities Division

Copy to: Burtice Bright – [bbright@gracelandpb.com](mailto:bbright@gracelandpb.com)

CODE CRITERIA:

THE CONTRACTOR/MANUFACTURER SHALL COMPLY WITH THE FOLLOWING CODES AND ALL APPLICABLE AMENDMENTS/SUPPLEMENTS:

FLORIDA BUILDING CODE 2010 – BUILDING  
FLORIDA BUILDING CODE 2010 – RESIDENTIAL  
FLORIDA BUILDING CODE 2010 – CHAPTER 11  
FLORIDA  
ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION  
FLORIDA BUILDING CODE 2010 – CHAPTER 13  
FLORIDA  
ENERGY EFFICIENCY FOR BUILDING CONSTRUCTION  
FLORIDA BUILDING CODE 2010 – GAS  
FLORIDA BUILDING CODE 2010 – MECHANICAL  
FLORIDA BUILDING CODE 2010 – PLUMBING  
NATIONAL ELECTRIC CODE 2011 – (NFPA 70)  
LIFE SAFETY CODE 2012 EDITION (NFPA 101)  
FLORIDA FIRE PREVENTION CODE 2010

PROJECT NOTE:

THIS BUILDING IS NOT DESIGNED FOR HUMAN HABITATION AND DOES NOT HAVE WATER, SEWER, ELECTRICAL OR HVAC SYSTEMS. THIS BUILDING IS DESIGNED AS A MINOR STORAGE OCCUPANCY ONLY.

GENERAL NOTES:

1. STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, 2010 W/ 2012 SUPPLEMENTAL.
2. ALL MATERIALS AND LABOR SHALL BE IN ACCORDANCE WITH THE ABOVE CODE AND ALL OTHER APPLICABLE LOCAL CODES AT THE TIME OF MANUFACTURE.
3. DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
4. STRUCTURES ARE CLASSIFIED AS "MINOR STORAGE FACILITIES" (OCCUPANCY CATEGORY I) AND SHOULD NOT BE USED FOR HUMAN HABITATION.

THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE W/ 2012 SUPPLEMENTAL FOR A THREE SECOND GUST OF 150 MPH

5. STRUCTURES ARE DESIGNED FOR LOCATIONS THAT HAVE A 3 SECOND WIND GUST OF 150 MPH (MAX). STRUCTURES SHOULD NOT BE USED IN OTHER LOCATIONS.
6. STRUCTURES ARE DESIGNED FOR LOCATIONS WITH A SURFACE ROUGHNESS CATEGORY B AND A TOPOGRAPHICAL FACTOR OF 1.0. STRUCTURES SHOULD NOT BE USED IN OTHER LOCATIONS.
7. STRUCTURES ARE DESIGNED FOR LOCATIONS THAT ARE NOT IN FLOOD HAZARD AREAS. STRUCTURES SHOULD NOT BE USED IN OTHER LOCATIONS.
8. STRUCTURES SHOULD HAVE METAL ROOF OR OPTIONAL 25 YEAR RATED FIBERGLASS/ASPHALT SHINGLES.
9. ALL STUDS, RAFTERS, COLLAR TIES, AND TRUSS CHORDS ARE SPF #2, U.N.O.
10. ALL EXTERIOR WOOD IS TO BE PRESSURE TREATED.
11. ALL ROOF DECKING IS TO BE 7/16" O.S.B.
12. ALL SIDING IS TO BE 5/8" P.T. T-III PLYWOOD OR DURATEMP.
13. ALL FLOOR JOISTS ARE TO BE P.T. SYP #2.
14. ALL EXTERIOR NAILS ARE TO BE HOT DIPPED GALVANIZED.
15. ALL FLOOR DECKING IS TO BE 5/8" P.T. PLYWOOD.
16. ALL SKIDS ARE TO BE 4x6 P.T. SYP, RATED FOR GROUND CONTACT.
17. THE STRUCTURE HAS BEEN DESIGNED TO RESIST LOADS AS A COMPLETED STRUCTURE ONLY. APPLICATION OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND INCLUDED IN THE DESIGN OF SHORING, BRACING, FORM WORK, AND OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE.
18. NO FIELD SUPERVISION OR CONSTRUCTION ADMINISTRATION HAS BEEN PROVIDED BY THE ENGINEER.

DESIGN CRITERIA:

1. FLORIDA BUILDING CODE 2010, W/ 2012 SUPPLEMENTAL
2. DEAD LOADS:  
FLOOR: 10 PSF  
LOFT: 5 PSF  
ROOF: 10 PSF
3. LIVE LOADS:  
FLOOR: 40 PSF  
LOFT: 10 PSF  
ROOF: 20 PSF (REDUCIBLE)
4. SNOW LOADS:  
GROUND SNOW LOAD, Pg=25psf  
FLAT ROOF SNOW LOAD, Pf=20psf  
SNOW EXPOSURE FACTOR, Ce=1.2  
SNOW LOAD IMPORTANCE FACTOR, I=0.8  
THERMAL FACTOR, Ct=1.2
5. WIND LOADS:  
BASIC WIND SPEED, V=150 MPH  
RISK CATEGORY = I  
WIND EXPOSURE B  
C&C ROOF-ZONE 1=23.3, -37.0 psf  
C&C ROOF-ZONE 2=23.3, -64.5 psf  
C&C ROOF-ZONE 3=23.3, -95.4 psf  
C&C WALL-ZONE 4=40.5, -43.9 psf  
C&C WALL-ZONE 5=40.5, -54.2 psf
6. SEISMIC LOADS:  
THIS STRUCTURE IS EXEMPT FROM SEISMIC DESIGN PER EXEMPTION 3 OF ASCE 7-10, SECTION 11.1.2

ITEMS BY OTHERS:

- THE FOLLOWING ITEMS ARE NOT PROVIDED BY RAILROAD CONSULTANTS, PLLC AND ARE TO BE DESIGNED BY OTHERS IF APPLICABLE AND ARE TO BE SUPPLIED AND INSTALLED BY OTHERS. THESE ITEMS MAY BE SUBJECT TO LOCAL JURISDICTION APPROVAL. RAILROAD CONSULTANTS, PLLC IS NOT RESPONSIBLE THESE ITEMS.
1. RAMPS, STAIRS, AND GENERAL ACCESS
2. ELECTRICAL SERVICE HOOKUP

BUILDING SIZES:

<u>10' WIDTH</u> 10'x24'	<u>14' NOMINAL WIDTH*</u> *NOTE:(13'-0 ACTUAL) 14'x24' 14'x28' 14'x32' 14'x36' 14'x40'
<u>12' NOMINAL WIDTH**</u> **NOTE:(11'-2 ACTUAL) 12'x20' 12'x24' 12'x28' 12'x32' 12'x40'	<u>16' NOMINAL WIDTH*</u> *NOTE:(15'-0 ACTUAL) 16'x24' 16'x28' 16'x32' 16'x36' 16'x40'

INDEX OF SHEETS:

- S-0-PG – COVER SHEET
- S-1-PG – FOUNDATION PLAN
- S-2-PG – UPLIFT ANCHORAGE
- S-3-PG – FRAMING PLAN
- S-4-PG – BUILDING SECTIONS
- S-5-PG – ELEVATIONS
- S-6-PG – NAILING PATTERN
- S-7-PG – DETAILS
- S-8-PG – DETAILS





SHEET APPROVAL STAMP

**PSI** Information  
To Build On  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

**PSI APPROVAL**  
2014-10-20



RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142



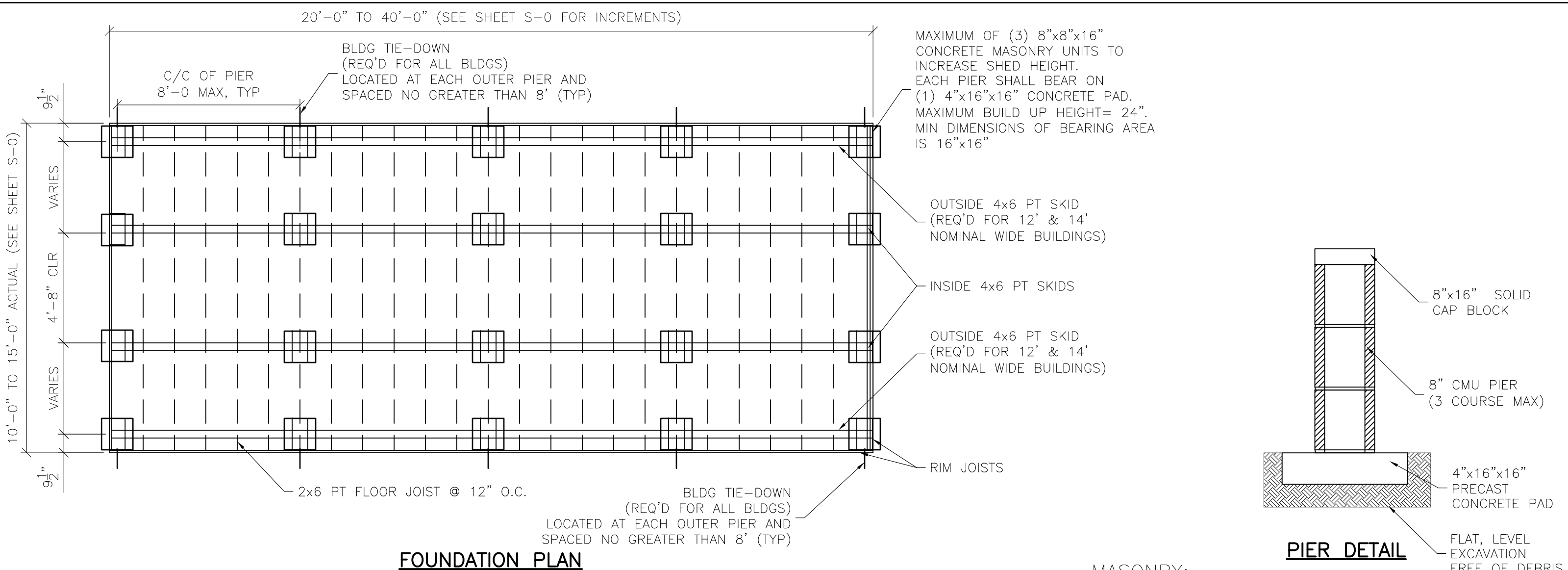
GRACELAND PORTABLE BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

PROJECT NO:	14017
DATE:	10-18-14
DRAWN BY:	DBG
CHECKED BY:	TP
REVISION:	0

SHEET NUMBER

**S-0-PG**

SCALE: 1/4"=1'-0



**FOUNDATION:**

1. ANCHORS ARE IRON ROOT DOUBLE HEAD EARTH ANCHORS. PROVIDE ANCHOR AT EACH PERIMETER PIER GIRDER. PROVIDE 1¼" - 12 ga OR EQUIVALENT GALVANIZED STRAPS WITH BUCKLE AND SLOTTED PER THE BUILDING CODE.
2. ANCHORS AND STRAPS INCLUDING THE INSTALLATION SHALL MEET THE REQUIREMENTS OF APPENDIX E OF THE INTERNATIONAL RESIDENTIAL BUILDING CODE.
3. THE MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 2500 psf HAS BEEN ASSUMED FOR FOOTING DESIGN. CONTRACTOR TO HAVE THIS CAPACITY VERIFIED PRIOR TO CONSTRUCTION.
4. IF A MINIMUM ALLOWABLE SOIL BEARING CAPACITY OF 1500 psf IS USED, THEN THE PIER SPACING SHALL BE NO GREATER THAN 4'-0.
5. FOOTINGS SHALL BE CARRIED TO AN ELEVATION LOWER THAN THOSE SHOWN ON THE DRAWINGS IF REQUIRED TO REACH SUITABLE SOIL.
6. FOOTINGS SHALL BE PLACED ON SUITABLE SOIL THAT MEETS DESIGN ASSUMPTIONS.

**MASONRY:**

CMU f'm = 1,500 PSI  
MORTAR f'm = 1,900 PSI  
GROUT f'm = 3,500 PSI

**CONCRETE:**

1. MATERIALS (COMPRESSIVE STRENGTH AT 28 DAYS)  
FOOTINGS 3,000 PSI  
FOOTINGS AND EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED

**THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE W/ 2012 SUPPLEMENTAL FOR A THREE SECOND GUST OF 150 MPH**

SHEET APPROVAL STAMP

**PSI** Information  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

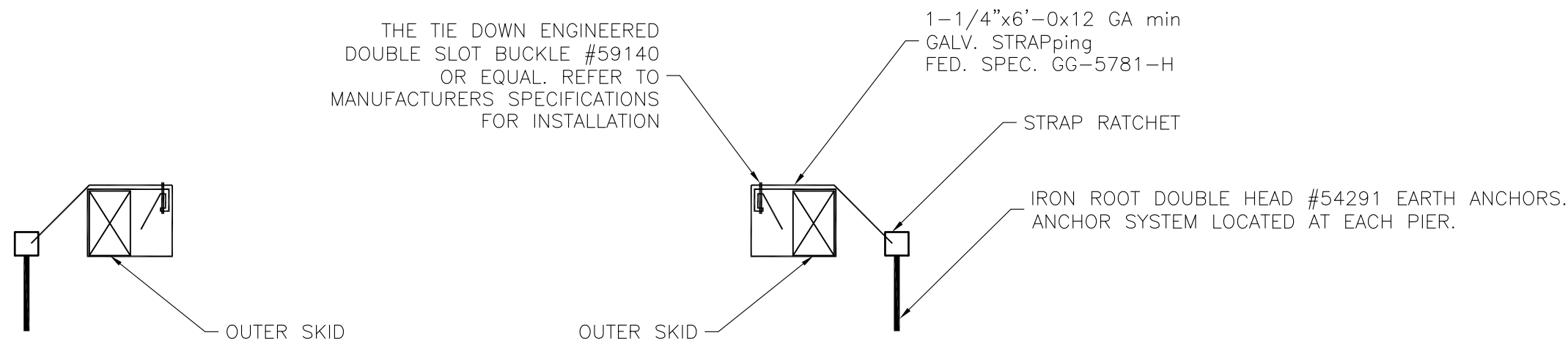
**PSI APPROVAL**  
2014-10-20

RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142

GRACELAND PORTABLE BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

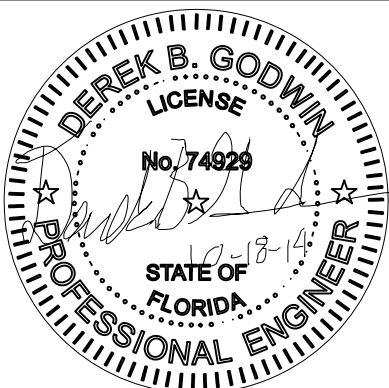
PROJECT NO: 14017	SHEET NUMBER <b>S-1-PG</b> SCALE: 1/4"=1'-0
DATE: 10-18-14	
DRAWN BY: DBG	
CHECKED BY: TP	
REVISION: 0	





ANCHOR TIE DOWN DETAIL

THESE PLANS WERE DESIGNED IN ACCORDANCE  
WITH THE 2010 FLORIDA BUILDING CODE W/  
2012 SUPPLEMENTAL FOR A THREE SECOND  
GUST OF 150 MPH



SHEET APPROVAL STAMP

**psi** Information  
To Build On  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

**PSI APPROVAL**  
2014-10-20

# PORTABLE GARAGE--FL--V=150MPH--FBC 2010



RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142



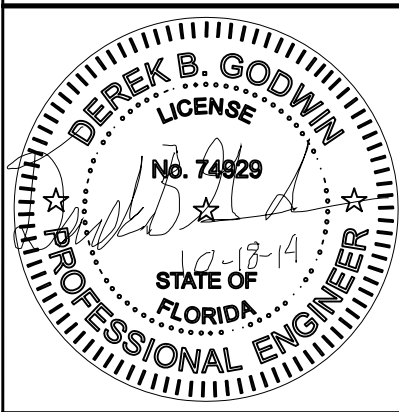
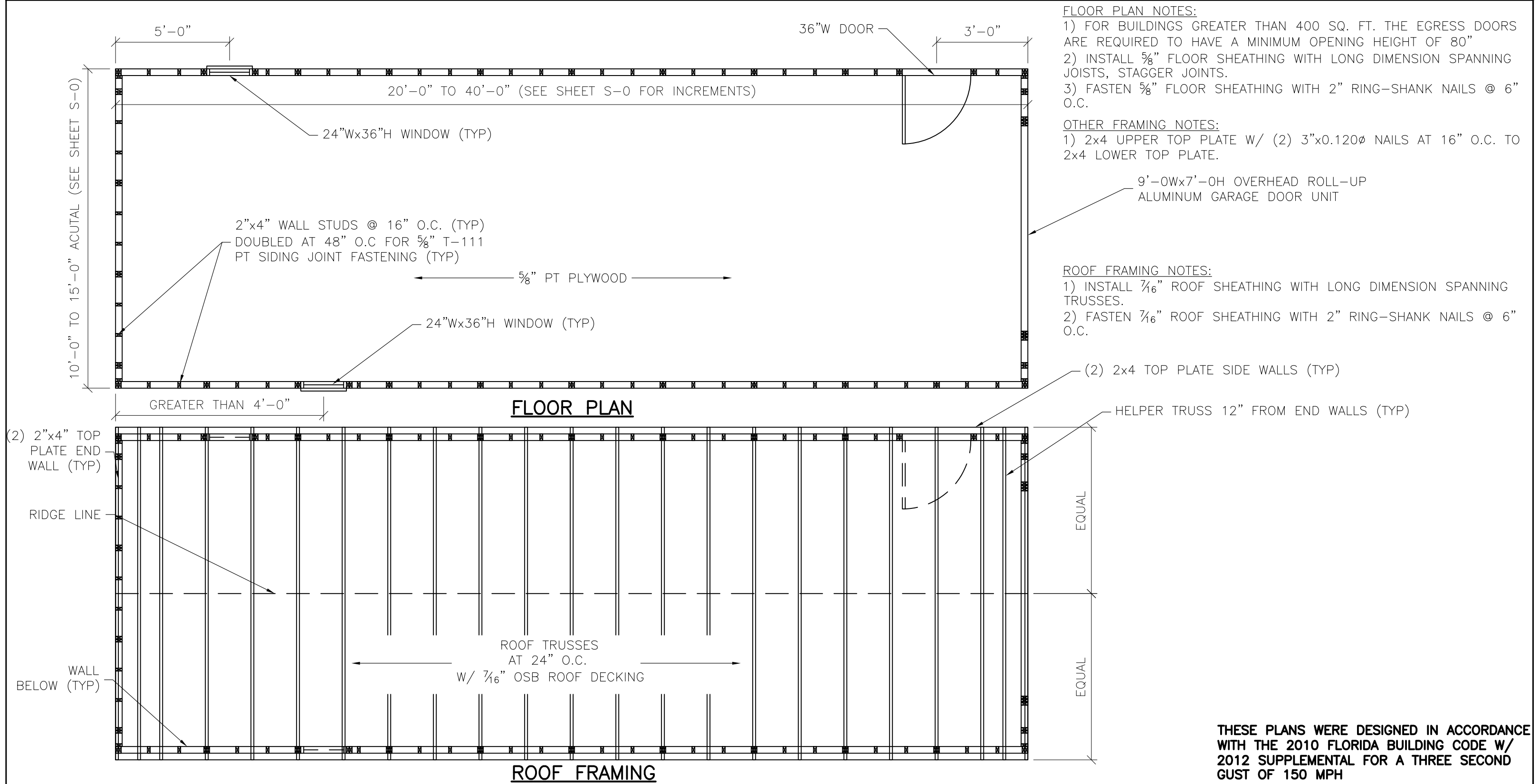
GRACELAND PORTABLE  
BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

PROJECT NO:	14017
DATE:	10-18-14
DRAWN BY:	DBG
CHECKED BY:	TP
REVISION:	0

SHEET NUMBER

**S-2-PG**

SCALE: 1/4"=1'-0



SHEET APPROVAL STAMP

**PSI** Information  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

**PSI APPROVAL**  
2014-10-20

# PORTABLE GARAGE--FL--V=150MPH--FBC 2010



RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142



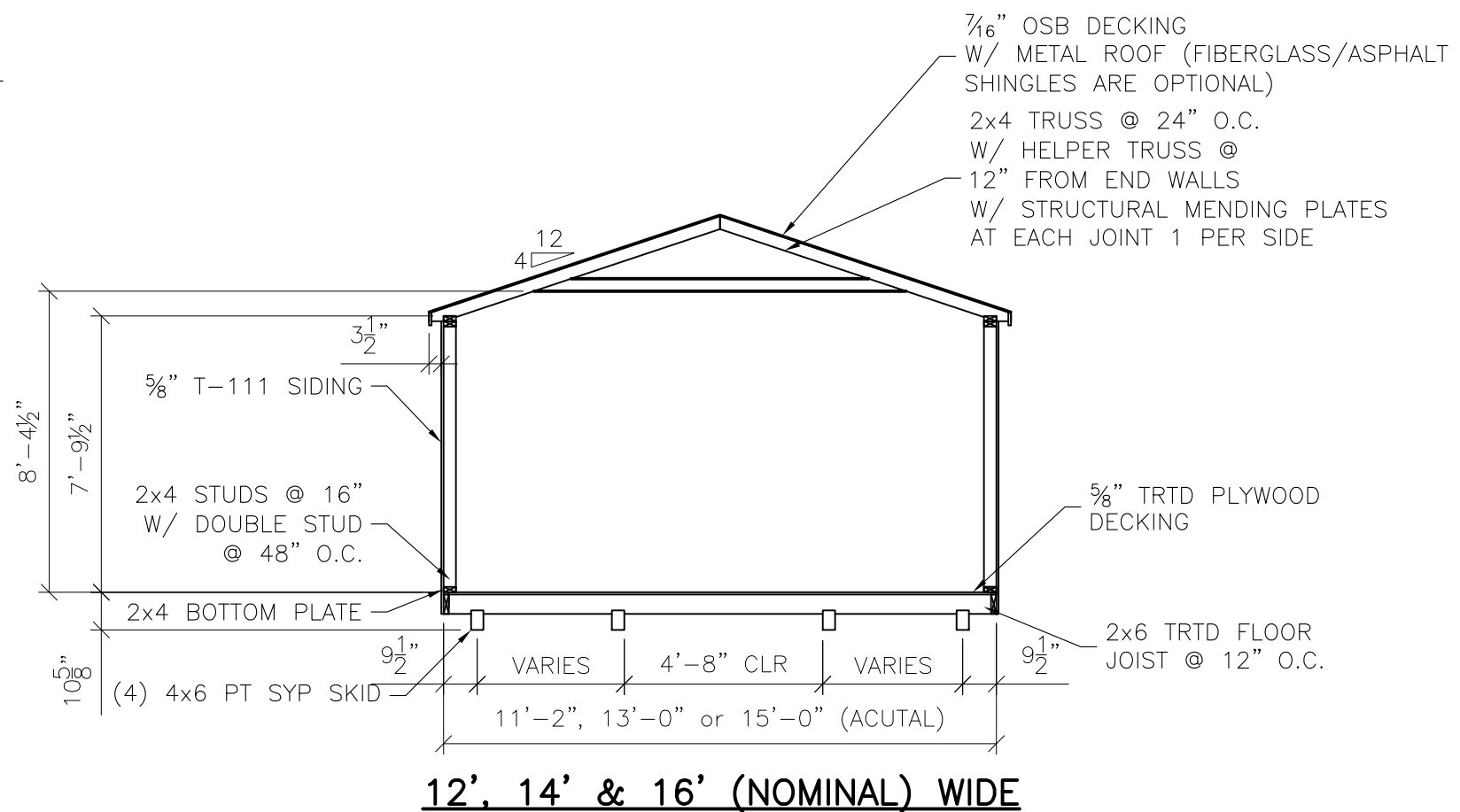
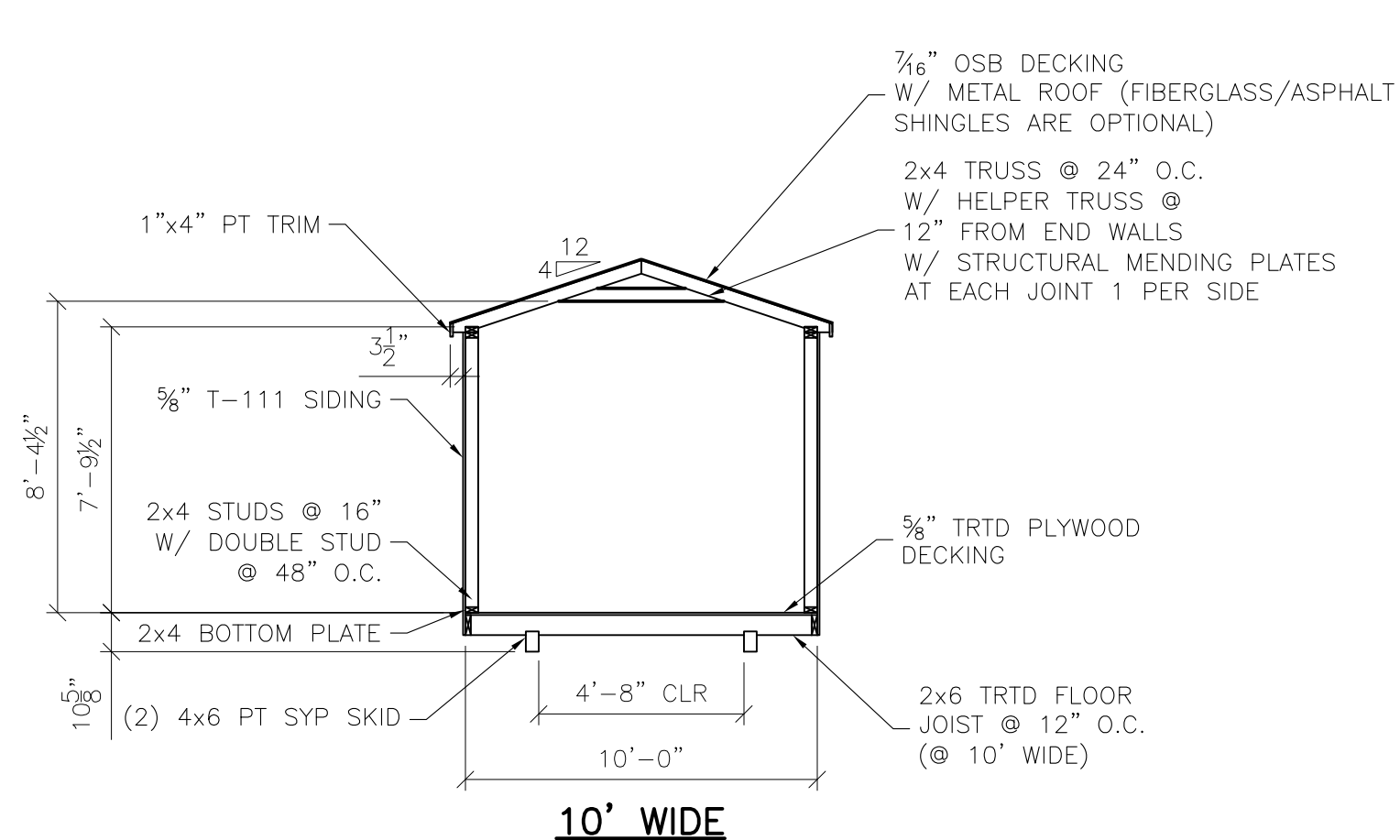
GRACELAND PORTABLE BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

PROJECT NO:	14017
DATE:	10-18-14
DRAWN BY:	DBG
CHECKED BY:	TP
REVISION:	0

SHEET NUMBER

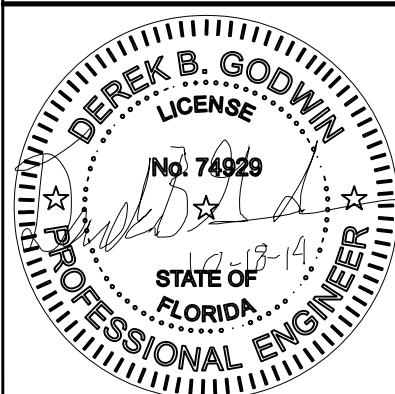
**S-3-PG**

SCALE: 1/4"=1'-0"



**BUILDING SECTIONS**

THESE PLANS WERE DESIGNED IN ACCORDANCE  
WITH THE 2010 FLORIDA BUILDING CODE W/  
2012 SUPPLEMENTAL FOR A THREE SECOND  
GUST OF 150 MPH



SHEET APPROVAL STAMP  
**psi** Information  
To Build On  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51  
**PSI APPROVAL**  
2014-10-20

# PORTABLE GARAGE--FL--V=150MPH--FBC 2010



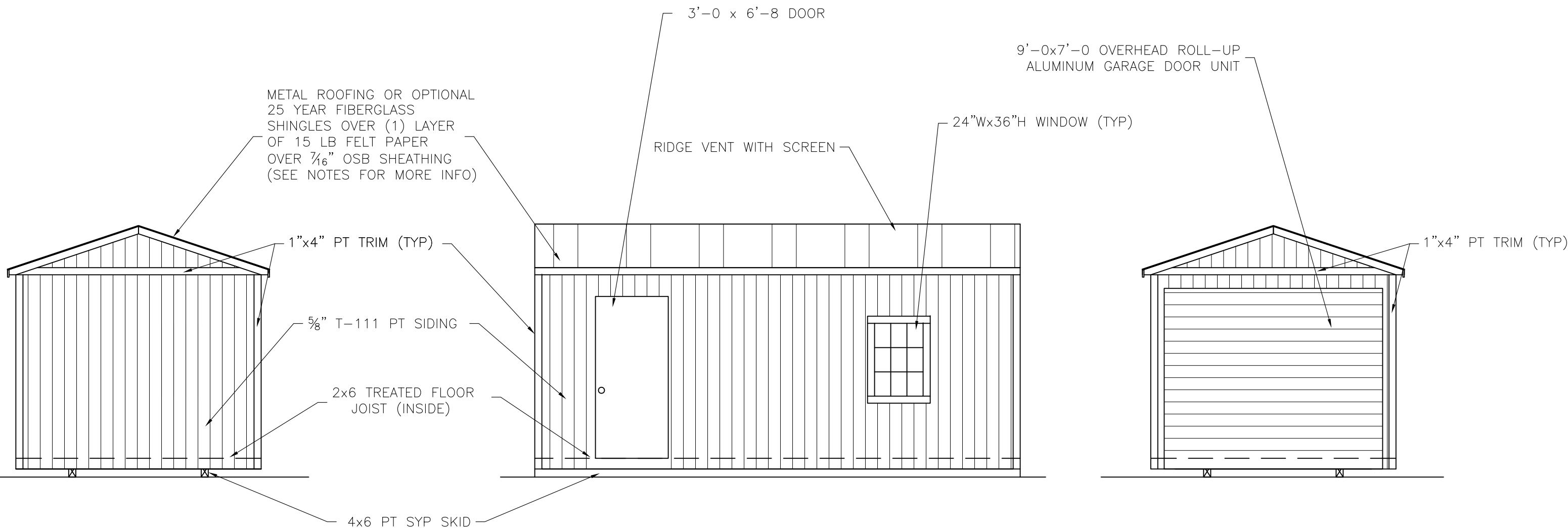
RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142



GRACELAND PORTABLE  
BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

PROJECT NO: 14017  
DATE: 10-18-14  
DRAWN BY: DBG  
CHECKED BY: TP  
REVISION: 0

SHEET NUMBER  
**S-4-PG**  
SCALE: 1/4"=1'-0"



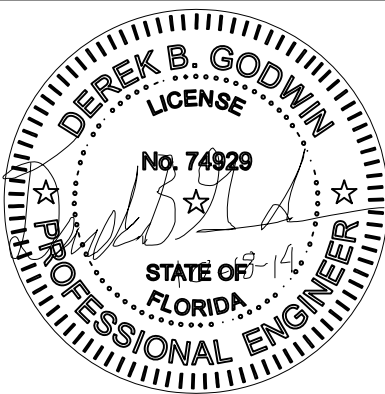
END WALL ELEVATION

SIDE WALL ELEVATION

END WALL ELEVATION 2

- ROOFING AND UNDERLAYMENT NOTES:
- 1) PROVIDE A RIDGE VENT TYPICAL WITH INSECT SCREEN.
  - 2) METAL ROOFING SHALL BE 29 GAUGE METAL IN ACCORDANCE WITH ASTM A 924 OR ASTM A 924M OVER OSB SHEATHING.
  - 3) PROVIDE 29 GAUGE RIDGE CAP, EAVE TRIM AND RAKE TRIM.
  - 4) INSTALL AND FASTEN METAL ROOFING PER MANUFACTURER'S INSTRUCTIONS FOR WIND LOADING.
  - 5) OPTIONAL SHINGLES SHALL BE IN ACCORDANCE WITH ASTM D 7158 TYPE H OR ASTM D 3161F TYPICAL.
  - 6) INSTALL 1 LAYER OF 15 LB ROOFING FELT, START WITH A 19" WIDE STRIP PARALLEL WITH AND STARTING AT EAVES FASTENED SECURELY TO HOLD IN PLACE. START AT EAVE WITH A 38" WIDE SHEET WITH OVERLAPPING SUCCESSIVE SHEETS BY 19". FASTEN UNDERLAYMENT WITH CORROSION-RESISTANT FASTENERS PER MAUFACTURER'S INSTRUCTIONS AND SPACED A MAXIMUM OF 36" APART.

THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE W/ 2012 SUPPLEMENTAL FOR A THREE SECOND GUST OF 150 MPH



SHEET APPROVAL STAMP

**PSI** Information  
To Build On  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

**PSI APPROVAL**  
2014-10-20

# PORTABLE GARAGE--FL--V=150MPH--FBC 2010



RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142



GRACELAND PORTABLE  
BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

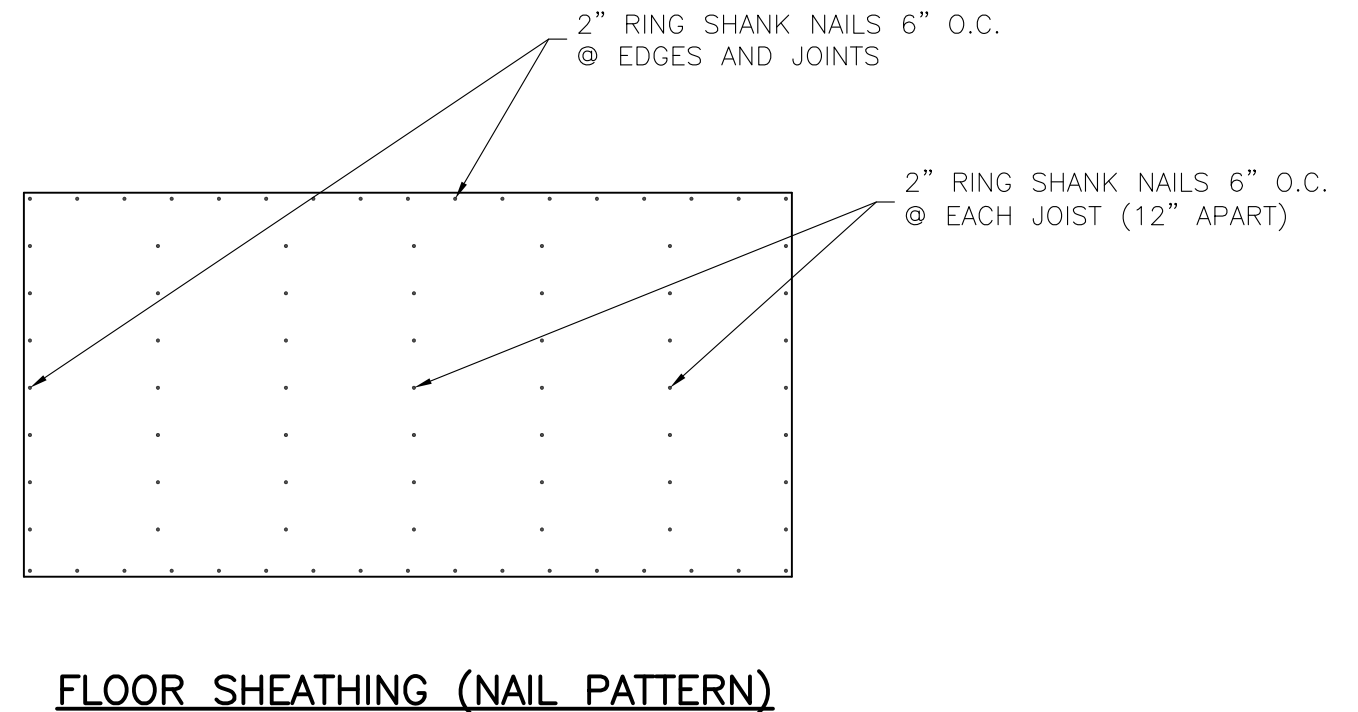
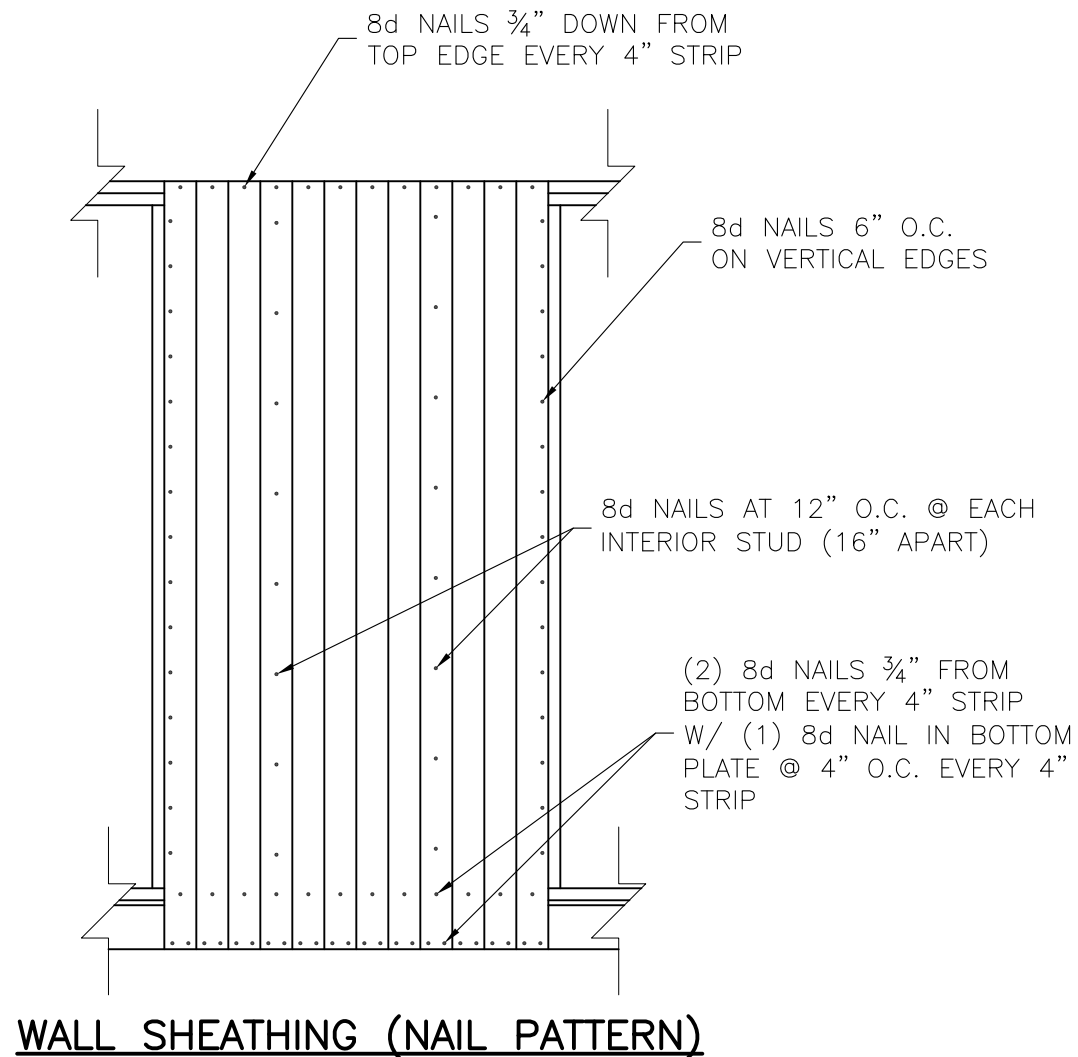
PROJECT NO:	14017
DATE:	10-18-14
DRAWN BY:	DBG
CHECKED BY:	TP
REVISION:	0

SHEET NUMBER

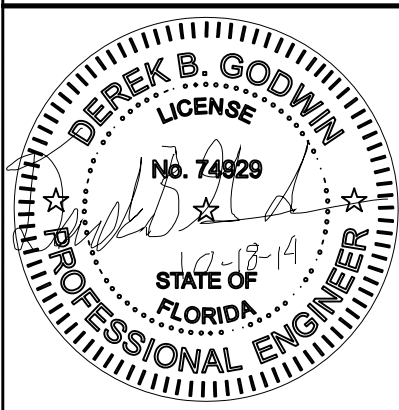
## S-5-PG

SCALE: 1/4"=1'-0





THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE W/ 2012 SUPPLEMENTAL FOR A THREE SECOND GUST OF 150 MPH



SHEET APPROVAL STAMP

**psii** Information  
To Build On  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

**PSI APPROVAL**  
2014-10-20

# PORTABLE GARAGE--FL--V=150MPH--FBC 2010



RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142



GRACELAND PORTABLE BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

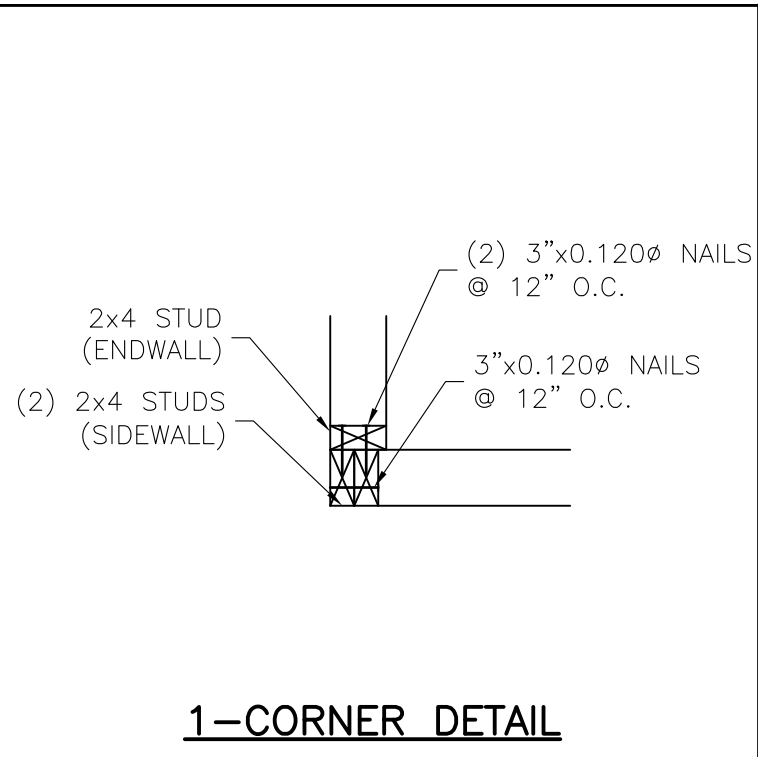
PROJECT NO:	14017
DATE:	10-18-14
DRAWN BY:	DBG
CHECKED BY:	TP
REVISION:	0

SHEET NUMBER

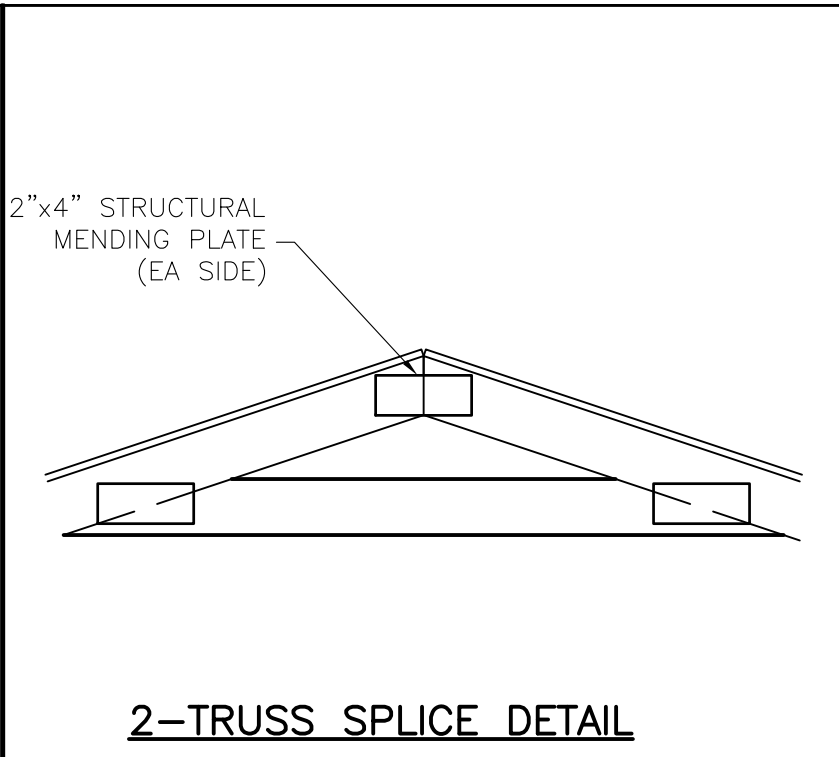
**S-6-PG**

SCALE: 1/2"=1'

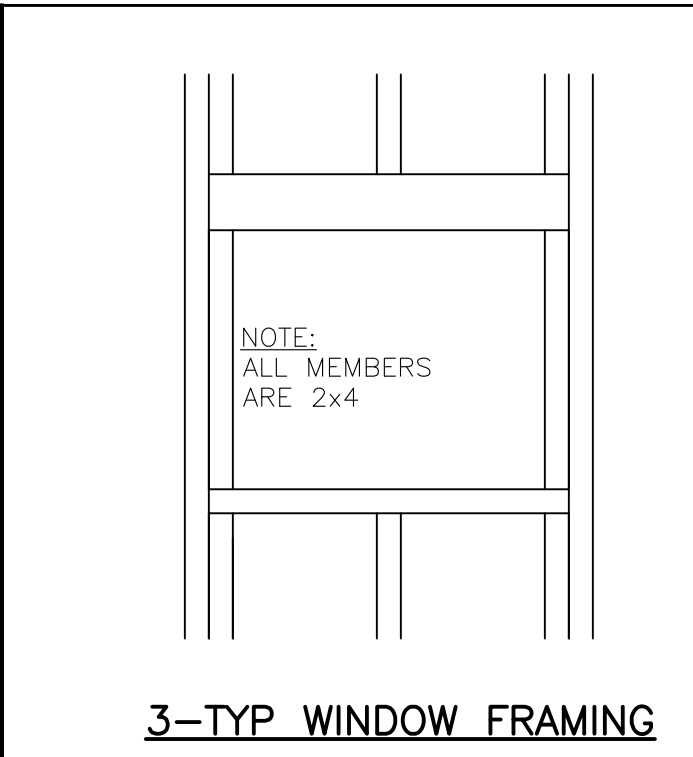




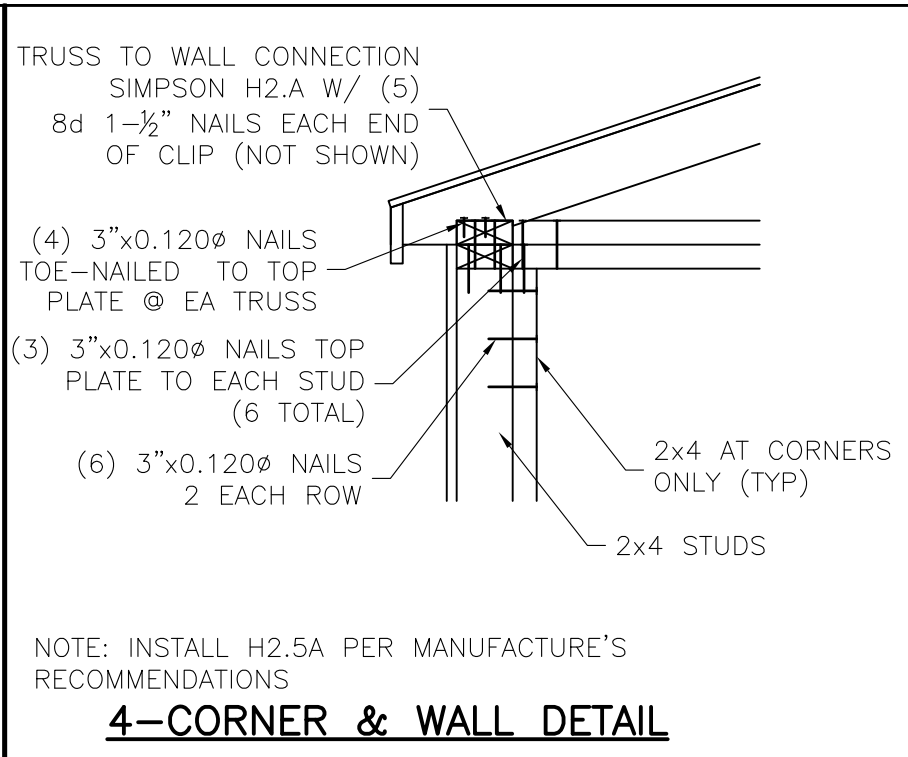
1-CORNER DETAIL



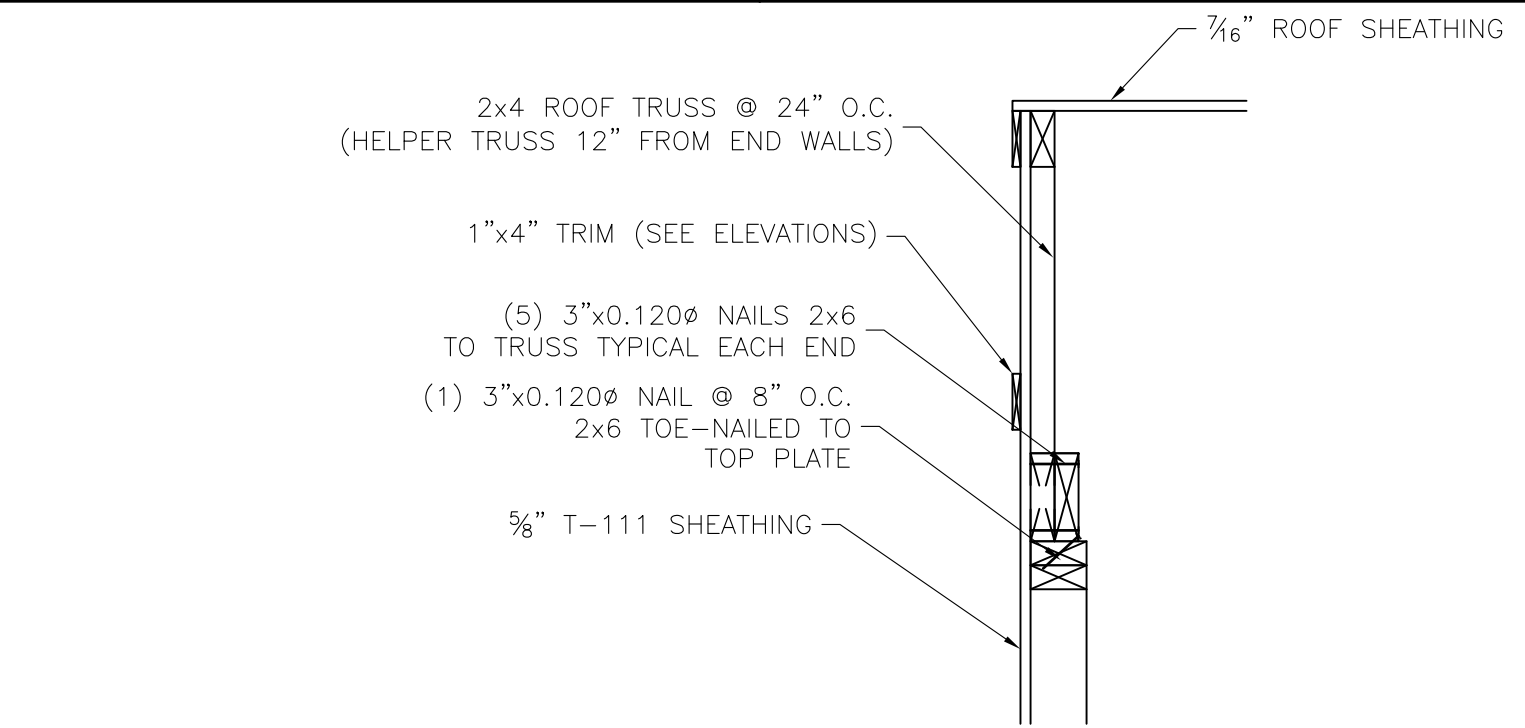
2-TRUSS SPLICE DETAIL



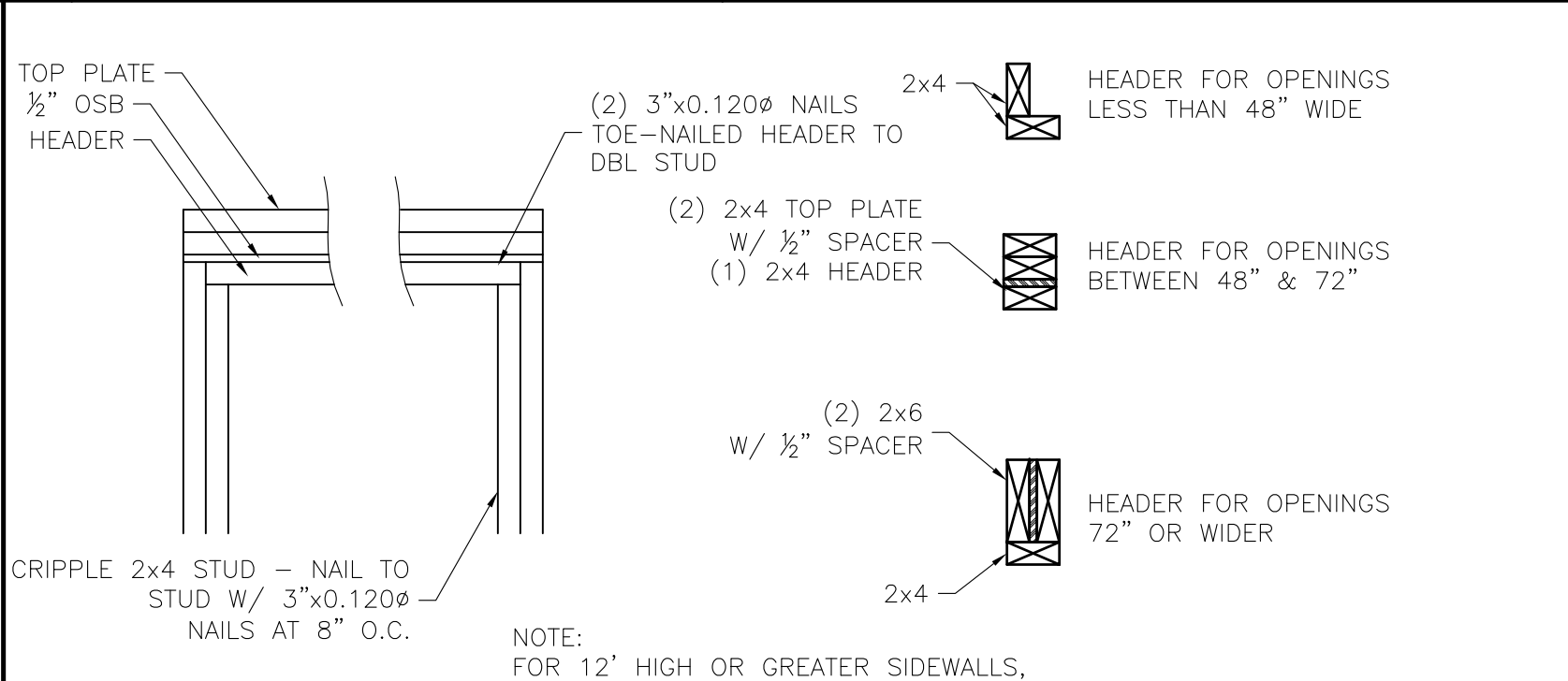
3-TYP WINDOW FRAMING



4-CORNER & WALL DETAIL

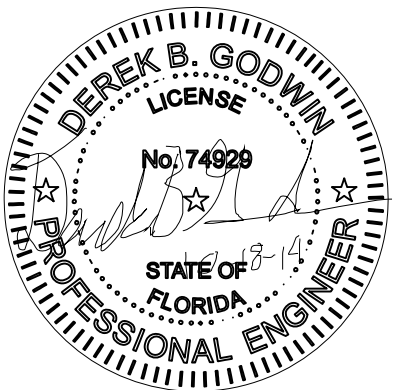


5-END WALL DETAIL



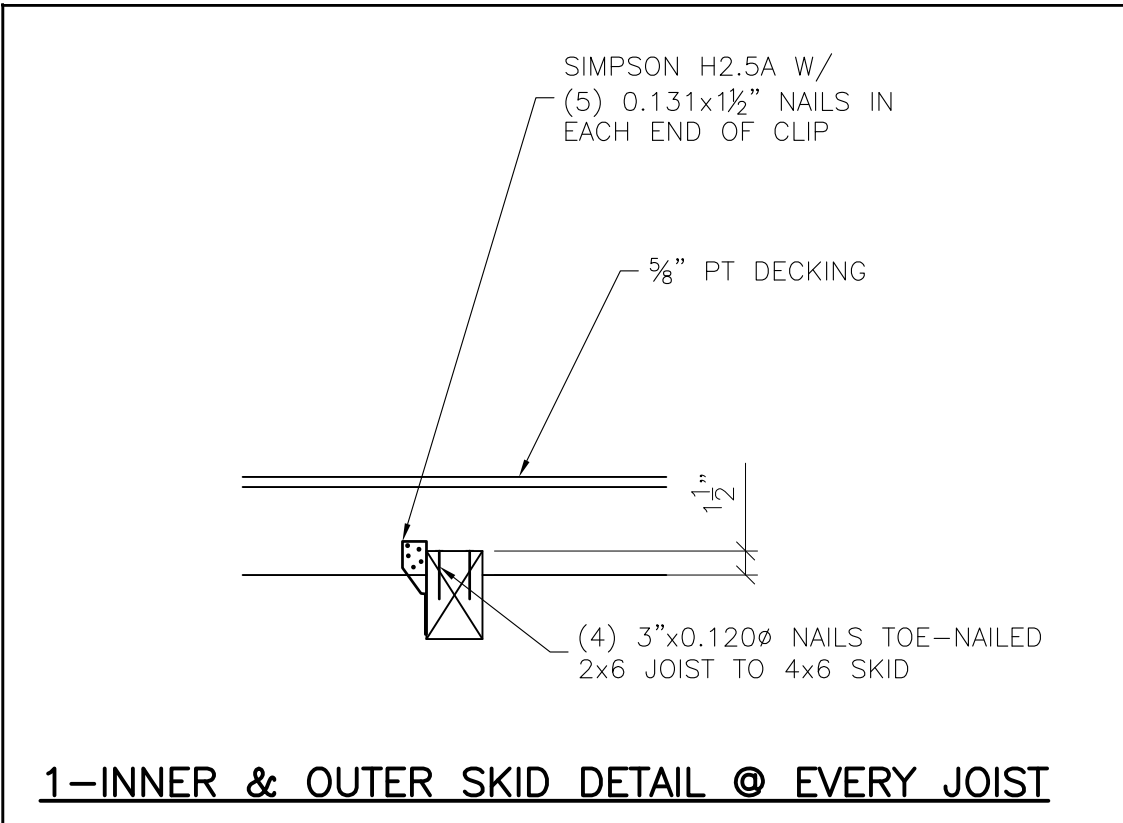
6-TYP DOOR FRAMING

THESE PLANS WERE DESIGNED IN ACCORDANCE WITH THE 2010 FLORIDA BUILDING CODE W/ 2012 SUPPLEMENTAL FOR A THREE SECOND GUST OF 150 MPH

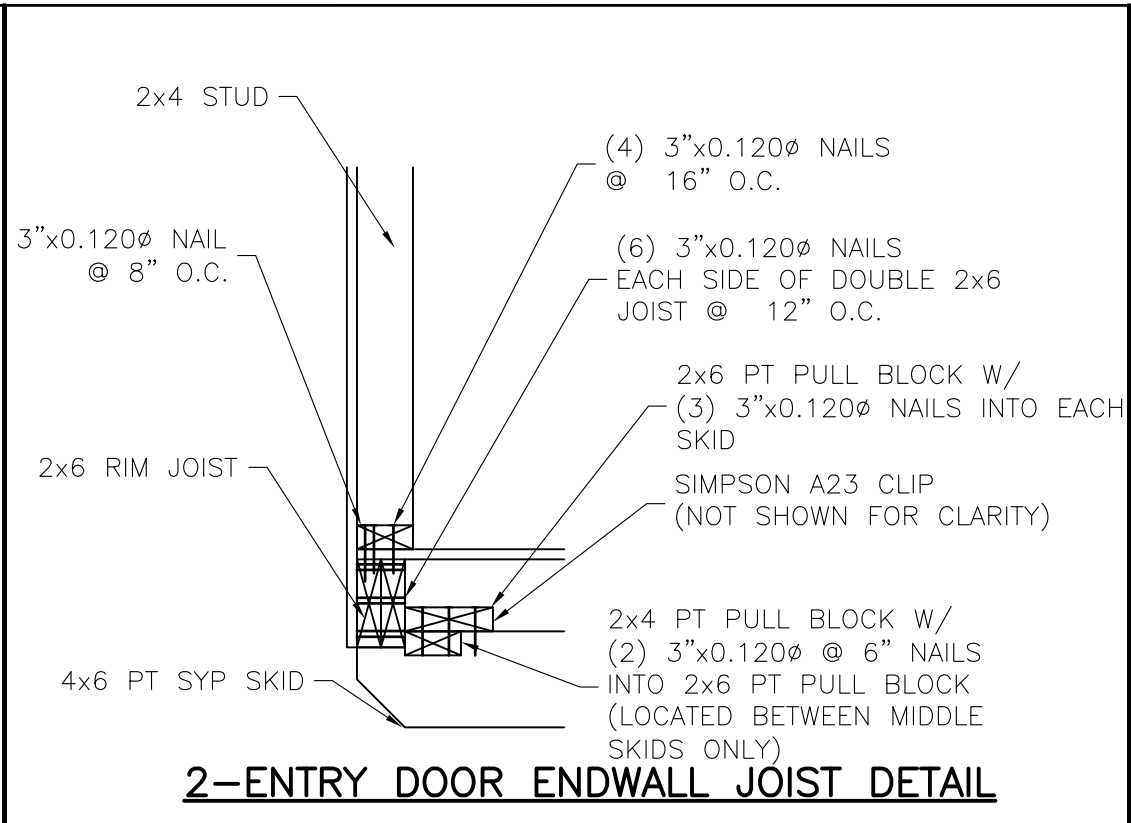


SHEET APPROVAL STAMP  
**psj** Information To Build On  
Engineering • Consulting • Testing  
**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51  
**PSI APPROVAL**  
2014-10-20

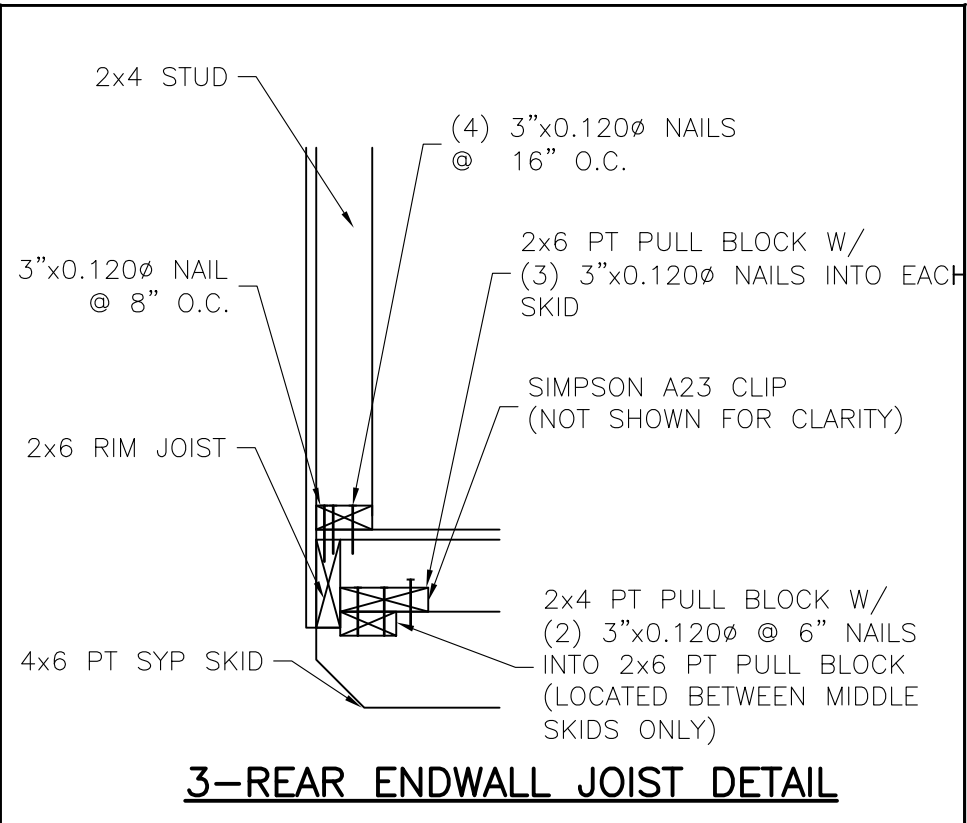
<h1>PORTABLE GARAGE--FL--V=150MPH--FBC 2010</h1>														
	RAILROAD CONSULTANTS, PLLC 718B SOUTH CHURCH STREET MURFREESBORO, TN 37130 PHONE: (615) 663-1142		GRACELAND PORTABLE BUILDINGS, LLC 6807 HWY 62 WEST BARDWELL, KY 42023 PHONE: (866) 574-7446	<table><tr><td>PROJECT NO:</td><td>14017</td></tr><tr><td>DATE:</td><td>10-18-14</td></tr><tr><td>DRAWN BY:</td><td>DBG</td></tr><tr><td>CHECKED BY:</td><td>TP</td></tr><tr><td>REVISION:</td><td>0</td></tr></table>	PROJECT NO:	14017	DATE:	10-18-14	DRAWN BY:	DBG	CHECKED BY:	TP	REVISION:	0
PROJECT NO:	14017													
DATE:	10-18-14													
DRAWN BY:	DBG													
CHECKED BY:	TP													
REVISION:	0													
				<p>SHEET NUMBER</p> <h2>S-7-PG</h2> <p>SCALE: 1"=1'</p>										



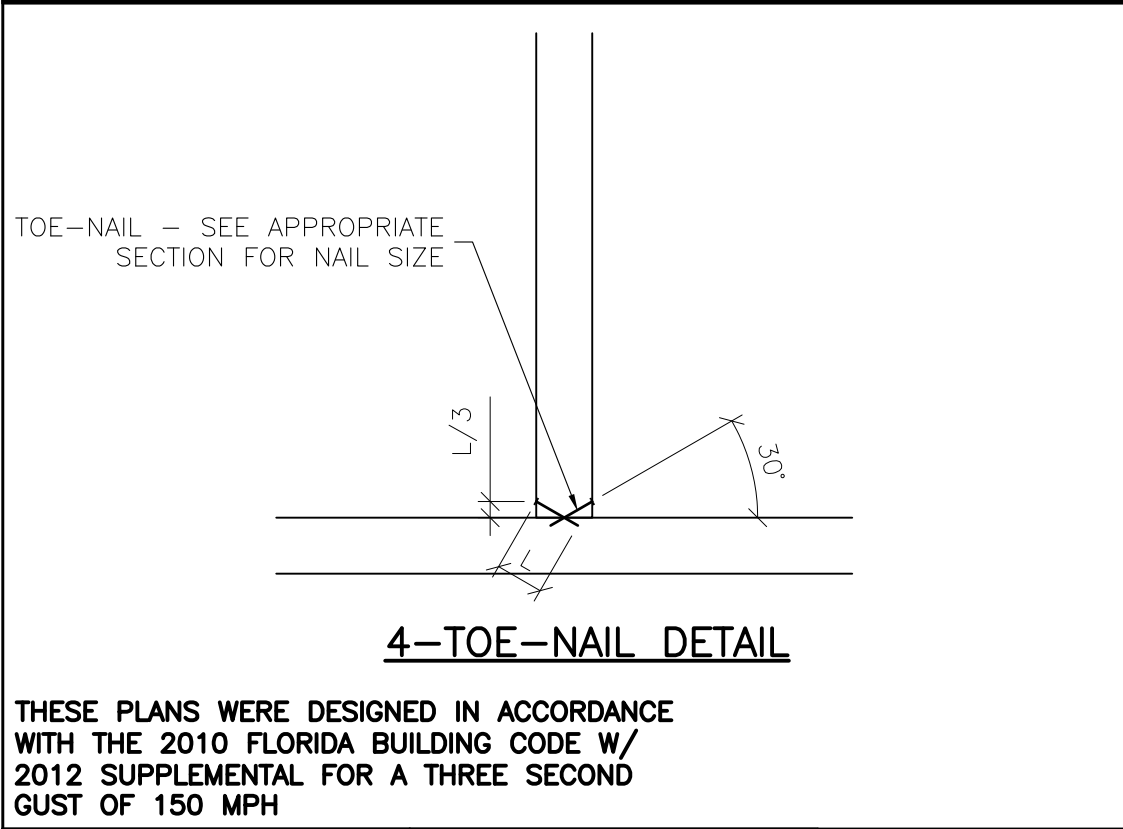
1-INNER & OUTER SKID DETAIL @ EVERY JOIST



2-ENTRY DOOR ENDWALL JOIST DETAIL

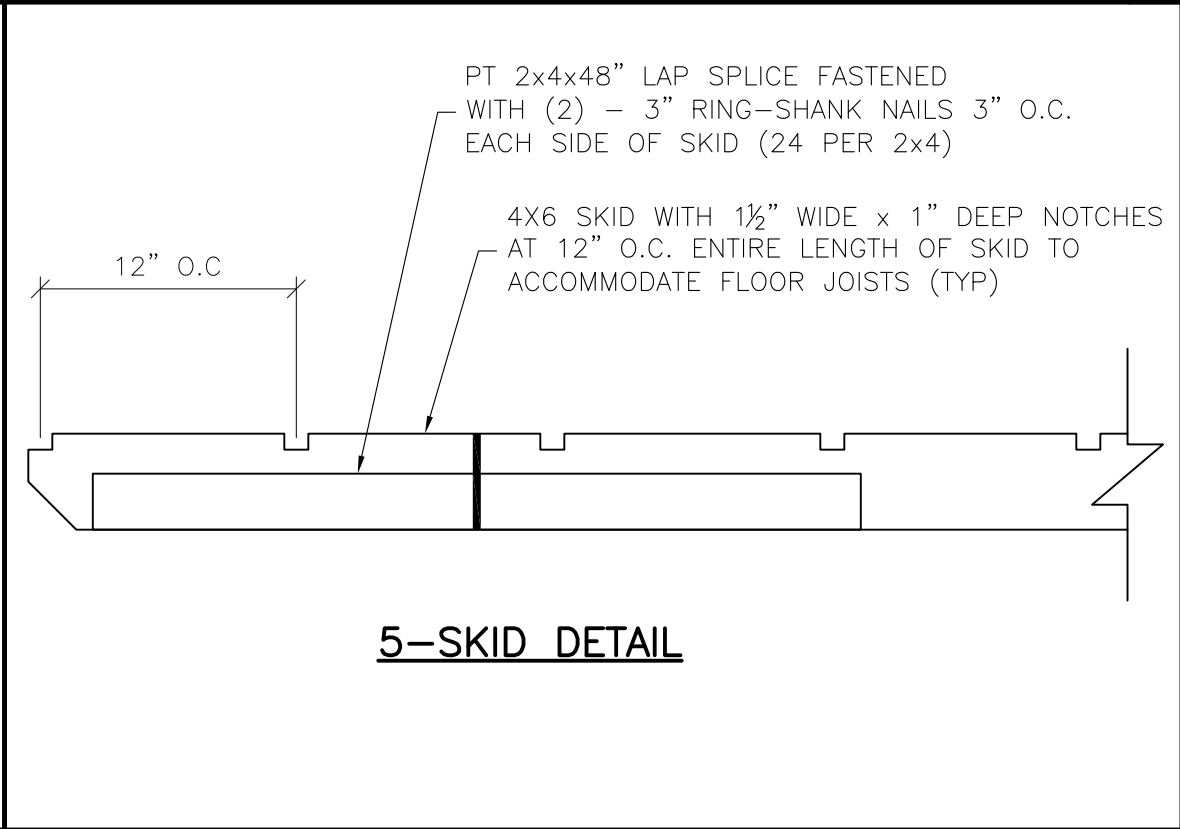


3-REAR ENDWALL JOIST DETAIL

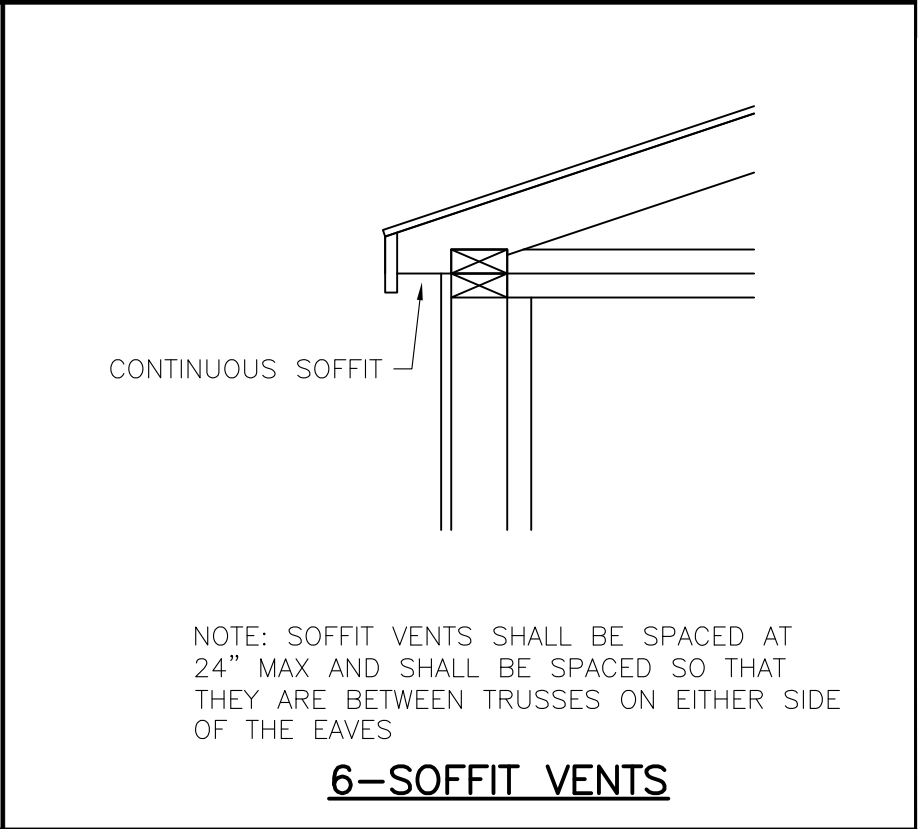


4-TOE-NAIL DETAIL

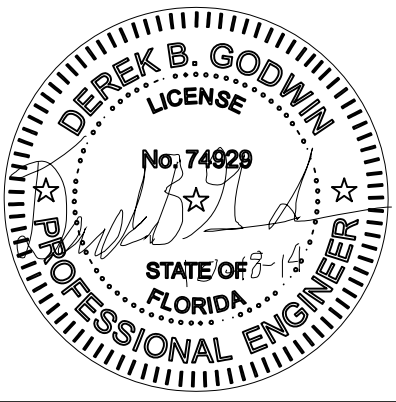
THESE PLANS WERE DESIGNED IN ACCORDANCE  
WITH THE 2010 FLORIDA BUILDING CODE W/  
2012 SUPPLEMENTAL FOR A THREE SECOND  
GUST OF 150 MPH



5-SKID DETAIL



6-SOFFIT VENTS



SHEET APPROVAL STAMP

**psj** Information  
To Build On  
Engineering • Consulting • Testing

**CODE REVIEW**  
Professional Service Industries  
1748 33rd Street  
Orlando, Florida 32839  
Plan Reviewer: William E. Neary, III  
ICC # 5185040  
LA #U00406  
FL SMI-79, SMP-51

**PSI APPROVAL**  
2014-10-20

**RAILROAD CONSULTANTS**

RAILROAD CONSULTANTS, PLLC  
718B SOUTH CHURCH STREET  
MURFREESBORO, TN 37130  
PHONE: (615) 663-1142

**GRACELAND PORTABLE BUILDINGS®**

GRACELAND PORTABLE BUILDINGS, LLC  
6807 HWY 62 WEST  
BARDWELL, KY 42023  
PHONE: (866) 574-7446

PROJECT NO:	14017
DATE:	10-18-14
DRAWN BY:	DBG
CHECKED BY:	TP
REVISION:	0

SHEET NUMBER

**S-8-PG**

SCALE: 1"=1'

# PORTABLE GARAGE--FL--V=150MPH--FBC 2010