

FLA Manufactured Building Program 2601 Blair Stone Road Tallahassee, Florida 32399-0772 Phone: 850.487.1824• Fax: 850.414.8436

Halsey Beshears, Secretary

Ron DeSantis, Governor

July 07, 2020

doug oliver

Cook Portable Warehouse 100 Douglas Street Valdosta, GA 31601

RE: Manufacturer Certification, ID MFT-1435; Expiration Date: July 07, 2023

Dear doug oliver

It is my pleasure to inform you that Cook Portable Warehouse, located at 100 DOUGLAS STREET, VALDOSTA, GA 31601, has been approved under the Manufactured Buildings Program, as provided for under Chapter 553, Part I, Florida Statutes, to manufacture Storage Sheds, Manufactured Buildings for installation in Florida.

Construction or modification on a manufactured building cannot begin until the Third Party Agency has approved the plans in accordance with the current Florida Building Code. Your Third Party Agency is a contractor for the Department and has statutory authority and responsibilities that must be met to maintain approved status. You may expect and demand quality plans review and inspections.

Each Code change will make your plans obsolete until they have been reviewed, approved and indicated [on the cover page of the plans] for compliance with the Code by your Third Party Agency for plans review. Please ensure that your plans are in compliance and are properly posted on our website. All site-related installation issues are subject to the local authority having jurisdiction.

The Department's contractor will make unannounced monitoring visits at least once each year. You must grant complete access to your manufacturing facility and records to remain in compliance with the rules and regulations of this program.

Your certification is approved for three years from this date. You will receive a renewal notice by Email generated by the BCIS (www.floridabuilding.org) for online renewal. If you have questions you may contact Robert Lorenzo at 850-717-1835 or our FAX at 850-414-8436.

Please visit our website at www.floridabuilding.org to see valuable information on the Florida Manufactured Buildings Program. A copy of this letter must accompany applications for local building permits.

Sincerely, Part Lugo

Robert Lorenzo

Manufactured Buildings Program

cc: Top Line Engineering, LLC



December 30, 2020

Mr. Thomas Campbell Florida Department of Business and Professional Regulation 2601 Blair Stone Road, Building C Tallahassee, Florida 32399-6563

RE: Plan Approval

Cook Portable Warehouses, Valdosta, Georgia

Plan # Garden-V

Dear Mr. Campbell,

Pursuant to the requirements of the Department of Business & Professional Regulation, the above referenced documents have been reviewed for compliance with:

2020 Florida Building Code, 7th Edition 2017 National Electrical Code (NFPA-70) Florida Product Approval Rule 61G20-3.006 (FAC)

All mandatory comments have been satisfied and plans are approved for construction by a currently approved modular building manufacturer.

These documents were reviewed for only what is to be constructed in the factory. Any work performed at the site, such as the foundation, is under the authority and jurisdiction of the local Building Official.

Third Party Agency approval in no way alleviates the builder/manufacturer from complying with all the applicable codes, which may or may not be identified in this review. Approval also does not preclude the local building official from requiring work be performed that was not previously reviewed, approved, and constructed under the State of Florida's Manufactured (Modular) Building Program to make the building, code compliant, for the intended use.

A signed and sealed set of plans are maintained on file with Top Line Engineering, LLC.

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

Thank you.

Respectfully

William E. Neary, || Business Partner

Top Line Engineering, LLC

BILL.TLE@vahoo.com

*** Please note: Any questions regarding local permitting should be directed to the Manufacturer. The Manufacturer's contact information can be found in the title block of the plans.

COOK PORTABLE WAREHOUSES

100 DOUGLAS ST., VALDOSTA, GA 31601

STANDARD GARDEN SHED

STATE OF FLORIDA

	Design Criteria
BUILDING CODE	ASCE 7-16, FBC 2020 (7th ed.)
ELECTRICAL CODE	2017 NEC, NFPA70
BUILDING TYPE	RESIDENTIAL LAWN STORAGE SHED
MANUFACTURER	COOK PORTABLE WAREHOUSES
AGENCY	TOP LINE ENGINEERING, LLC
AGENCY PLAN NUMBER	GARDEN
CONSTRUCTION TYPE	V-B
FIRE PROTECTION	В
FIRE SUPPRESSION SYSTEM	NO
OCCUPANCY	U - UTILITY
NUMBER OF OCCUPANTS	0
ALLOWABLE # OF STORIES	1
WIND INFORMATION	160 MPH ULTIMATE, V _{ASD} = 124 MPH, EXPOSURE C, CATEGORY I; ENCLOSED; +/- 0.18 INTERNAL PRESSURE COEFFICIENT; 15' HEIGHT
FLOOR LIVE LOAD	75.0 PSF
FLOOR DEAD LOAD	10.0 PSF
ROOF LIVE LOAD	20.0 PSF
ROOF DEAD LOAD	10.0 PSF
WALL DEAD LOAD	10.0 PSF
UNINHABITED LOFT LIVE LOAD	0.0 PSF
GROUND SNOW LOAD	0.0 PSF
FIRE RATING OF EXTERIOR WALLS	0
"R" RATING OF FLOOR, WALL, AND ROOF	R-0, R-0, R-0
MODULES PER BUILDING	1
SQUARE FOOTAGE	LESS THAN 719 SQ. FT.
EXEMPT FROM ENERGY CONSERVATION CODE?	YES
APPROVED FOR HURRICANE PROTECTION USAGE?	NO
DESIGNED FOR HURRICANE PUBLIC SHELTER?	NO

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 JURISDICTION APPROVAL.

- THE COMPLETE FOUNDATION SUPPORTING AND TIE-DOWN SYSTEM.
- 2. RAMPS, STAIRS, AND GENERAL ACCESS TO THE BUILDING IF NECESSARY.
- 3. GUTTERS AND DOWN SPOUTS ON ALL BUILDINGS WITH EAVES OF LESS THAN 6 INCHES HORIZONTAL PROJECTION EXCEPT FOR GABLE END RAKES.

OCCUPANCY NOTE:

THIS BUILDING IS NOT DESIGNED FOR HUMAN HABITATION AND 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, AND CARDBOARD BOXES WITH VARIOUS SMALL ITEMS.

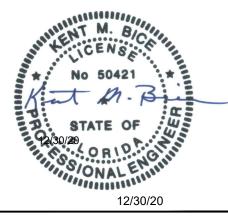
Sheet Index						
SHEET NUMBER	SHEET TITLE					
S-1	COVER SHEET					
S-2	GENERAL NOTES					
S-3	WIND LOAD TABLES					
S-4	FASTENING SCHEDULE					
S-5	FRAMING PLANS					
S-6	ELEVATION PANEL SIDING					
S-6A	ELEVATION LAP SIDING					
S-7	7'-11 1/2" SHED - FRAMING ELEVATION					
S-8	9'-11 1/2" SHED - FRAMING ELEVATION					
S-9	SIDE WALL ELEVATION					
S-10	CROSS SECTIONS					
S-11	CROSS SECTIONS					
S-12	DETAILS					
S-13	DETAILS					
S-14	DETAILS					

*** Please note: Any questions regarding local permitting should be directed to the Manufacturer. The Manufacturer's contact information can be found in the title block of the plans.

NOT APPROVED FOR HVHZ



William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

COVER SHEET

DATE: 12/08/20 DRAWN BY: RD

SCALE: AS NOTED CHECKED BY: KMB

SHEET:

S-1
SHEET 1 OF 15

2020 FLORIDA BUILDING CODE (7TH ED

GENERAL NOTES:

- 1. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
- 2. THE FOUNDATION PLAN IS A SEPARATE SET OF PLANS FOR APPROVAL BY LOCAL MUNICIPALITIES.
- EXTERIOR DIMENSIONS CAN VARY BETWEEN LIMITS SHOWN AT 2' O.C. BUT MEMBER SPACING SHALL NOT EXCEED LIMITS AS INDICATED.
- 4. ALL THE FOLLOWING LUMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA USE CATEGORY UC4B (GROUND CONTACT, HEAVY DUTY)-SKIDS.
- 5. ALL THE FOLLOWING LUMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA USE CATEGORY UC3B (EXTERIOR ABOVE GROUND, UNCOATED OR POOR WATER RUNOFF)-FLOOR JOISTS, PLYWOOD FLOOR DECKING, AND EXTERIOR RATED WOOD STRUCTURAL PANEL SIDING.
- 6. ALL FASTENERS AND CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED (G185) OR STAINLESS STEEL
- 7. ALL WINDOWS WITHIN 24" OF DOORS, AND ALL GLASS IN DOORS SHALL BE SAFETY, TEMPERED, OR ACRYLIC PLASTIC SHEET.
- 8. 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 WITH SECTION 1507.2.2 OF THE 2020 FBC OR PER SHINGLE MANUFACTURER INSTRUCTIONS.
- 9. UNDERLAYMENT SHALL CONFORM WITH SECTION 1507.2.3 OF THE 2020 FBC OR PER SHINGLE MANUFACTURER INSTRUCTIONS.
- 10. ASPHALT SHINGLES SHALL CONFORM WITH SECTION 1507.2.5 OF THE 2020 FBC ATTACHMENT OF ASPHALT SHINGLES SHALL CONFORM WITH 1507.2.7 OF THE 2020 FBC.
- 11. FASTENERS FOR ASPHALT SHINGLES SHALL CONFORM TO SECTION 1507.2.6 OF THE 2020 FBC.
- 12. TIE-DOWNS SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES LISTED ON SHEET S-1
- 13. THESE PLANS HAVE NOT BEEN DESIGNED FOR HVHZ REQUIREMENTS AS SET FORTH IN THE 2020 FBC OR FOR USE AS A COMMERCIAL BUILDING.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY AND PLACEMENT OF LAWN STORAGE UNIT TO ENSURE THE INTEGRITY OF THE BUILDING AND ITS COMPONENT PARTS.
- 16. NO FIELD REVISIONS TO ANY STRUCTURAL COMPONENTS OR DEVIATIONS FROM THESE DRAWINGS SHALL BE MADE.
- 17. 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 ERRORS OR OMISSIONS IN THE PERFORMANCE OF THE WORK BY THE CONTRACTOR.
- 18. SECTIONS AND DETAILS ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY AT ALL SIMILAR LOCATIONS, UNLESS OTHER SECTIONS AND DETAILS ARE SPECIFICALLY REFERENCED.
- 19. REFER TO SUPPLIED FASTENING SCHEDULE FOR FASTENING BASED ON CONNECTION AND LOCATION OF MEMBERS AS PER 2020 FBC TABLE 2304.10.1 UNLESS NOTED OTHERWISE.
- 20. BUILDINGS HAVE BEEN DESIGNED FOR LP SMARTSIDE STRAND SUBSTRATE PANEL SIDING, LP SMARTSIDE PRECISION LAP SIDING SHALL BE USED WITH X-STRAPS OR STRUCTURAL
- 21. SHEATHING AS DETAILED IN THIS PLAN SET.
- 22. FASTENERS IN LP SMARTSIDE STRAND SUBSTRATE PANEL SIDING MUST NOT BE INSTALLED IN PANEL SIDING GROOVES IN THE FIELD OF THE PANEL SIDING OR WHEN THE PANEL F SIDING GROOVES OCCUR AT CUT EDGES OF THE PANEL SIDING.
- 23. REFER TO THE ICC-ES EVALUATION REPORT ESR-1301 / 3090 FOR ADDITIONAL DATA AND SPECIFICATIONS OF LP SMARTSIDE STRAND SUBSTRATE PANEL / LAP SIDING.
- 24. MAX OPENINGS WIDTHS MUST COMPLY WITH DESIGN RATIOS AS PER ANSI/AF&PA SDPWS-2015. BUILDINGS HAVE BEEN DESIGNED TO HAVE ONLY OPENINGS WITH MAX WIDTHS EQUAL TO THOSE IN THE ENDWALL SHEAR WALL CHART.
- 25. AS PER FBC SECTION 1626.1 EXCEPTION (F): STORAGE SHEDS THAT ARE NOT DESIGNED FOR HUMAN HABITATION AND THAT HAVE A FLOOR AREA OF LESS THAN 720 SQUARE FEET OR LESS ARE NOT REQUIRED TO COMPLY WITH THE MANDATORY WINDBORNE DEBRIS IMPACT STANDARDS OF THIS CODE.
- 26. IN ACCORDANCE WITH FBC 1609.1.2, "STORAGE SHEDS THAT ARE NOT DESIGNED FOR HUMAN HABITATION AND THAT HAVE A FLOOR AREA OF 720 SQUARE FEET OR LESS ARE NOT REQUIRED TO COMPLY WITH THE MANDATORY WINDBORNE DEBRIS IMPACT STANDARDS OF THIS CODE".
- 27. BUILDINGS HAVE BEEN DESIGNED TO HAVE ANCHORS DIRECTLY ATTACHED TO ALL FOUR CORNERS OF THE BUILDING TO RESIST TENSION FORCES FROM LATERAL WIND LOADS. THIS DESIGN CONSIDERATION MUST BE MADE BY INSTALLER WHEN ATTACHING ANCHORING SYSTEM TO BUILDING.
- 28. UNLESS NOTED OTHERWISE, ATTACH ALL MANUFACTURED PRODUCTS IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
- 29. 2X4 SP #2 PRESSURE TREATED LUMBER SHALL BE SUBSTITUTED FOR 2X4 SPF #2 LUMBER IN WALLS FOR USE IN FLOOD PLAINS.
- 30. PER APA PRODUCT REPORT PR-N124, LP SMARTSIDE STRAND SUBSTRATE SERIES TREATED-ENGINEERED-WOOD PANEL AND LAP SIDING IS PERMITTED ON WALLS FOR USE IN FLOOD PLAINS.
- 31. 19/32" LP PROSTRUCT FLOORING WITH SMARTFINISH IS PERMITTED IN LIEU OF 5/8" APA RATED STRUCTURAL SHEATHING ON FLOOR. INSTALL PER MANUFACTURER INSTRUCTIONS.
- 32. FOUNDATION PLANS ARE NOT PART OF THIS PLAN SET AND ARE GOVERNED BY LOCAL JURISDICTION.
- 33. THIS BUILDING IS EXEMPT FROM THE FECC PER SECTIONS R101.4.2.4, R402.1.
- 34. BUILDINGS ARE APPROVED FOR RESIDENTIAL LAWN STORAGE ONLY
- 35. REFER TO TIE DOWN DETAILS FOR PROPER INSTALLATION REQUIREMENTS TO MEET CODE.
- 36. ALL LUMBER FOR CONSTRUCTION WILL BE #2 SYP EXCEPT AS NOTED.
- 37. GUTTERS SHALL BE SITE INSTALLED PER THE LOCAL AUTHORITY HAVING JURISDICTION AND PERMITTING REQUIREMENTS.
- 38. ALL WINDOWS AND DOORS TO MEET THE MINIMUM SPECIFICATIONS PER THE APPROVED PLANS AND THE FLORIDA BUILDING CODE.
- 39. IN ACCORDANCE WITH FBC 1010.1.1, EXCEPTION (10.) BUILDINGS THAT ARE 400 SQ-FT OR LESS AND THAT ARE INTENDED FOR USE IN CONJUNCTION WITH ONE- AND TWO-FAMILY RESIDENCES ARE NOT SUBJECT TO THE DOOR HEIGHT AND WIDTH REQUIREMENTS OF THIS CODE. STRUCTURES 400 SQ-FT OR MORE SHALL HAVE AN 80" MINIMUM DOOR.
- 40. IN ACCORDANCE WITH FLORIDA STATUTE 553.80 (1)D, LAWN STORAGE BUILDINGS AND STORAGE SHEDS BEARING THE INSIGNIA OF APPROVAL OF THE DEPARTMENT ARE NOT SUBJECT TO 553.842 (FLORIDA PRODUCT APPROVALS) BUT SHALL MEET THE DESIGN WIND LOAD REQUIREMENTS OF THE 2020 FBC 7TH EDITION.
- 41. FLAT METAL STRAPS CAN BE BENT AROUND STRUCTURAL MEMBERS OF WALL STUDS, TRUSSES, CHORDS, ETC. TO HELP SECURE THESE MEMBERS, PROVIDED THAT THE ADDED BEND DOES NOT INTERFERE WITH ANY OF THE EXISTING BREAKS/BENDS IN THE STRAP.
- 42. COMPONENTS/CLADDING ARE IN COMPLIANCE WITH THE 2020 FBC 7TH EDITION.
- 43. SHEDS LOCATED IN FLOOD HAZARD AREAS MUST COMPLY WITH THE LOCAL FLOOD ZONE REGULATIONS.
- 44. IF A WALL IS FRAMED FOR FUTURE HVAC UNITS THAT SHALL BE APPROVED BY THE AHJ AND SHALL COMPLY WITH LOCAL REQUIREMENTS FOR PERMITTING.
- 45. WINDOWS AND DOORS INSTALLED BY THE CUSTOMER THAT SHALL BE APPROVED BY THE AHJ AND SHALL COMPLY WITH LOCAL REQUIREMENTS FOR PERMITTING.
- 46. HVHZ COMPONENTS FOR SHEDS REQUIRE THAT INSTALLATION PER MANUFACTURER'S INSTRUCTIONS.

NOT APPROVED FOR HVHZ



William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



CHECKED BY: KMB

1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

GENERAL NOTES

DATE: 12/08/20 DRAWN BY: R

SCALE: AS NOTED

SHEET:

S-2 SHEET 2 OF 15

DESIGN WIND LOADS - WINDOWS, DOORS, COMPONENTS AND CLADDING

ROOF							
ZONE	AREA (FT²)	DESIGN PRESSURE (PSF)					
	(' ' '	POSITIVE	NEGATIVE				
1	10	30.8	-56.5				
1	20	27.4	-47.9				
1	50	22.9	-36.5				
1	100	19.4	-28.0				
2	10	30.8	-56.5				
2	20	27.4	-47.9				
2	50	22.9	-36.5				
2	100	19.4	-28				
3	10	30.8	-96.5				
3	20	30.8	-76.3				
3	50	19.4	-47.5				
3	100	19.4	-35.9				

	WALLS								
	ZONE	AREA (FT²)	DESIGN PRESSURE (PSF)						
		(1 1)	POSITIVE	NEGATIVE					
	4	10	33.7	-36.5					
	4	20	32.2	-35.0					
	4	50	29.5	-32.3					
	4	100	27.1	-29.9					
	5	10	33.7	-45.1					
	5	20	32.2	-42.1					
	5	50	29.5	-39.2					
	5	100	27.1	-36.3					
1									

BUILDING DATA ASCE 7-16 WIND

WIND VELOCITY V_{ULT} 160 MPH INTERNAL PRESSURE COEFFICIENT ± 0.18 WIND VELOCITY VASD (ENCLOSED BUILDING ASCE 7-16) 124

BUILDING CATEGORY HEIGHT & EXPOSURE ADJUSTMENT COEFFICIENT 1.21 ROOF DEAD LOAD RESISTING UPLIFT (PSF) 10.0

ROOF ANGLE, ° (DEGREES) 15 OR 30 DEGREES

WIND EXPOSURE CATEGORY С MEAN ROOF HEIGHT

NOTES:

1. FOR EFFECTIVE AREAS BETWEEN THOSE GIVEN ABOVE THE LOAD MAY BE INTERPOLATED, OTHERWISE USE THE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREA.

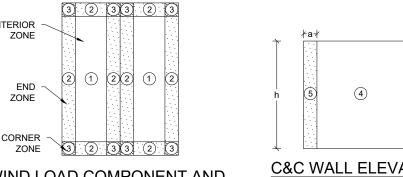
15

2. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.

3. PRESSURES SHOWN ARE APPLIED NORMAL TO THE SURFACE.

4. REFER TO PRESSURE ZONE DIAGRAMS PROVIDED FOR CORRESPONDING ZONES.

5. ROOF COVERINGS, FINISHES, ETC SHALL BE DESIGNED FOR THE FULL NEGATIVE DESIGN PRESSURE.



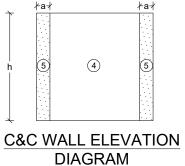
WIND LOAD COMPONENT AND **CLADDING ROOF PRESSURE DIAGRAM**

INTERIOR

ZONE

END

ZONE



TOP LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS

William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734

12/30/20 ONAL

SHEET:

SHEET 3 OF 15

1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

WIND LOAD TABLES

DATE: 12/08/20 DRAWN BY: RD SCALE: AS NOTED CHECKED BY: KMB

DESIGN WIND LOADS - MWFRS

	WALL				ROOF			
	SURFACE 1	SURFACE 1E	SURFACE 4	SURFACE 4E	SURFACE 2	SURFACE 2E	SURFACE 3	SURFACE 3E
LOAD CASE A	35.0	43.6	-26.5	-35.5	-41.2	-59.2	-29.4	-38.8

	SIDE WALL			ROOF			GABLE WALL					
	WINDWARD LEEV		VARD	WINDWARD		LEEWARD		WINDWARD		LEEWARD		
	SURFACE 1	SURFACE 1E	SURFACE 4	SURFACE 4E	SURFACE 2	SURFACE 2E	SURFACE 3	SURFACE 3E	SURFACE 5	SURFACE 5E	SURFACE 6	SURFACE 6E
LOAD CASE B	-29.8	-31.3	-29.8	-31.3	-41.2	-59.2	-26.0	-33.6	27.5	37.4	-22.3	-28.9

CONNECTION	FASTENING ^{a, k}	LOCATION
1. JOIST TO SILL OR GIRDER	OR GIRDER 3 - 8d COMMON (2½" X 0.131") 3 - 3" X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	
2. BRIDGING TO JOIST	2 - 8d COMMON (2½" X 0.131") 2 - 3" X 0.131" NAILS 2 - 3", 14 GAGE STAPLES	TOENAIL EACH END
3. SOLE PLATE TO JOIST OR BLOCKING	16d (3½" X 0.135") AT 12" O.C. 3" X 0.131" NAILS AT 12" O.C. 3", 14 GAGE STAPLES AT 12" O.C.	FACE NAIL
4. SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3 - 16d (3½" X 0.135") AT 16" O.C. 4 - 3" X 0.131" NAILS AT 16" O.C. 4 - 3", 14 GAGE STAPLES AT 16" O.C.	FACE NAIL
5. TOP PLATE TO STUD	2 - 16d (3½" X 0.162") 3 - 3" X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	END NAIL
6. STUD TO SOLE PLATE	4 - 8d COMMON (2½" X 0.131") 4 - 3" X 0.131" NAILS 4 - 3", 14 GAGE STAPLES	TOENAIL
	2 - 16d COMMON (3½" X 0.162") 3 - 3" X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	END NAIL
7. DOUBLE STUDS	16d (3½" X 0.162") AT 24" O.C. 3" X 0.131" NAILS AT 16" O.C. 3", 14 GAGE STAPLES AT 16" O.C.	FACE NAIL
8. TOP PLATE TO TOP PLATE	16d (3½" X 0.162") AT 16" O.C. 3" X 0.131" NAILS AT 12" O.C. 3", 14 GAGE STAPLES AT 12" O.C.	FACE NAIL
	8 - 16d COMMON (3½" X 0.162") 12 - 3" X 0.131" NAILS 12 - 3", 14 GAGE STAPLES	FACE NAIL AT LAP SPLICE
9. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	3 - 8d COMMON (2½" X 0.131") 3 - 3 X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	TOENAIL
10. RIM JOIST TO TOP PLATE	8d (2½" X 0.131") AT 6" O.C. 3" X 0.131" NAILS AT 6" O.C. 3", 14 GAGE STAPLES AT 6" O.C.	TOENAIL
11. TOP PLATES, LAPS AND INTERSECTIONS	2 - 16d COMMON (3½" X 0.162") 3 - 3" X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	FACE NAIL
12. CONTINUOUS HEADER (2) PIECES	16d COMMON (3½" X 0.162")	16" O.C. EACH EDGE, FACE NAIL
13. CEILING JOISTS TO PLATE	3 - 8d COMMON (2½" X 0.131") 3 - 3" X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	TOENAIL
14. CONTINUOUS HEADER TO STUD	4 - 8d COMMON (2½" X 0.131")	TOENAIL
15. RAFTER TO PLATE	3 - 16d (3½" X 0.162") 4 - 3" X 0.131" NAILS 4 - 3", 14 GAGE STAPLES	TOENAIL
16. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	2 - 8d COMMON (2½" X 0.131") 2 - 3" X 0.131" NAILS 3 - 3", 14 GAGE STAPLES	FACE NAIL
17. BUILT-UP CORNER STUDS	16d (3½" X 0.162") 3" X 0.131" NAILS 3" 14 GAGE STAPLES	12" O.C. FACE NAIL

NOT APPROVED FOR HVHZ

FASTENING SCHEDULE								
CONNECTION		FASTENING ^{a, k}	LOCATION					
18. BUILT-UP GIRDER AND BEAMS	3" X 0.131" NA 3" 14 GAGE S	TAPLE AT 24" O.C. AND	FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES					
	3 - 3" X 0.131" 3 - 3" 14 GAGE		FACE NAIL AT ENDS AND AT EACH SPLICE					
19. COLLAR TIE TO RAFTER	3 - 10d COMM 4 - 3" X 0.131" 4 - 3" 14 GAGE		FACE NAIL					
20. ROOF RAFTER TO 2-BY RIDGE BEAM	3 - 10d COMM 4 - 3" X 0.131" 4 - 3" 14 GAGE		TOENAIL					
21. JOIST TO BAND JOIST	3 - 16d COMM 4 - 3" X 0.131" 4 - 3" 14 GAGE		END NAIL					
22. WOOD STRUCTURAL PANELS AND PARTICLEBOARD ^b , SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING) SINGLE FLOOR, COMBINATION SUBFLOOR-UNDERLAYMENT TO FRAMING	19/ ₃₂ " TO 3/ ₄ " 7/ ₈ " TO 1" 11/ ₈ " TO 11/ ₄ "	6d°, J 23/8" X 0.113" NAIL ¹ 13/4" X 16 GAGE ^m STAPLE 8d ^d OR 6d ^e 23/8" X 0.113" NAIL ⁿ 2" 16 GAGE ⁿ STAPLE 8d ^c 10d ^d OR 8d ^e	6" O.C. AT EDGES AND 12" O.C. AT INTERMEDIATE, 4" O.C. AT COMPONENT AND CLADDING EDGE STRIP # ZONE 3 [REFER TO FIGURE ON SHEET S-3]					
23. PANEL SIDING TO FRAMING	½" OR LESS 5/8"	6d ^f 8d ^f	6" / 12" O.C. AT EDGES / INTERMEDIATE					
24. FIBERBOARD SHEATHING	25/32"	NO. II GAGE ROOFING NAIL ^h 6d COMMON NAIL (2" x 0.113") NO. 16 GAGE STAPLE ⁱ NO. II GAGE ROOFING NAIL ^h 8D COMMON NAIL (2½" x 0.131") NO 16 GAGE STAPLE ⁱ	3" / 6" O.C. AT EDGES / INTERMEDIATE FOR STRUCTURAL APPLICATIONS 6" / 12" O.C. AT EDGES / INTERMEDIATE FOR NON-STRUCTURAL APPLICATIONS					
NOTES: a. COMMON OR BOX NAILS ARE PERMITTED TO BE USED EXCEPT WHERE OTHERWISE STATED. b. NAILS SPACED AT 6' O.C. AT EDGES, 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT SUPPORTS WHERE SPANS ARE 48" OR MORE. NAILS FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.								
c. COMMON OR DEFORMED SHANK (6d - 2" x 0.113"; 8d - 2 ½" x 0.131"; 10d 3" x 0.148"). d. COMMON (6d - 2" x 0.113"; 8d - 2 1/2" x 0.131"; 10d x 0.148"). e. DEFORMED SHANK (6d - 2" x 0.113"; 8d - 2 1/2" x 0.131"; 10d 3" x 0.148"). f. CORROSION-RESISTANT SIDING (6d - 1 7/8" x 0.106"; 8d 2 3/8' x 0.128") OR CASING (6d 2" x								

TOP LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS

William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734

- OT C
- 0.099"; 8d 2 1/2" x 0.113") NAIL.
- g. FASTENERS SPACED 3" O.C. AT EXTERIOR EDGES AND 6" O.C. AT INTERMEDIATE SUPPORTS, WHEN USED AS STRUCTURAL SHEATHING. SPACING SHALL BE 6" O.C. ON THE EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS.
- h. CORROSION-RESISTANT ROOFING NAILS WITH 7/16" DIAMETER HEAD AND 1 1/2" LENGTH FOR 1/2" SHEATHING AND 1 3/4" LENGTH FOR 25/32" SHEATHING.
- i. CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16" CROWN OR 1" CROWN AND 1 1/4" LENGTH FOR 1/2" SHEATHING AND 1 1/2" LENGTH FOR 25/32" SHEATHING. PANEL SUPPORTS AT 16" (20" IF STRENGTH AXIS IS THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
- FOR ROOF SHEATHING APPLICATIONS, 8d NAILS (2 1/2" x 0.113") ARE THE MINIMUM REQUIRED FOR WOOD STRUCTURAL PANELS.
- k. STAPLES SHALL HAVE A MINIMUM CROWN WIDTH OF 7/16'.
- I. FOR ROOF SHEATHING APPLICATIONS, FASTENERS SPACED 4" O.C. AT EDGES, 8" O.C. AT INTERMEDIATE SUPPORTS.
- m. 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.
- n. FASTENERS SPACED 4" O.C. AT EDGES, 8" AT INTERMEDIATE SUPPORTS.



CHECKED BY: KMB

1552 6TH ST., WINTER HAVEN, FL 33880

(863)865-6502

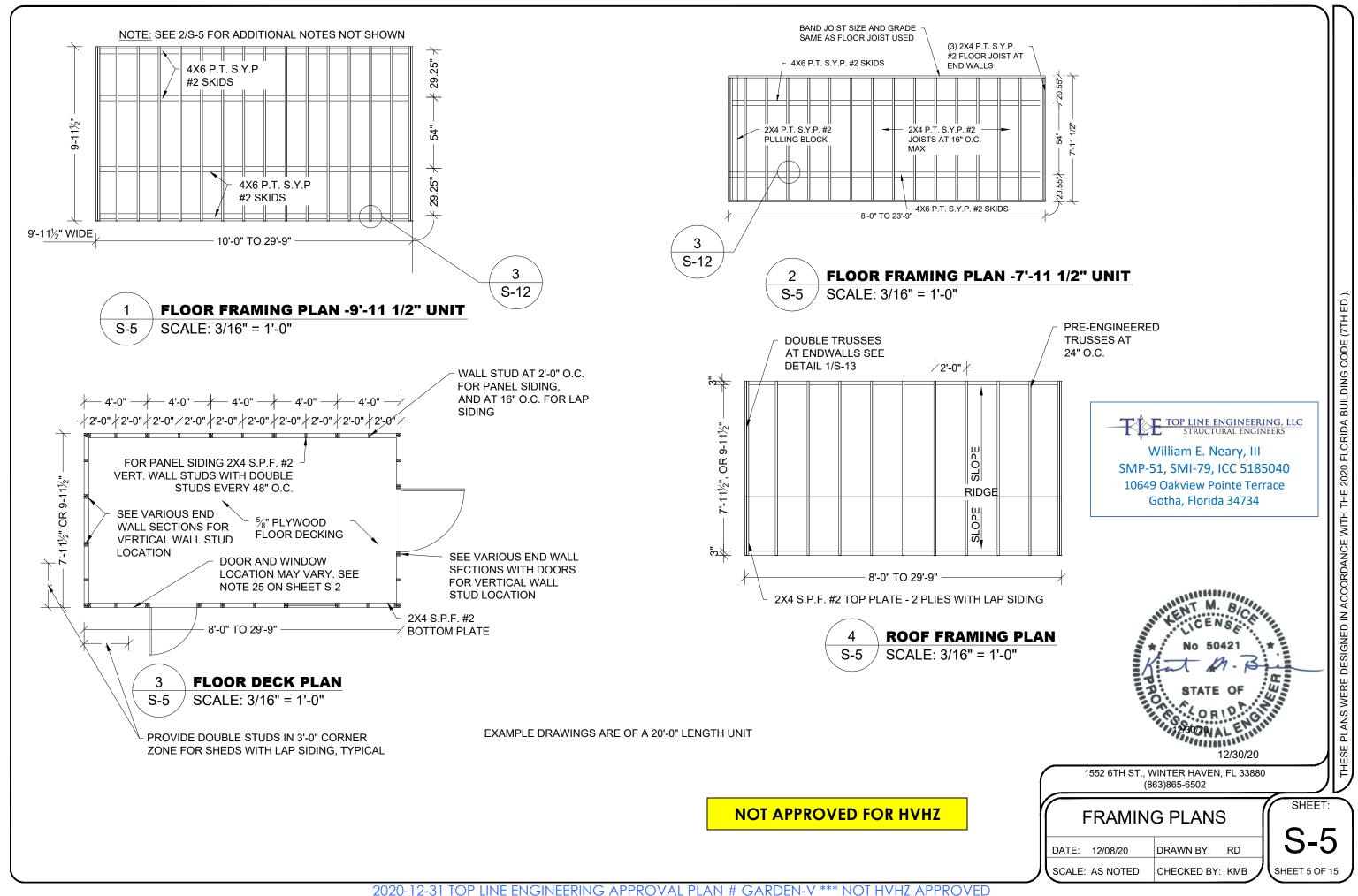
FASTENING SCHEDULE DRAWN BY: RD DATE: 12/08/20

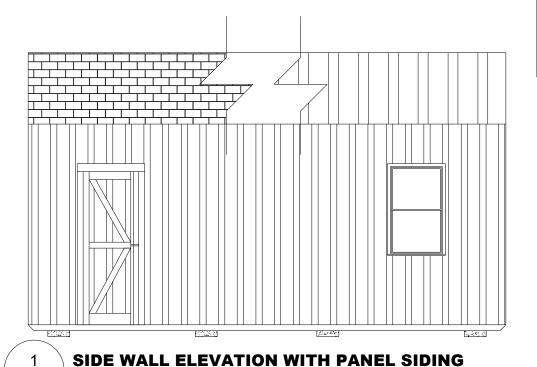
SCALE: AS NOTED

SHEET:

SHEET 4 OF 15

2020-12-31 TOP LINE ENGINEERING APPROVAL PLAN # GARDEN-V *** NOT HVHZ APPROVED

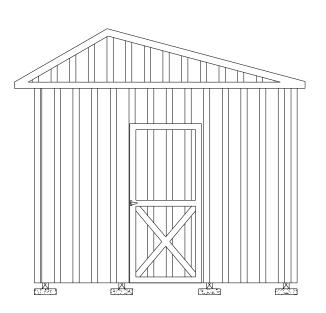




SHEARWALL								
FLOOR WIDTH (FT)	OPENI	NG WIDTH		MAX BUILDING LENGTH				
	LONG SIDE WALL	SHORT END WALL	19/32" T1-11 ¹	19/32" LP PANEL ²	19/32" LP PANEL ³	19/32" LP PANEL ² + 7/16" RATED SHEATHING ⁴		
7'-11½"	2'-0", 3'-0", 4'-0", 8'-0"	2'-0", 3'-0", 4'-0"	23'-9"	23'-9"	23'-9"	23'-9"		
9'-11½"	2'-0", 3'-0", 4'-0", 6'-0", 7'-0", 8'-0"	2'-0", 3'-0", 4'-0", 6'-0"	29'-9"	29'-9"	29'-9"	29'-9"		
_		7'-0"		24'-0"		~		

NOTES:

- 1. 19/32" T1-11 APA RATED SIDING 303-24 O.C. WITH 8D COMMON OR DEFORMED (0.131"X2-1/2") NAILS AT 6" O.C. IN FIELD AND 3" O.C. IN EDGES IN END WALL AND 6" O.C. EVERYWHERE IN SIDE WALL.
- 2. 19/32" LP SMARTSIDE STRAND SUBSTRATE PANEL SIDING WITH STAGGERED 8D COMMON OR DEFORMED (0.131"X2-1/2") NAILS AT 6" O.C. IN FIELD AND 3" O.C. IN EDGES IN END WALL AND 6" O.C. EVERYWHERE IN SIDE WALL.
- 3. 19/32" LP SMARTSIDE STRAND SUBSTRATE PANEL SIDING WITH STAGGERED 8D COMMON OR DEFORMED (0.131"X2-1/2") NAILS AT 6" O.C. IN FIELD AND 2" O.C. IN EDGES IN END WALL AND 6" O.C. EVERYWHERE IN SIDE WALL.
- 4. 7/16" APA STRUCTURAL RATED SHEATHING (OSB) WITH STAGGERED 8D COMMON OR DEFORMED (0.131"X2-1/2") NAILS AT 6" O.C. IN FIELD AND 4" O.C. IN EDGES IN END WALL AND 6" O.C. EVERYWHERE IN SIDE WALL.
- 5. WINDOWS AND DOORS MAY BE LOCATED IN EITHER THE SIDE WALL OR ENDWALL. DOORS ARE PERMITTED TO BE IN BOTH ENDWALLS OR ENDWALL AND SIDEWALL IF REQUESTED BY CUSTOMER. LIMITATIONS ON THE TOTAL DIMENSIONS SHALL BE BASED ON THE SHEAR WALL HEIGHT TO WIDTH RATIO OF 3.5:1 AND SHALL NOT EXCEED (2/3) OF THE TOTAL LENGTH OF BUILDING.
- 6. DOOR AND WINDOW SHALL BE LOCATED SUCH THAT THEY ARE AT LEAST 3'-3" APART.
- EDGE NAILING SHALL BE PROVIDED AT TOP PLATE IN ALL END WALLS.
- PROVIDE BLOCKING AT ALL UNSUPPORTED EDGES OF WALL SHEATHING.



10'-0" WIDE UNIT WITH 3'-0" DOOR

S-6

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

S-6

TOP LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS

William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

DRAWN BY: RD

CHECKED BY: KMB

ELEVATIONS AND SHEARWALL

DATE: 12/08/20 SCALE: AS NOTED SHEET 6 OF 15

SHEET:

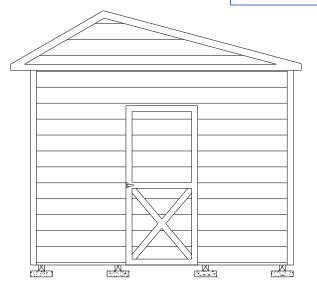
10'-0" WIDE UNIT WITH 7'-0" DOOR

ENDWALL ELEVATION WITH PANEL SIDING SCALE: 1/4" = 1'-0"

SIDE WALL ELEVATION WITH LAP SIDING
SCALE: 1/4" = 1'-0"

TOP LINE ENGINEERING, LLC STRUCTURAL ENGINEERS
William E. Neary, III

SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



S-6A

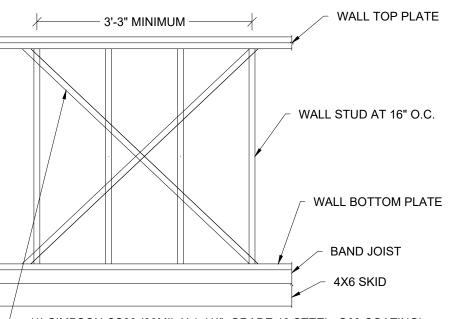
10'-0" WIDE UNIT WITH 3'-0" DOOR

ENDWALL ELEVATION WITH LAP SIDING

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

4

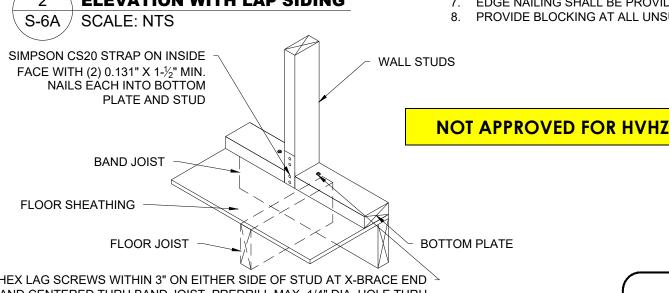
S-6A



(1) SIMPSON CS20 (33MIL X 1-1/4", GRADE 40 STEEL, G60 COATING) X-STRAP OR EQUIVALENT ON EACH FACE OF WALL STUD. ATTACH STRAPS TO WALL TOP & BOTTOM PLATES WITH (5) 0.131" x 2-1/4" NAILS STAGGERED. STRAP MAY BE WRAPPED AROUND WALL TOP & BOTTOM PLATES.

ALTERNATE: 7/16" APA RATED SHEATHING ON OUTSIDE FACE OF WALL STUD FASTENED WITH 8d COMMON OR DEFORMED (0.131" x 2-1/2") NAILS AT 6" O.C. IN FIELD AND 3" O.C. AT EDGES.

PARTIAL SIDE WALL FRAMING
ELEVATION WITH LAP SIDING



(2) 1/4" x 4" HEX LAG SCREWS WITHIN 3" ON EITHER SIDE OF STUD AT X-BRACE END LOCATIONS AND CENTERED THRU BAND JOIST. PREDRILL MAX. 1/4" DIA. HOLE THRU BOTTOM PLATE AND 0.15" DIA. HOLE THRU SHEATHING AND BAND JOIST.

3 WALL STUD TIEDOWN FOR X-BRACE OPTION SCALE: NTS

SHEARWALL WITH LP SMARTSIDE LAP SIDING¹ **MAX BUILDING OPENING WIDTH LENGTH FLOOR** WIDTH (FT) LONG SIDE SHORT END WALL^{3,4} WALL² 23'-9" 2'-0", 3'-0", 4'-0", 7'-111/2" 2'-0", 3'-0", 4'-0" 6'-0". 8'-0" 2'-0", 3'-0", 4'-0", 2'-0", 3'-0", 4'-0", 6'-0" 9'-11½" 29'-9" 6'-0". 7'-0". 8'-0" 7'-0"

NOTES:

- 1. MIN. 0.45" THICK LP SMARTSIDE 12" BOLD PROFILES DOUBLE 5" FIBER SUBSTRATE LAP SIDING PER ICC-ES ESR 3090, TABLES 2A, 2B AND 2C
- 2. ON LONG SIDE WALL, ATTACH LAP SIDING TO EACH WALL STUD WITH MINIMUM 8d SINKER NAILS (0.113" X 2-3/8") AT 3/8" FROM EACH END, AND 3 NAILS PER STUD -- 3" FROM TOP EDGE, IN THE MIDDLE AND 1-1/2" FROM BOTTOM EDGE. PROVIDE X-STRAP OR SHEATHING ON WALL PER 2/S-6A.
- 3. ON SHORT END WALL, ATTACH LAP SIDING TO SHEATHING WITH MINIMUM 8d SINKER NAILS (0.113" X 2- 3 8") AT 3 8" FROM EACH END, AND 3 NAILS PER 16" SPACING -- 3" FROM TOP EDGE, IN THE MIDDLE AND 1- 1 2" FROM BOTTOM EDGE.
- 4. ON SHORT END WALL WITHOUT AN OPENING, PROVIDE MIN. 7/16" APA RATED SHEATHING ON EXTERIOR FACE FASTENED TO STUDS WITH 8d COMMON OR DEFORMED (0.131" x 2-1/2") NAILS AT 6" O.C. IN FIELD AND EDGES.

 ON SHORT END WALL WITH AN OPENING, PROVIDE 19/32" APA RATED SHEATHING ON EXTERIOR FACE FASTENED TO STUDS WITH 8d COMMON OR DEFORMED (0.131" x 2-1/2") NAILS AT 6" O.C. IN FIELD AND 3" O.C. AT EDGES.
- 5. WINDOWS AND DOORS MAY BE LOCATED IN EITHER THE SIDE WALL OR ENDWALL. DOORS ARE PERMITTED TO BE IN BOTH ENDWALLS OR ENDWALL AND SIDEWALL IF REQUESTED BY CUSTOMER. LIMITATIONS ON THE TOTAL DIMENSIONS SHALL BE BASED ON THE SHEAR WALL HEIGHT TO WIDTH RATIO OF 3.5:1 AND SHALL NOT EXCEED (2/3) OF THE TOTAL LENGTH OF BUILDING.
- 6. DOOR AND WINDOW SHALL BE LOCATED SUCH THAT THEY ARE AT LEAST 3'-3" APART.
- EDGE NAILING SHALL BE PROVIDED AT TOP PLATE IN ALL END WALLS.
- 8. PROVIDE BLOCKING AT ALL UNSUPPORTED EDGES OF WALL SHEATHING.

No 50421

No 50421

STATE OF

ORIO

12/36/20

12/30/20

1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

ELEVATIONS AND SHEARWALL

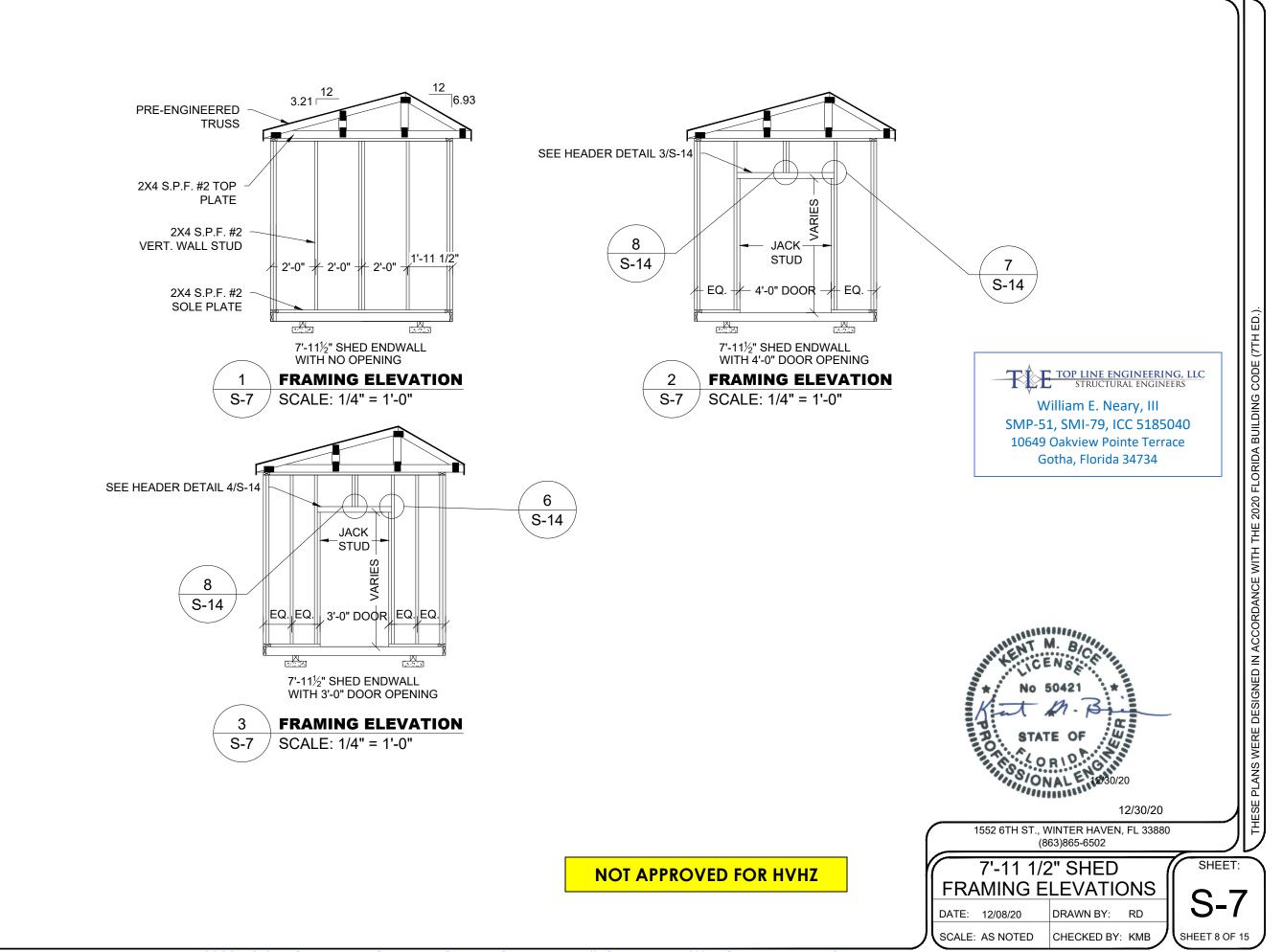
DATE: 12/08/20 DRAWN BY: RD

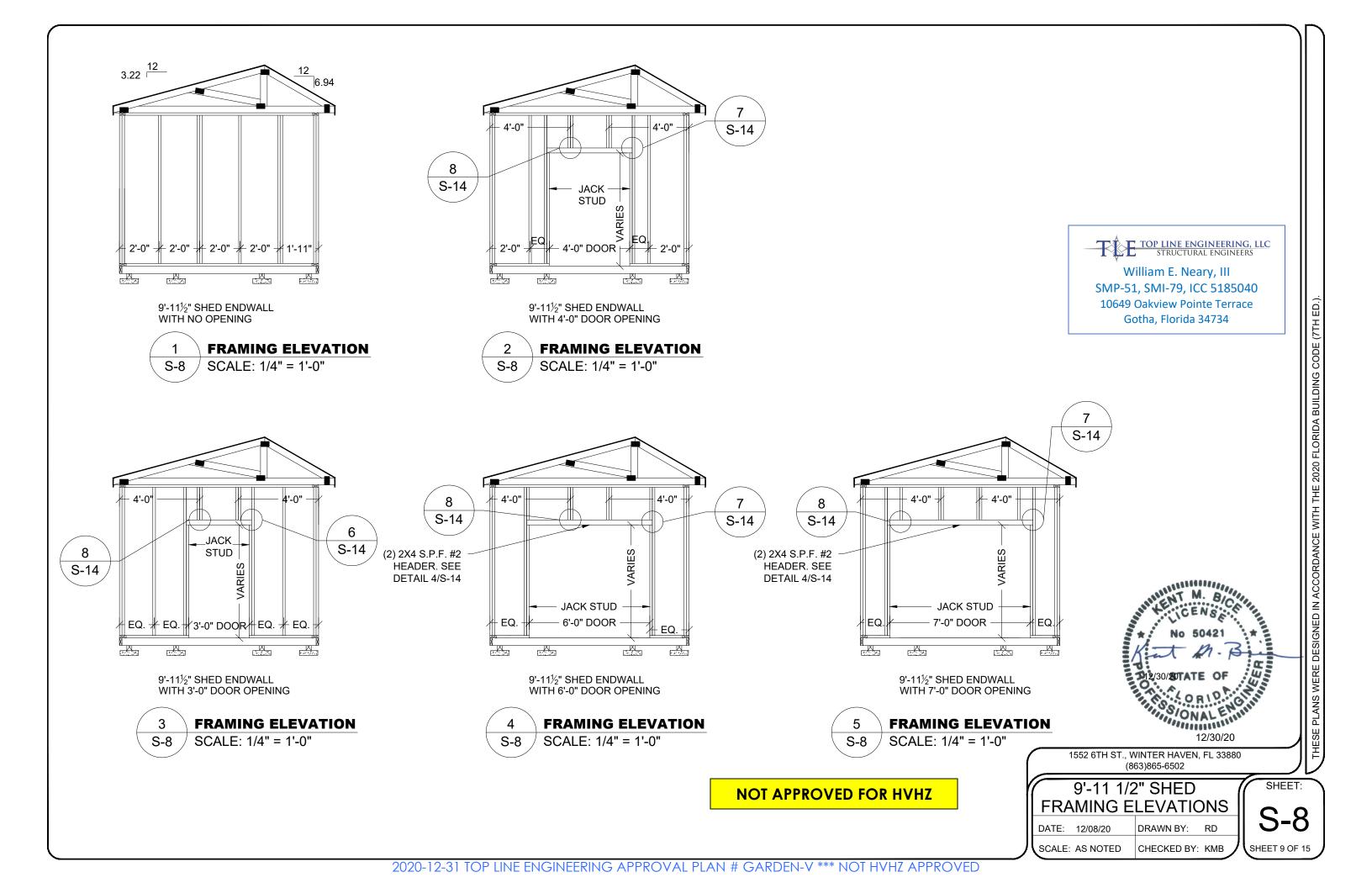
SCALE: AS NOTED CHECKED BY: KMB

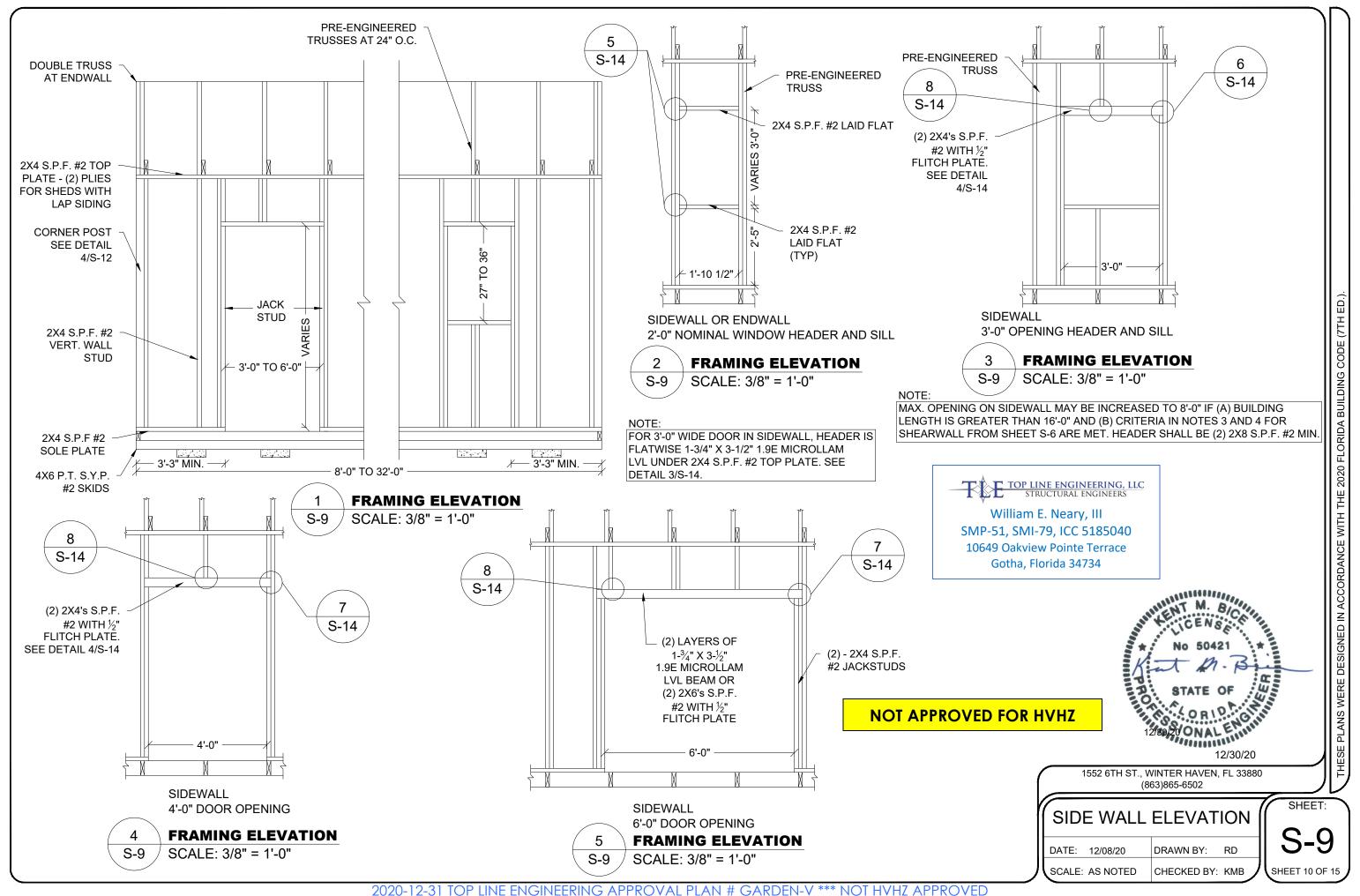
SHEET:

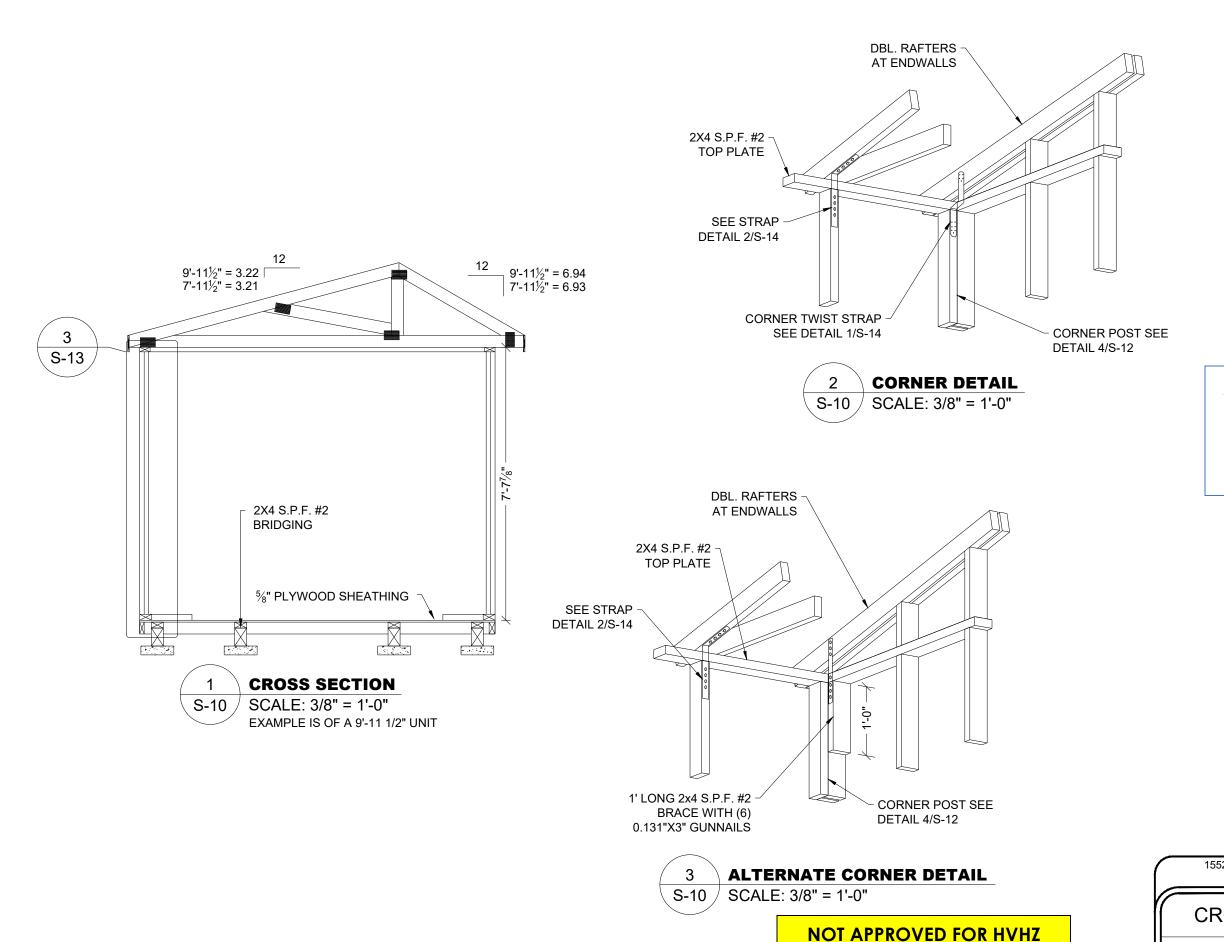
S-6A
SHEET 7 OF 15

2020-12-31 TOP LINE ENGINEERING APPROVAL PLAN # GARDEN-V *** NOT HVHZ APPROVED



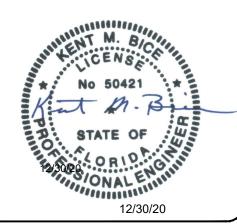






TOP LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS

William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

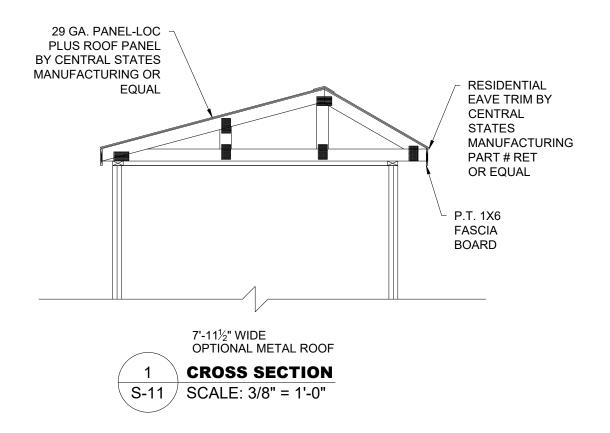
CROSS SECTIONS

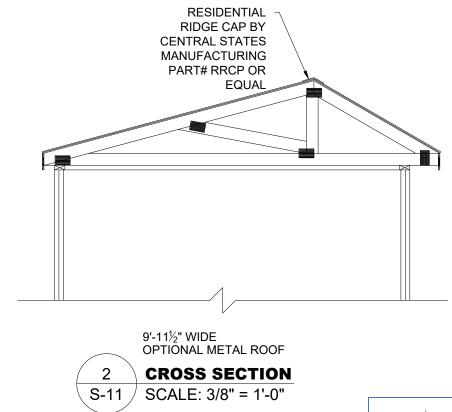
DATE: 12/08/20 DRAWN BY: RD

SCALE: AS NOTED CHECKED BY: KMB

SHEET:

SHEET 11 OF 15





TOP LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS

William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



1552 6TH ST., WINTER HAVEN, FL 33880

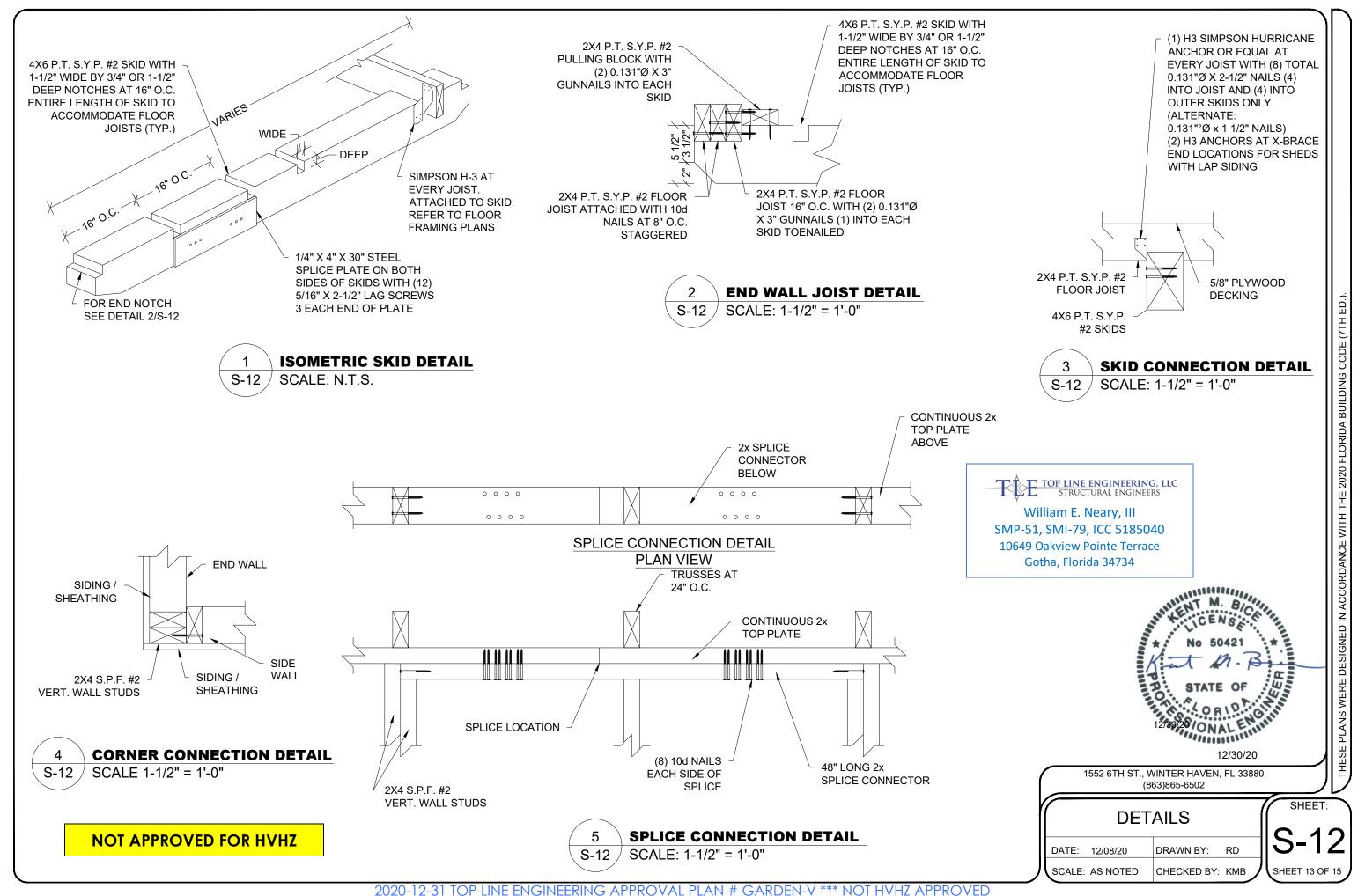
(863)865-6502

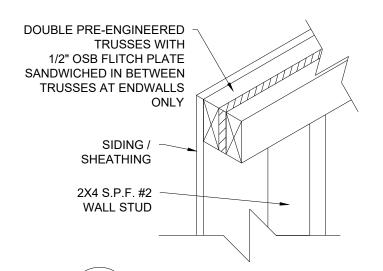
CROSS SECTIONS

DRAWN BY: RD DATE: 12/08/20 SCALE: AS NOTED CHECKED BY: KMB

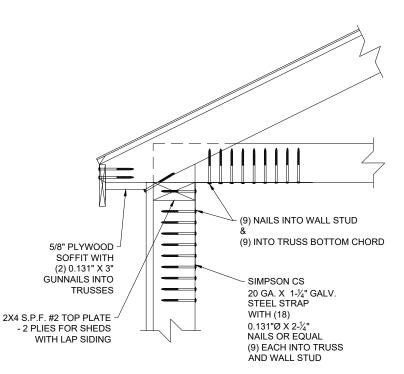
SHEET:

SHEET 12 OF 15





DOUBLE TRUSS DETAIL S-13 SCALE: 1-1/2" = 1'-0"

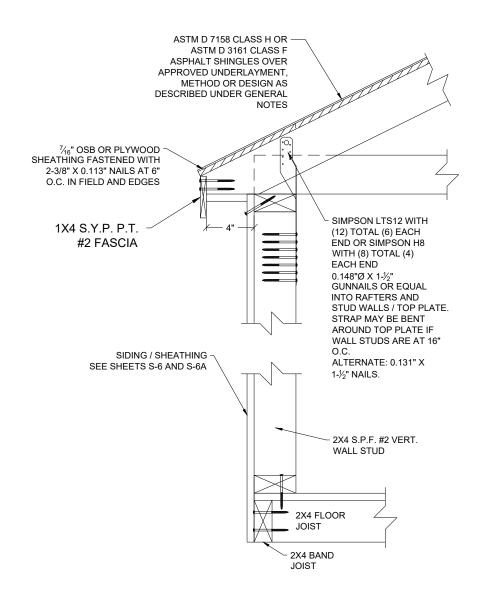


WALL STUD TO RAFTER FASTENING

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

S-13

NOTE: FOR ALL FASTENING OF FRAMING MEMBERS NOT NOTED ON THIS SHEET, REFER TO **FASTENING SCHEDULE ON SHEET S-4.**

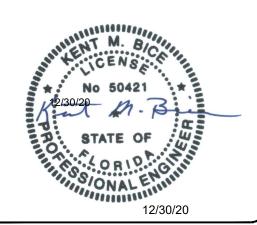


ALTERNATE WALL STUD TO RAFTER AND FLOOR FASTENING DETAIL S-13

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

TOP LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS

William E. Neary, III SMP-51, SMI-79, ICC 5185040 10649 Oakview Pointe Terrace Gotha, Florida 34734



SHEET:

SHEET 14 OF 15

1552 6TH ST., WINTER HAVEN, FL 33880 (863)865-6502

DETAILS

DATE: 12/08/20 DRAWN BY: SCALE: AS NOTED CHECKED BY: KMB

2020-12-31 TOP LINE ENGINEERING APPROVAL PLAN # GARDEN-V *** NOT HVHZ APPROVED

