



February 12, 2021

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

**RE: Plan Approval
Robin Builders
Plan # FBC2020ACP**

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, III
Business Partner
Top Line Engineering, LLC
BILL.TLE@yahoo.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.**

ROBIN BUILDERS, INC. LYONS, GEORGIA

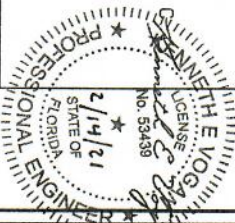
Please note: Any questions regarding local permitting should be directed to the Manufacturer.
The Manufacturer's contact information can be found in the title block of the plans.

GENERAL NOTES:

1. Foundation plans are not part of this plan set and are governed by local jurisdiction.
2. Buildings are approved for residential lawn storage only.
3. This building is exempt from the FECC per sections R101.4.2.4, R402.1.
4. Refer to tie down details for proper installation requirements to meet code.
5. All lumber for construction will be #2 SYP except as noted.
6. Gutters shall be site installed per the local authority having jurisdiction and permitting requirements.
7. All windows and doors to meet the minimum specifications per the approved plans and the Florida Building Code.
8. 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."
9. In accordance with FBC 1001.1, 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.
10. 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.
11. 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.
12. 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.
13. Components/Cladding are in compliance with the 2020 FBC 7th Edition.
14. Sheds located in flood hazard areas must comply with the local flood zone regulations.
15. If a wall is framed for future HVAC units that shall be approved by the AHJ and shall comply with local requirements for permitting.
16. Windows and doors installed by a customer shall be approved by the AHJ and shall comply with local requirements for permitting.
17. HVHZ components for sheds require that installation per manufacturer's instructions.

NOT APPROVED FOR HVHZ

Building Code	2020 FBC, 7th Edition ASCE-7-16
Building Type	2017 National Electric Code(NFPA-70)
Shed Manufacturer	Residential Lawn Storage
Agency	Robin Builders, Inc.
Agency Plan Number	Lyons, Ga
Construction Type	Top Line Engineering, LLC
Fire Protection	V-B
Fire Suppression System	B
Occupancy	ND
Allowable # of Stories	Utility
Building Risk Category	1
Partially Enclosed	1
Wind Velocity	160 mph Exposure
Fire Rating of Exterior Walls	0 hour
Floor Live Load/Dead Load	75 psf, 5 psf
Roof Live Load/Dead Load	20 psf, 8 psf
R' Rating of Floor, Walls, Roof	R-0, R-0, R-0
Modules per Building	1
Square Footage	719 sq-ft
HVHZ Approved	No



SHEET LIST

Sheet Number	Sheet Title
Sheet 1	Cover
Sheet 2	Floor details
Sheet 3	Framing: Americana Model
Sheet 4	Framing: Floridian Model
Sheet 5	Framing: Gambrel Model
Sheet 6	Framing: Steel frame option
Sheet 7	Framing: Porch option
Sheet 8	Framing: Mono slope roof
Sheet 9	Electrical and Door details

FILED FOR THE ENGINEERING, LLC
WILLIAM E. NEARY, III
SMP-SL-SM-79, JCC 5135040
10640 Oakview Pointe Terrace
Gotha, Florida 34734

ROBIN BUILDERS, INC. 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266		Kenneth E. Vogan P. E. Florida License No. 53439	
CONSTRUCTION TYPE	VB	FIRE RATING EXT. WALL:	0
OCCUPANCY:	UTILITY	PLAN NO:	FBC 2020 7th ED
ALLOW. # OF FLOORS:	1	ALLOW. FLOOR LOAD:	50
ULTIMATE WIND VELOCITY:	160	APPROVAL DATE:	12/01/2020

VARIES TO 50' 0"

PT 2X6 FLOOR JOISTS 16" OC

2 SKIDS TYPICAL PER UNIT
4 SKIDS REQUIRED FOR
FLOOR WIDTH OF 13' 6"

PT 2X6 RIM JOIST WITH
(3) 3" X .120 GALV NAILS PER CONN

5/8" X 24" 6" HELIX (OR EQUAL) ANCHOR FOR SOIL
MODEL MRA (#2ADAC) OR EQUAL FOR ROCK
.035 GALV. STRAP OR CABLE OF 4750# CAPACITY

13' 6" MAX

FLOORING TO SPAN PERPENDICULAR
ACROSS FLOOR JOISTS
FLOORING TO BE 1/2" MIN. THICK
GRADE PLYWOOD OR OSB
FLOORING TO BE TONGUE & GROOVE
EDGE OR SQUARE EDGE WITH
2x6 PT SOLID BLOCKING AT ALL
JOIST SPACINGS
FLOORING TO BE FASTENED WITH 8" X
.120" GALV NAILS or 2.25" x #8
COATED SCREWS
FLOOR FASTENERS TO BE 8" OC MIN
TYPICAL 16" OC
MIN IN FIELD OF SHEETS

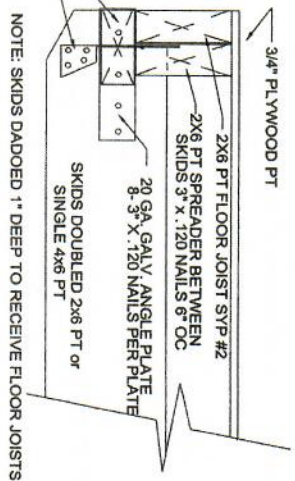
156 SHIELDING INSTITUTE
TLE
William E. Meary, III
SNP-51, SNP-79, ITC-5, ITC-6
30649 Oakview Drive, Fort Worth, Texas 76134

2" (OR 4") X 8"X 16" SOLID CONCRETE BLOCKS
AND TIE DOWN ANCHORS SPACED 2' FROM
EACH END, THEN MAX. 8' CENTERS.

FLOORING TO SPAN PERPENDICULAR
ACROSS FLOOR JOISTS
FLOORING TO BE 2" UNDERLAYMENT
GRADE PLYWOOD OR OSB
FLOORING TO BE TONGUE & GROOVE
EDGE OR SQUARE EDGE WITH
2x6 PT SOLID BLOCKING AT ALL
SEAMS
FLOORING TO BE FASTENED WITH 3"x
.120" GALV NAILS @ 2.25" x #8
COATED SCREWS
FLOOR FASTENERS TO BE 8" OC MIN
ALONG EDGE OF SHEETS, 10" OC
MIN IN FIELD OF SHEETS

FILE 306 LINE ENGINEERING, LLC
STRUCTURAL ENGINEERS
William E. Neary, III
SNP-51, SNAI-79, ICC 5185040
10669 Calview Pointe Terrace
Gotha, Florida 34734

2X4 PT HEADER BETWEEN
SKIDS - 3" x .120 NAILS 6" OC
SIMPSON H4 OR EQUAL -
OR ALTERNATE (2) 0.220"
x 4" TIMBER SCREW



N.T.S.

SKID SPACING							
UNIT WIDTH	6'	8'	10'	11'-6"	13'-6"		
FLOOR JOIST	2X6	2X6	2X6	2X6	2X6		
# OF SKIDS	2	2	2	2	4		
"A"	16"	18"	18"	24.5"	10"		
"B"	40"	60"	82"	84"	4.6'		

ALL FLOOR JOISTS ARE AT 16" OC AND WILL SUPPORT 75 PSF

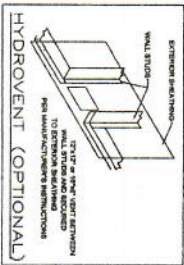
ALL FLOOR JOISTS ARE AT 16" OC AND WILL SUPPORT 75 PSF

FBC 2020 12-13-20 NONE	FLOOR DETAILS FBC2020ACP	ROBIN BUILDERS, INC. 552 S. STATE ST. LYONS, GA 30436 912-526-3266	ROBIN BUILDERS, INC. 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266	Kenneth E. Vogan P. E. Florida License No. 53439
			CONSTRUCTION TYPE VB OCCUPANCY: UTILITY ALLOW. # OF FLOORS: 1 ULTIMATE WIND VELOCITY: 160	FIRE RATING EXT. WALL: 0 PLAN NO: FBC 2020 7th ED ALLOW. FLOOR LOAD: 50 APPROVAL DATE: 12/01/2020

FRAMING DETAILS: AMERICANA

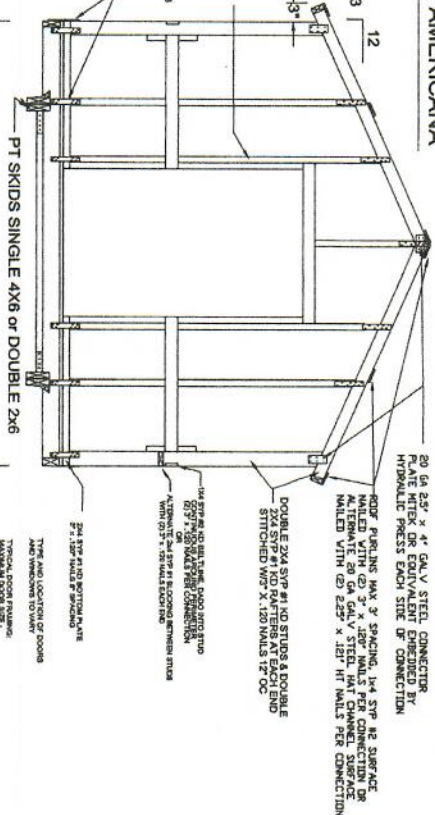
HEADER DETAIL	MAX SPANS & FASTENING
HEADERS	1-2x4
	2-2x4 WITH 1/2" PLYWOOD
	2-2x6 WITH 1/2" PLYWOOD
	OR 1-4x4
	OR 1-4x6
MAX SPANS	22.5'
FASTENING	2-3" x 120" NAIL EA END
	6-3" x 120" NAIL EA END
	8-3" x 120" NAIL EA END

SILLS	1-2x4
MAX SPANS	48'
FASTENING	2-130" x 3" NAIL EA END



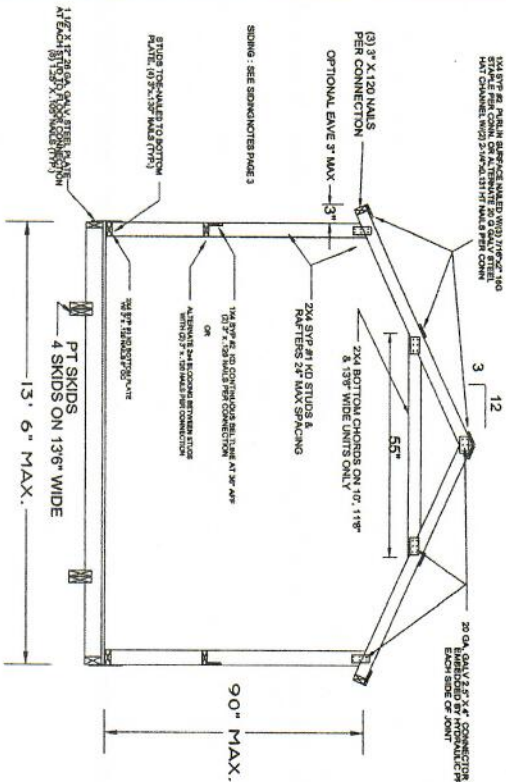
END WALL FRAMING

NOTE FOUR SKIDS UNDER 136" WIDE FLOORS ONLY



CROSS SECTION DETAIL

N.T.S.



TLE THE TLE ENGINEERING, LLC
 WILLIAM E. NEARY, III
 S.M.P. 51, S.M.E. 79, I.C.C. 5185040
 10649 Oakview Pointe Terrace
 GORNA, FLORIDA 32734

2021-02-12 TOP LINE ENGINEERING APPROVAL PLAN # FBC2020ACP *** NOT HWZ APPROVED

ROOFING NOTES:
 ROOFING TO BE 29 GA GALV. OR 29 GA PAINTED GALV. STEEL. MIN. YIELD STRENGTH 50 KSI. DO NOT USE 26 GA. STEEL. ROOFING TO BE INSTALLED OVER 1/2\"/>

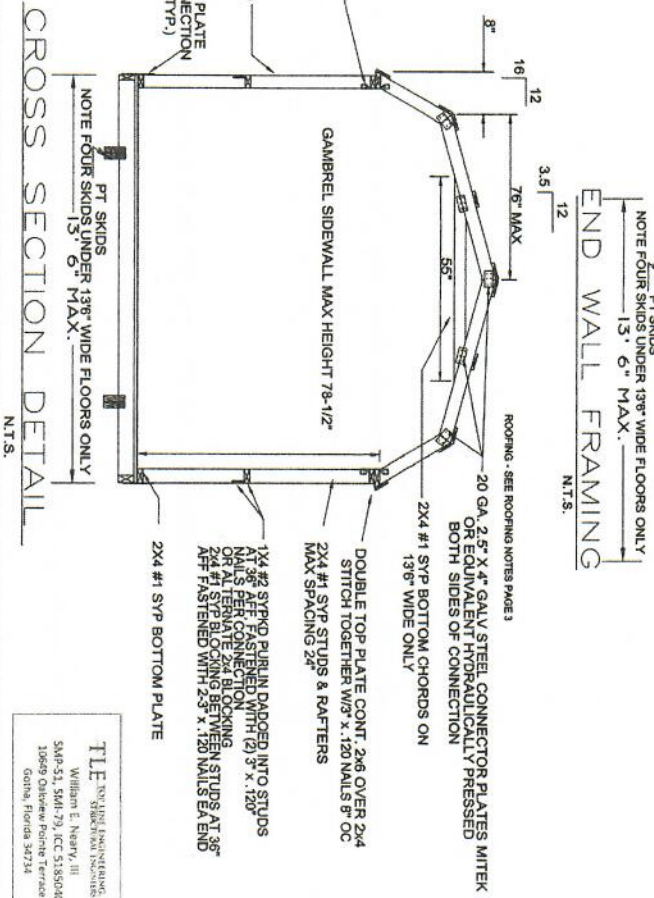
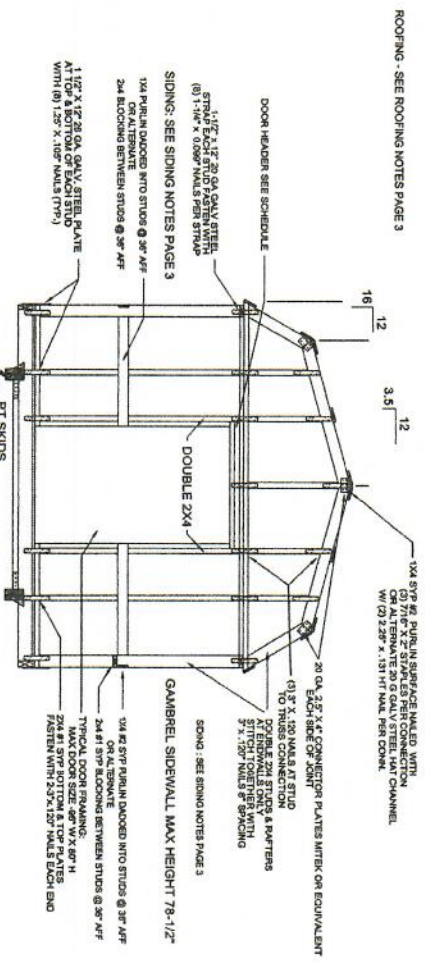
SIDING NOTES:
 SIDING TO BE 29 GA GALV. OR 29 GA PAINTED GALV. STEEL. MIN. YIELD STRENGTH 50 KSI. DO NOT USE 26 GA. STEEL. SIDING TO BE INSTALLED OVER 1/2\"/>

ROBIN BUILDERS, INC 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266		Kenneth E. Vogan P. E. Florida License No. 53439	
CONSTRUCTION TYPE: VB OCCUPANCY: UTILITY ALLOW. # OF FLOORS: 1 ULTIMATE WIND VELOCITY: 160		FIRE RATING EXT. WALL: 0 PLAN NO: FBC 2020 7th ED ALLOW. FLOOR LOAD: 50 APPROVAL DATE: 12/01/2020	
FBC 2020 12-13-20 NONE		3 of 9	

GAMBREL BARN FRAMING DETAILS

SILL SPAN & FASTENING	1-2x4
MAX SPAN	48"
FASTENING	2-130" x 3" NAIL EA END

HEADERS	1-2x4	2-2x4 WITH 1/2" PLYWOOD	2-2x6 WITH 1/2" PLYWOOD
MAX SPANS	22.5"	64"	96"
FASTENING	2-130" x 3" NAIL EA END	8-130" x 3" NAIL EA END	8-130" x 3" NAIL EA END



2021-02-12 TOP LINE ENGINEERING APPROVAL PLAN # FBC2020ACP *** NOT HVHZ APPROVED

TLE
TLE ENGINEERING, LLC
William E. Henry, III
SAP 51, S&H 79, ICC 51850-40
10969 Oakview Pointe Terrace
Orlando, Florida 32734

ROBIN BUILDERS, INC 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266		Kenneth E. Vogan P. E. Florida License No. 53439	
CONSTRUCTION TYPE	VB	FIRE RATING EXT. WALL:	0
OCCUPANCY:	UTILITY	PLAN NO:	FBC 2020 7th ED
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ULTIMATE WIND VELOCITY:	160	APPROVAL DATE:	12/01/2020

FBC 2020 12-13-20 NONE	5 of 9
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FRAMING DETAILS: GAMBREL STYLE FBC2020ACP	ROBIN BUILDERS, INC. 552 S. STATE ST. LYONS, GA 30436 (912) 526-3266
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ROOFING - SEE ROOFING NOTES PAGE 3



ROOFING - SEE ROOFING NOTES PAGE 3



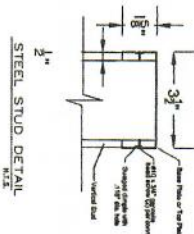
N.T.S

Professional Engineer Seal for Kenneth E. Vogros, State of Florida, License No. 54339, dated 2/14/21.

TLE TITLUM ENGINEERING, LLC
STRUCTURAL ENGINEERS
William E. Neary, III
SMP 51, SMP-79, ICC 5185040
10649 Calview Pointe Terrace
Gotha, Florida 34724

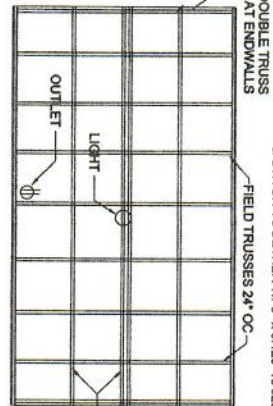


SILL SPAN & FASTENING	
SILLS	1-2x4
	┌
MAX SPANS	48"
FASTENING	2-#10 x 3/4" SCREWS EACH END



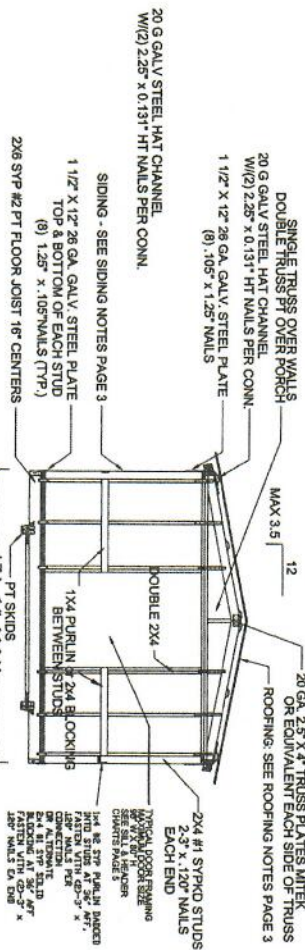
FBC 2020 2-13-20 NONE		FRAMING: STEEL FRAME OPTION FBC2020ACP		ROBIN BUILDERS, INC. 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266		Kenneth E. Vogan P. E. Florida License No. 53439		Drawing Notations
				CONSTRUCTION TYPE VB OCCUPANCY: UTILITY ALLOW. # OF FLOORS: 1 ULTIMATE WIND VELOCITY: 160		FIRE RATING EXT. WALL: 0 PLAN NO: FBC 2020 7th ED ALLOW. FLOOR LOAD: 50 APPROVAL DATE: 12/01/2020		

TRUSS SCHEDULE:
2x4 SYP #1 TRUSS RAFTERS 24" O.C.
DOUBLE 2x4 SYP #1 TRUSS RAFTERS AT ENDWALLS
& STITCH TOGETHER W/ 3" x 6" 120" NAILS 8" OC



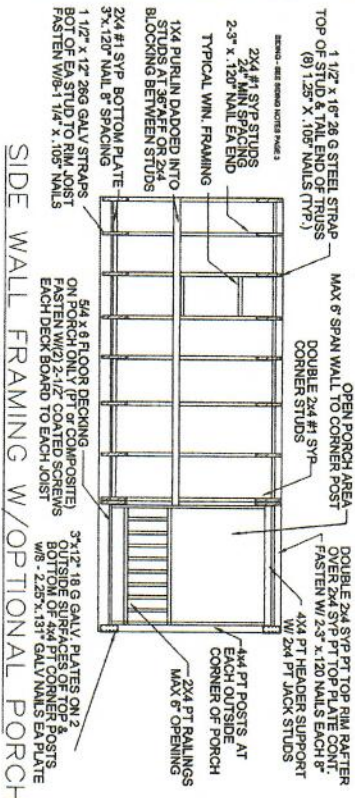
ROOF FRAMING
N.T.S.

FRAMING: WALL PANEL AMERICANA WITH PORCH OPTION



NOTE FOUR SKIDS UNDER 138" WIDE FLOORS ONLY
CABLE WALL FRAMING
N.T.S.

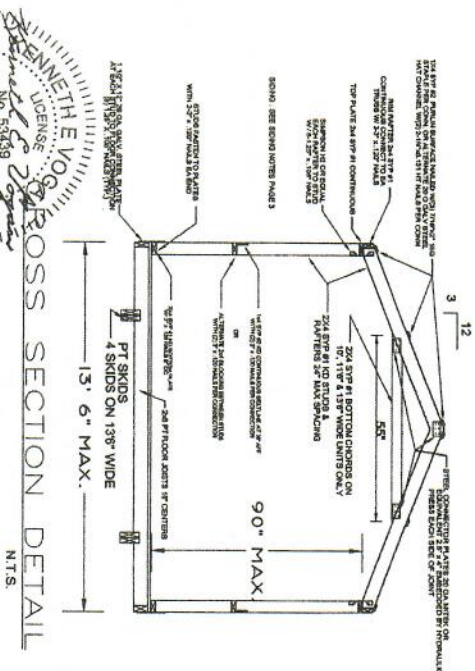
OPTIONAL PORCH DETAILS
N.T.S.



SIDE WALL FRAMING W/OPTIONAL PORCH
N.T.S.



TLE CONSULTING ENGINEERING, LLC
William E. Namy, III
SAP 51, SMI-79, ICC 5185040
10649 Calaveras Pointe Terrace
Gotha, Florida 34734

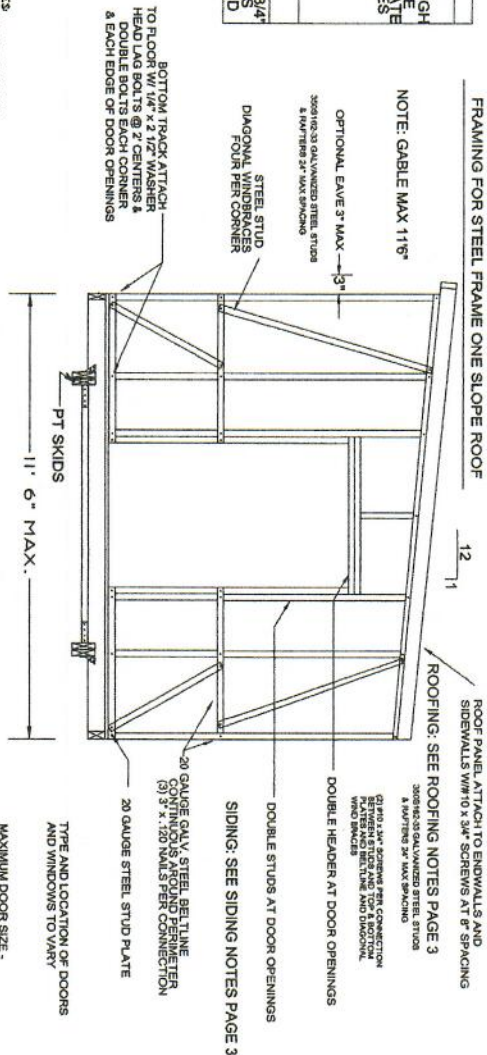


CROSS SECTION DETAIL
N.T.S.

2021-02-12 TOP LINE ENGINEERING APPROVAL PLAN # FBC2020ACP *** NOT HVHZ APPROVED

FBC 2020 12-13-20 AS NOTED 7 OF 9	FRAMING: WALL PANEL AMERICANA WITH PORCH OPTION FBC2020ACP	ROBIN BUILDERS, INC. 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266 3110-36 812-526-3266	ROBIN BUILDERS, INC 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266 CONSTRUCTION TYPE VB OCCUPANCY: UTILITY ALLOW. # OF FLOORS: 1 ULTIMATE WIND VELOCITY: 160	Kenneth E. Vogt P. E. Florida License No. 53439 FIRE RATING EXT. WALL: 0 PLAN NO: FBC 2020 7th ED ALLOW. FLOOR LOAD: 50 APPROVAL DATE: 12/01/2020
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HEADER DETAIL, MAX SPANS & FASTENING			
HEADERS	1-2x4	2-2x4	2-2x4 W/ 25' HIGH 18 GAUGE STEEL PLATE TWO SIDES
MAX SPANS	22.5'	64'	96'
FASTENING	2-#10 x 3/4" SCREWS EACH END	4-#10 x 3/4" SCREWS EACH END	10-#10 x 3/4" SCREWS EACH END
SILL SPAN & FASTENING	1-2x4		
MAX SPANS	48"		
FASTENING	2-#10 x 3/4" SCREWS EACH END		



END WALL FRAMING

N.T.S.

ROOFING NOTES:
ROOFING TO BE 29 GA. GALV. LINE
DR. PAINTED GALV. VALING STEEL, 1/4\"/>

CONTINUOUS BELTLINE AND
END PLATES MAX 3' OC
THROUGH ROOF PANEL

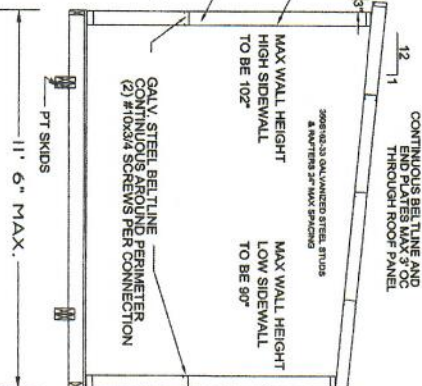
2006 K5-23 GALV. VALING STEEL STUDS
& PARTS 2\"/>

STEEL STUD
DIAGONAL BRIDGES
FOUR PER CORNER

GALV. STEEL STUDS
MAX SPACING 24\"/>

2006 K5-23 GALV. VALING STEEL STUDS
& PARTS 2\"/>

GALV. STEEL TOP &
BOTTOM WALL PLATES



CROSS SECTION DETAIL

N.T.S.

ROOF PANEL ATTACH TO SIDEWALLS
W/ 10 x 3/4\"/>

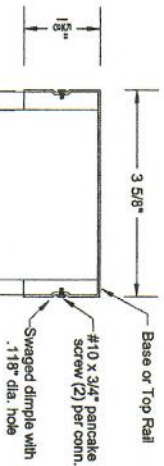
NOTE: GABLE MAX WIDTH 11'6\"/>

SIDING: SEE SIDING NOTES PAGE 3

BOTTOM TRACK ATTACH
TO FLOOR W/ 1/4\"/>



STEEL FRAMING MATERIAL TO BE 20 GAUGE
GALV. VALING G 90 32,000 KSI

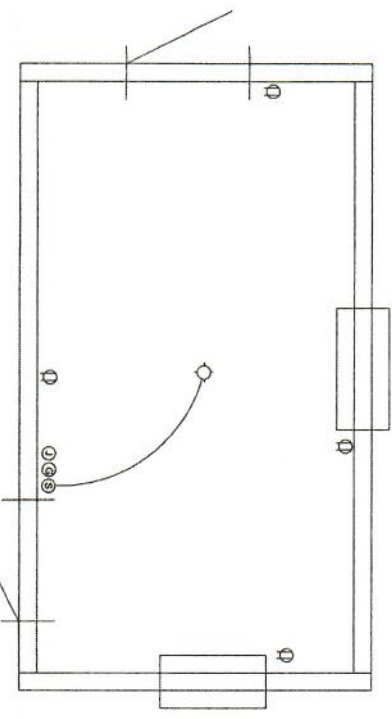


TYPE AND LOCATION OF DOORS
AND WINDOWS TO VARY

MAXIMUM DOOR SIZE -
8'0\"/>

ROBIN BUILDERS, INC 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266		Kenneth E. Hogan P. E. Florida License No. 53439	
CONSTRUCTION TYPE	VB	FIRE RATING EXT. WALL:	0
OCCUPANCY:	UTILITY	PLAN NO:	FBC 2020 7th ED
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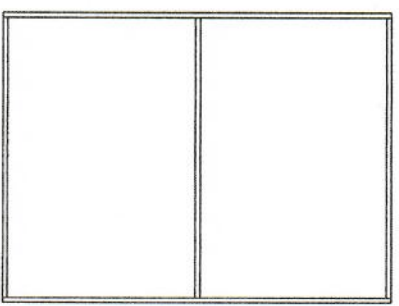
FRAMING: MONOSLOPE ROOF FBC2020ACP	TBC 2020 2-13-20 8 of 9
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ELECTRICAL DETAILS

N.T.S.

ELECTRICAL SYMBOLS
1 120 V RECEPTACLE
2 SINGLE POLE SWITCH
3 LIGHT FIXTURE
4 JUNCTION BOX
5 GFCI RECEPTACLE



- DOOR CONSTRUCTION:
1. 1" x 1" 20 GAUGE GALVANIZED STEEL TUBE WELDED FRAME
 2. 0.065" THICK INSULATIVE SHEATHING LINER PANEL DIRECTLY UNDER EXTERIOR FACE
 3. 29 GA STEEL RAIL/UP EXTERIOR DOOR PANEL ATTACHED VERTICALLY WITH #10 x 3/4 SELF DRILL SCREWS ON 6" CENTERS
 4. 29 GA STEEL J-RAIL TRIM TOP & BOTTOM OF DOOR PANEL
 5. 1 1/2" WIDE x 0.040 ALUMINUM PLANO HINGE ATTACH TO DOOR FRAME WITH #10 x 3/4 CLF DRILL SCREWS ON 10" MAX SPACING ATTACH PLANO HINGE TO WALL FRAMING WITH #8 x 3/4 DRILL SCREWS ON 12" ON 10" CENTERS
 6. MAX SINGLE DOOR SIZE 60" WIDE x 79" HIGH
 7. MAX DOUBLE DOOR SIZE 96" WIDE x 79" HIGH
 8. DOUBLE DOOR INACTIVE DOOR TO HAVE 3/4" STEEL PIN HEAD AND FOOT BOLTS
 9. DOOR LOCKS TO BE CHROME PLATED "TEE" HANDLES WITH 1/4" SQUARE STEEL SHAFT ATTACHED TO WELDED STEEL INSIDE "TEE" HANDLE

OPTIONAL: DOORS INCLUDE MOBILE HOME TYPE DOORS, INSULATED FIBERGLASS OR STEEL PREHUNG DOORS, INSULATED FIBERGLASS BARN DOORS, OR ROLL-UP STEEL CURTAIN DOORS. ALL GLASS INSTALLED IN DOORS OR WITHIN 24" OF DOORS TO BE SAFETY GLASS, ACRYLIC, OR PLASTIC SHEET.

DOOR DETAILS

N.T.S.

- ELECTRICAL NOTES:
1. AS PER NEC ARTICLE 330.30(b) SECURING OF MC TYPE CABLE, UNLESS OTHERWISE PROVIDED CABLES SHALL BE SECURED AT INTERVALS NOT EXCEEDING 6' AND SHALL BE SECURED WITHIN 12" OF EVERY BOX, CABINET, FITTING OR OTHER CABLE TERMINATION
 2. ALL WIRING SHALL BE #12 GAUGE 3-WIRE MC CABLE OR LARGER
 3. WIRING ENCASED IN ALL METAL BOXES
 4. MAXIMUM NUMBER OF OUTLETS PER CIRCUIT: 4
 5. MAXIMUM NUMBER OF LIGHTS PER CIRCUIT: 4
 6. MAXIMUM SIZE CIRCUIT BREAKER IS 20 AMP FOR 12 GAUGE CABLE
 7. PER NEC 210.8(A)(2), GROUND-FAULT CIRCUIT-INTERUPTER (GFCI) PROTECTION IS INSTALLED FOR ALL 125 VOLT SINGLE PHASE 15 AND 20 AMPERE RECEPTACLES

TITLE
 FOR LINE ENGINEERING, LLC
 William E. Neary, III
 SWP-S1, SM-79, ICC 5185040
 10649 Carview Poinc Terence
 Gonda, Florida 34734



ROBIN BUILDERS, INC 552 SOUTH STATE ST. LYONS, GA 30436 (912) 526-3266		Kenneth E. Vogan, P. E. Florida License No. 53439	
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FBC 2020 12-13-20 9 of 9	ELECTRICAL DIAGRAM DOOR DETAILS FBC2020ACP
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