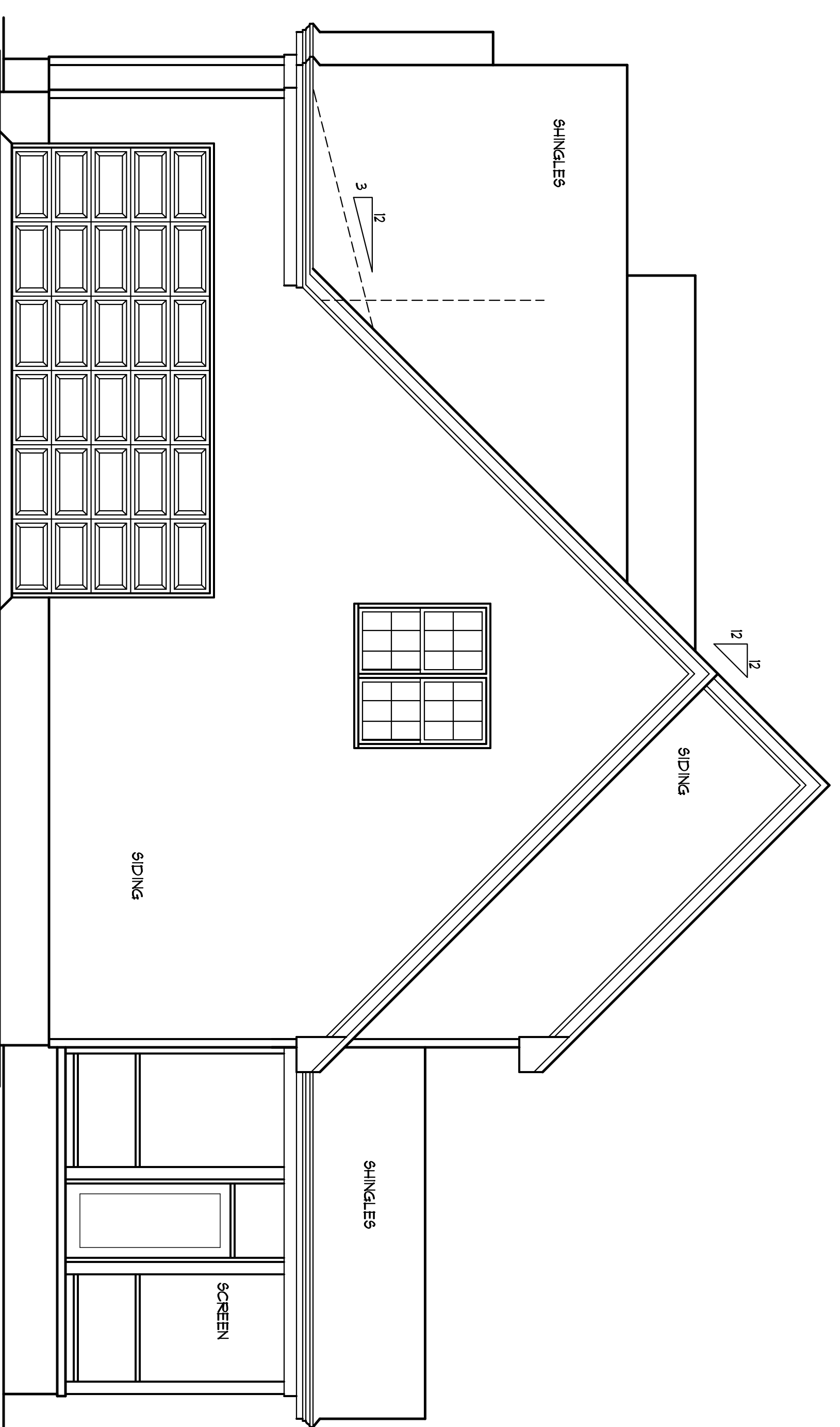


BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT TIME OF CONSTRUCTION.  
 ALL CONSTRUCTION SHALL CONFORM TO THE 2018 EDITION OF THE NC STATE BUILDING CODE. CODES GOVERN OVER DRAWINGS. DIMENSIONS GOVERN OVER SCALE.  
 VERIFY ALL MECHANICAL REQUIREMENTS BEFORE READING.  
 YUNCANNON DESIGNS DOES NOT ASSUME LIABILITY FOR ANY DEVIATION OF OR CONSTRUCTION METHODS OF THESE PLANS.

NOTICE TO CONTRACTOR  
 All construction must comply with current NC Building Codes and is subject to field inspection and verification.  
**APPROVED**  
 Limited building code review  
 Permit holder responsible for full compliance with the code  
 06/30/2021





**RIGHT SIDE ELEV**  
 SCALE: 1/4" = 1'-0"



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

MILTON BUILT HOMES

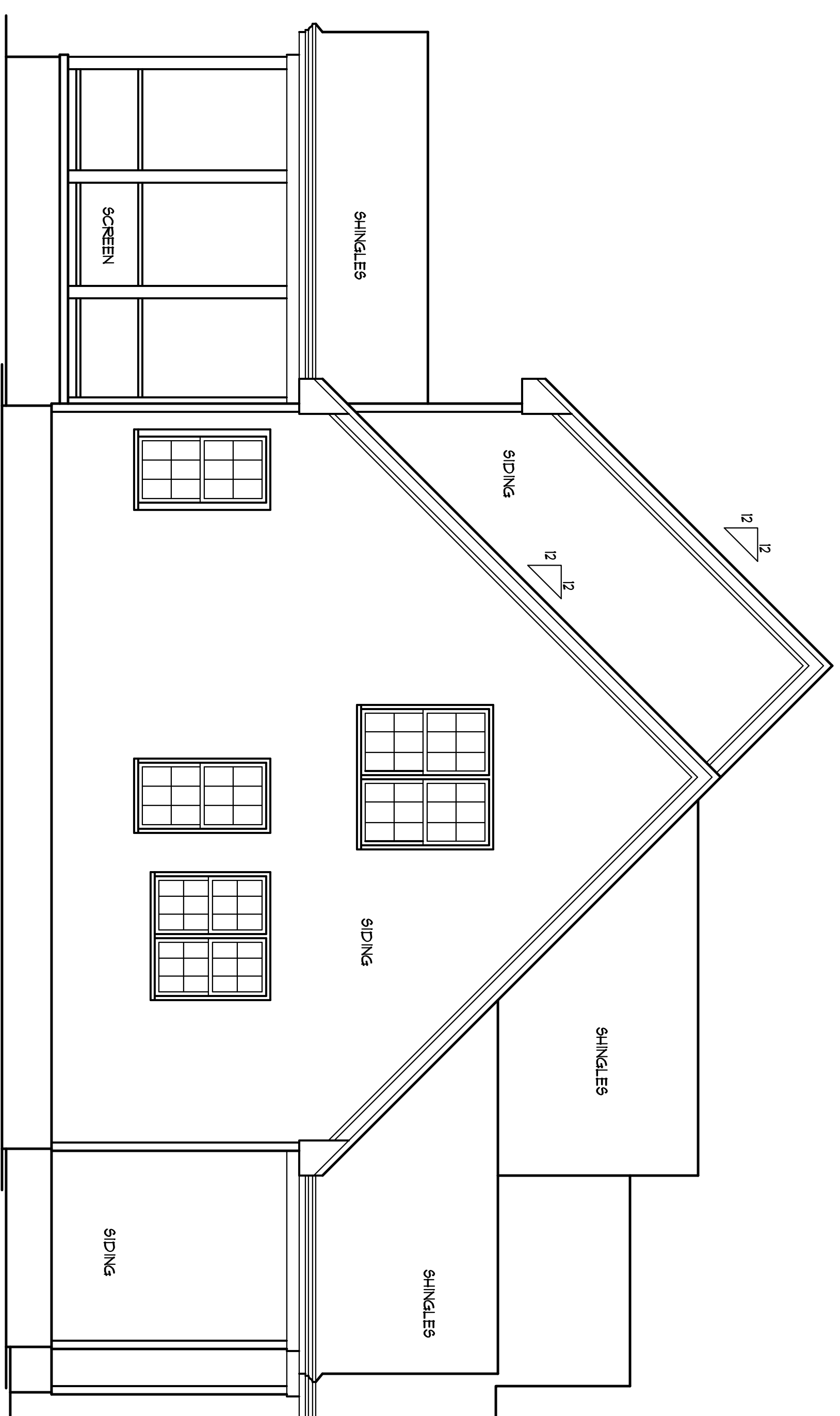
**YUNCANNON DESIGNS**  
 CUSTOM HOME PLANS  
 FUQUAY-VARINA, NC - (919) 421-1374

DRAWN BY : URY  
 CKD BY : URY  
 DATE : 02/05/19  
 REVISIONS :

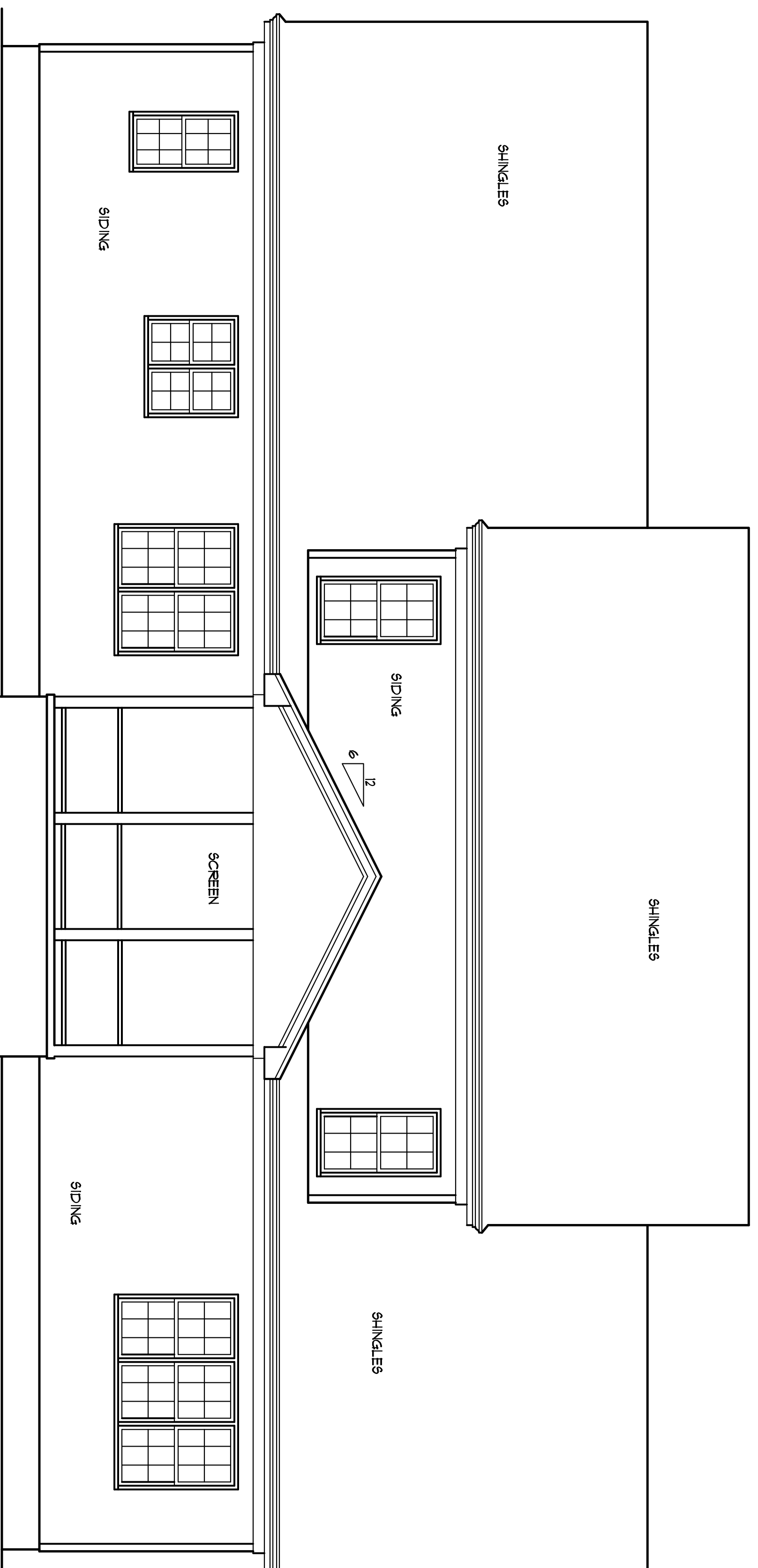
Plan No. 2662-15

SHEET  
 A-1

BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT TIME OF CONSTRUCTION.  
 ALL CONSTRUCTION SHALL CONFORM TO THE 2018 EDITION OF THE NC STATE BUILDING CODE.  
 CODES GOVERN OVER DRAWINGS.  
 DIMENSIONS GOVERN OVER SCALE.  
 VERIFY ALL MECHANICAL REQUIREMENTS BEFORE READING.  
 YUNCANNON DESIGNS DOES NOT ASSUME LIABILITY FOR ANY DEVIATION OF OR CONSTRUCTION METHODS OF THESE PLANS.



LEFT SIDE ELEV  
 SCALE: 1/4" = 1'-0"



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

MILTON BUILT HOMES

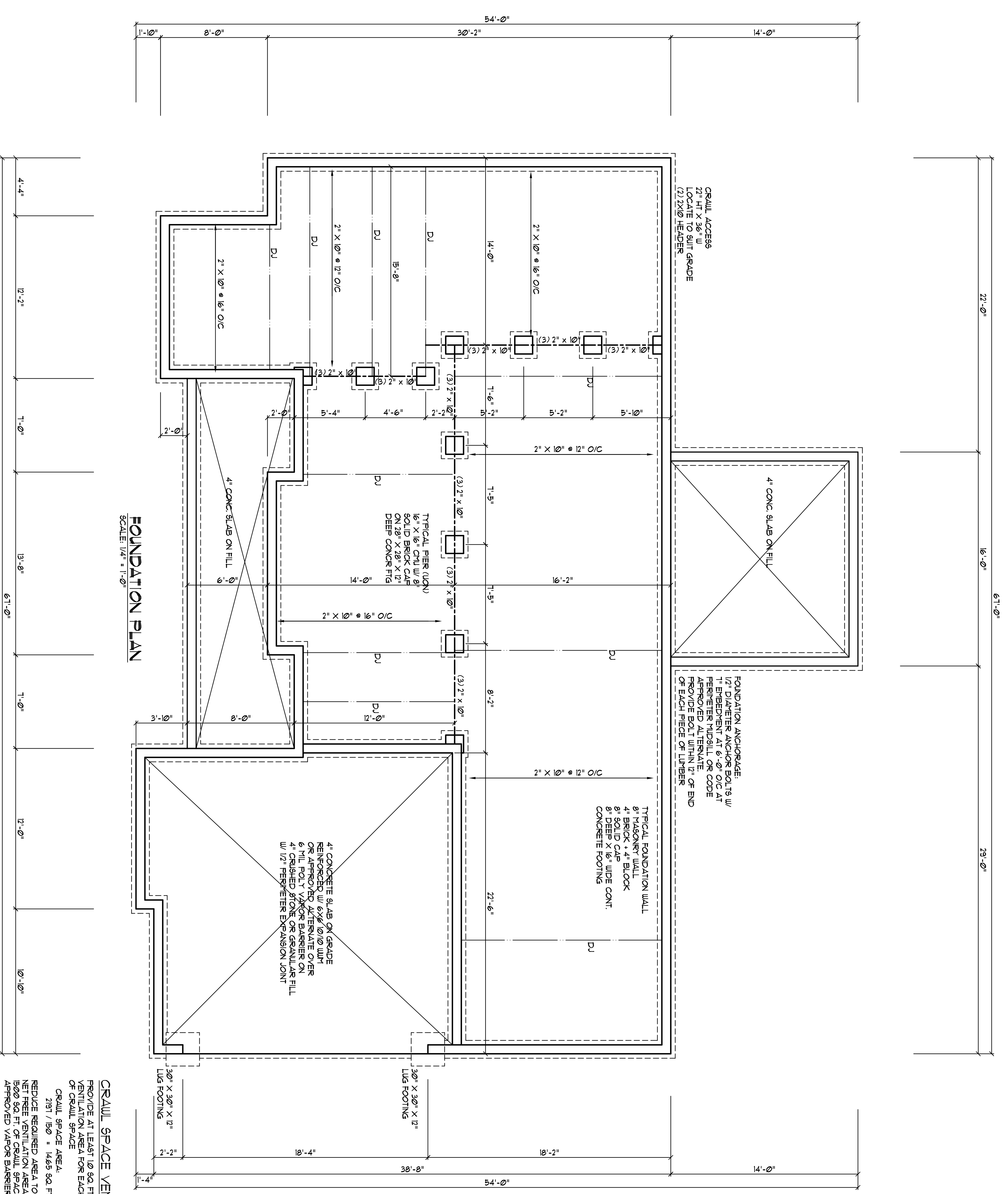
**YUNCANNON DESIGNS**  
 CUSTOM HOME PLANS  
 FUQUAY-VARINA, NC - (919) 421-1314

DRAWN BY : JRV  
 CKD BY : JRV  
 DATE : 02/05/19  
 REVISIONS :

Plan No. 2662-15

SHEET  
 A-2

BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT TIME OF CONSTRUCTION.  
 ALL CONSTRUCTION SHALL CONFORM TO THE 2018 EDITION OF THE NC STATE BUILDING CODE.  
 CODES GOVERN OVER DRAWINGS.  
 DIMENSIONS GOVERN OVER SCALE.  
 VERIFY ALL MECHANICAL REQUIREMENTS BEFORE STARTING WORK.  
 YUNCANNON DESIGNS DOES NOT ASSUME LIABILITY FOR ANY DEVIATION OF OR CONSTRUCTION METHODS OF THESE PLANS.



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

- FOUNDATION NOTES**
- 1) SPECIFIC NOTES ON THE PLANS TAKE PRECEDENCE OVER DIMENSIONS GOVERN OVER SCALE. PLAN DESIGNER AND CONTRACTOR ARE SOLELY RESPONSIBLE FOR DIMENSIONAL ACCURACY OF BUILDING CONSTRUCTION TO WITH CURRENT REVISIONS.
  - 2) STRUCTURAL CONCRETE TO BE FC-3000 PSI, PRE-STANDARD 318.
  - 3) FOOTINGS TO BEAR ON UNDISTURBED EARTH, A MIN OF 12" BELOW ADJACENT FINISHED GRADE, OR AS OTHERWISE DIRECTED BY THE LOCAL INSPECTOR.
  - 4) BEARING CAPACITY OF 2000 PSF. CONTRACTOR TO VERIFY BEARING CAPACITY FOR FINISHING AT THE TIME OF CONSTRUCTION.
  - 5) FOOTINGS AND PIERS SHALL BE CENTERED UNDER THEIR RESPECTIVE FINISH FLOORING OR INTERIOR FINISHING FROM FACE OF MASONRY.
  - 6) MAXIMUM DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN VOLUME VII, SECTION R-502.4.3 OF THE NC STATE CODE.
  - 7) PLASTER TO BE BONDED TO PERIMETER FOUNDATION WALL.
  - 8) PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY SITE CONDITIONS.
  - 9) PROVIDE PERIMETER INSULATION WITH BASEMENT SLABS.
  - 10) CORREL FOUNDATION WALL AS REQUIRED TO ACCEPT DATE BRICK VENEER.
  - 11) CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS.

ALLOWABLE PIER HEIGHTS	
SIZE	HOLLOW SOLID
8"X6"	2'-0" 5'-0"
12"X6"	4'-0" 8'-0"
16"X6"	5'-4" 12'-0"
24"X24"	8'-0"

FOOTINGS 30"X30"X10" MINIMUM UNLESS NOTED OTHERWISE

- NOTE**
- 1) USE 2X10 @ 16" O/C @ 9" P.F. MINIMUM SPECIFIED (U.O.N.)
  - 2) JOIST'S DIRECTION DESIGNATED BY ARROW ABOVE.
  - 3) DOUBLE ALL JOIST PARALLEL TO WALLS ABOVE.
  - 4) GIRDERS TO BE (3)2X10'S @ 9" P.F. MINIMUM (U.O.N.)
  - 5) MINIMUM CRAWL SPACE ACCESS TO BE 27" HEIGHT X 36" WIDTH.
  - 6) FOUNDATION WALL AND PIER CAPS TO BE MINIMUM 8" SOLID.
  - 7) FOOTING UNDER MASONRY FINISH TO BE 12" THICK AND EXTEND 12" BEYOND.

**CRAWL SPACE VENTILATION**  
 PROVIDE AT LEAST 10 SQ. FT. NET FREE VENTILATION AREA FOR EACH 150 SQ. FT. OF CRAWL SPACE.  
 CRAWL SPACE AREA:  
 2181 / 150 = 14.55 SQ. FT. REQ'D.  
 REDUCE REQUIRED AREA TO 10 SQ. FT. NET FREE VENTILATION AREA FOR EACH 1500 SQ. FT. OF CRAWL SPACE WITH APPROVED VAPOR BARRIER.

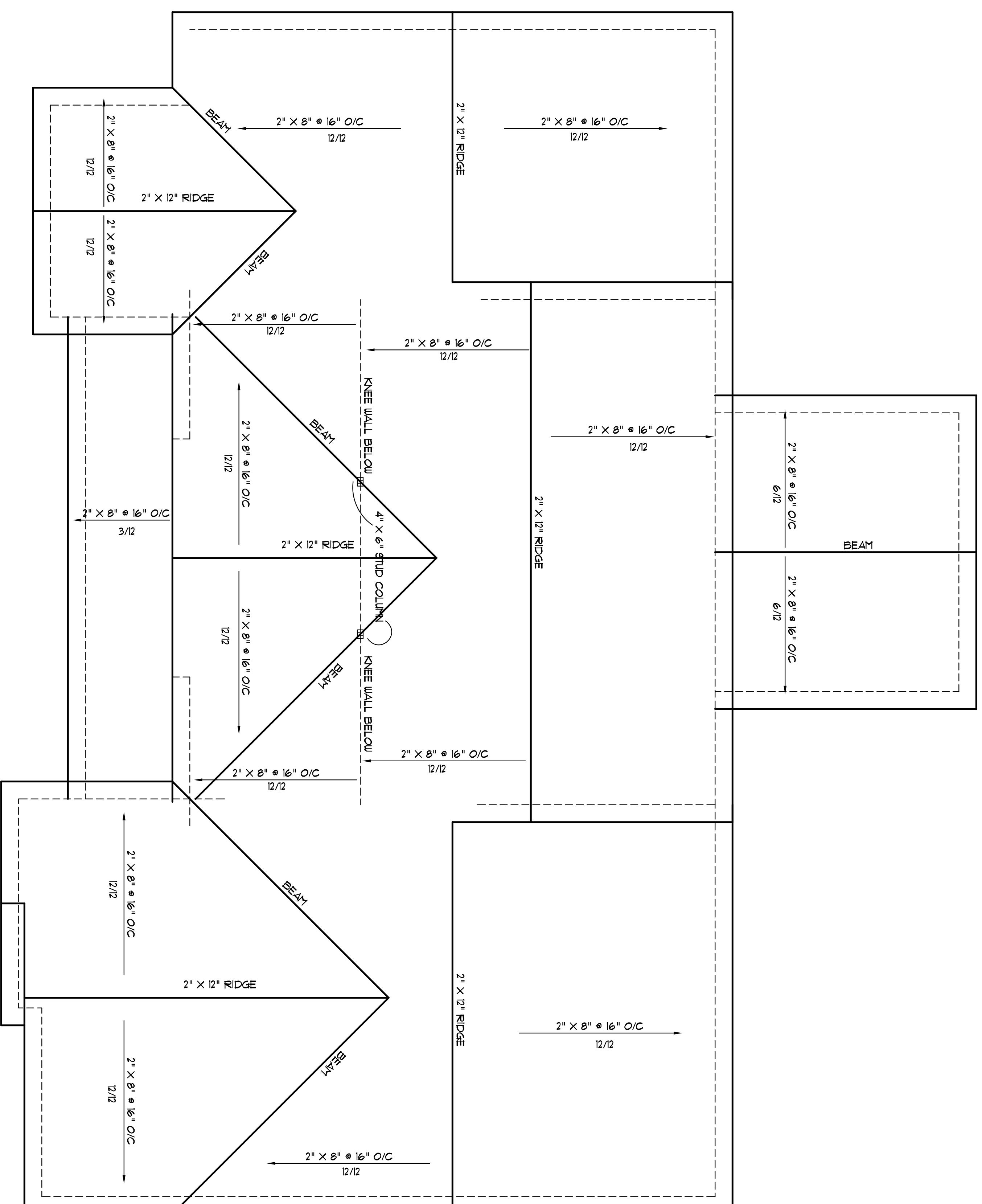
PROVIDE (1) VENT WITHIN 3'-0" OF EACH CORNER.  
 REFER TO MANUFACTURER SPECIFICATIONS FOR VENT SIZES AND DETERMINE NUMBER OF VENTS REQUIRED.

**Plan No. 2662-15**





BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT TIME OF CONSTRUCTION.  
 ALL CONSTRUCTION SHALL CONFORM TO THE 2018 EDITION OF THE NC STATE BUILDING CODE.  
 CODES GOVERN OVER DRAWINGS.  
 DIMENSIONS GOVERN OVER SCALE.  
 VERIFY ALL MECHANICAL REQUIREMENTS BEFORE DRAWING.  
 YUNCANNON DESIGNS DOES NOT ASSUME LIABILITY FOR ANY DEVIATION OF OR CONSTRUCTION METHODS OF THESE PLANS.



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

**ATTIC SPACE VENTILATION**  
 MAIN ROOF  
 ATTIC AREA = 718 SQ. FT.  
 REQUIRED AREA = A500 = 306 SQ. FT.  
 NOTE:  
 ALL EAVES TO HAVE 2" CONTINUOUS SOFFIT VENT  
 ALLOW 1" AIR SPACE ABOVE INSULATION FOR AIR FLOW

Plan No. 2662-15

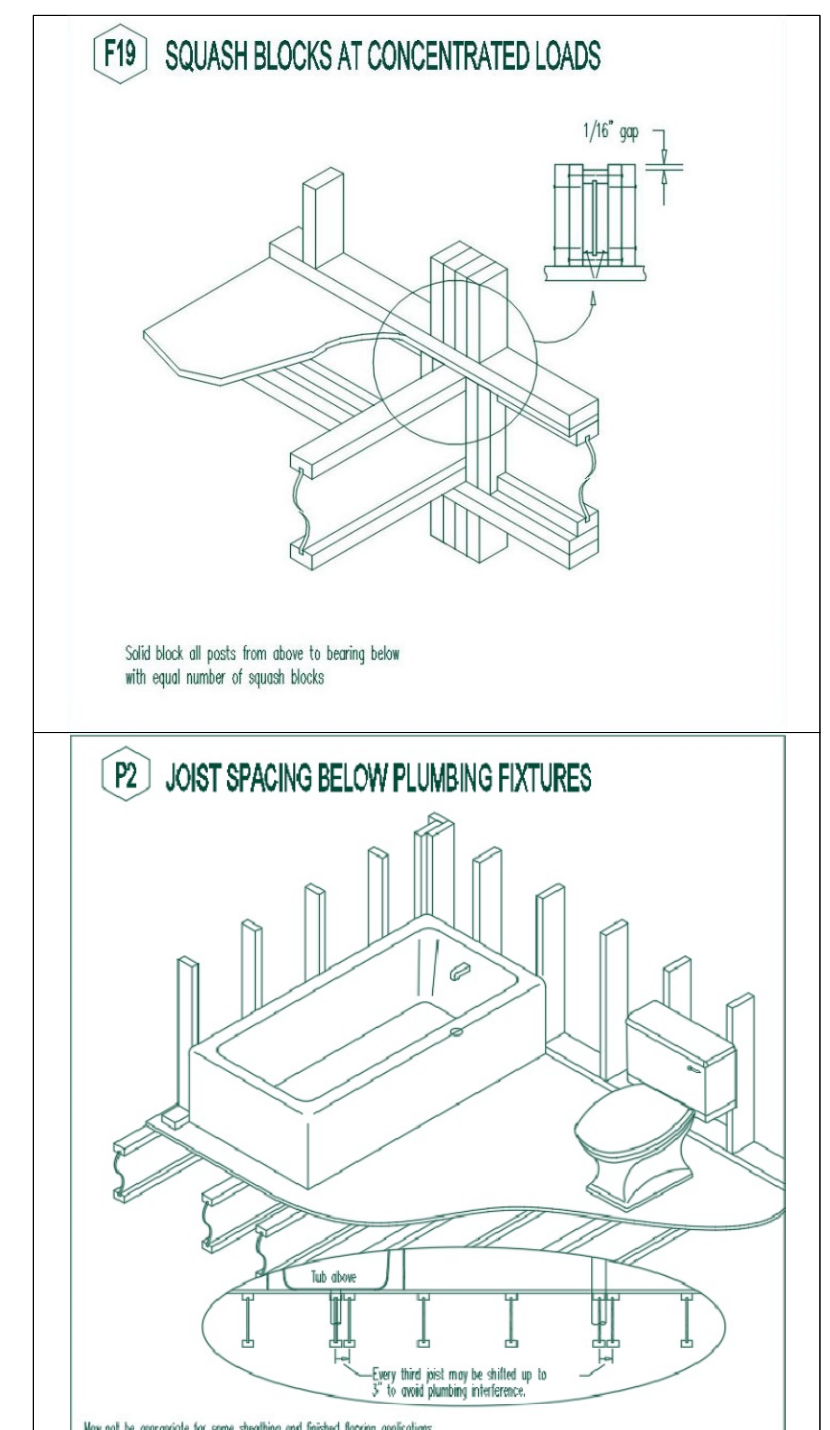
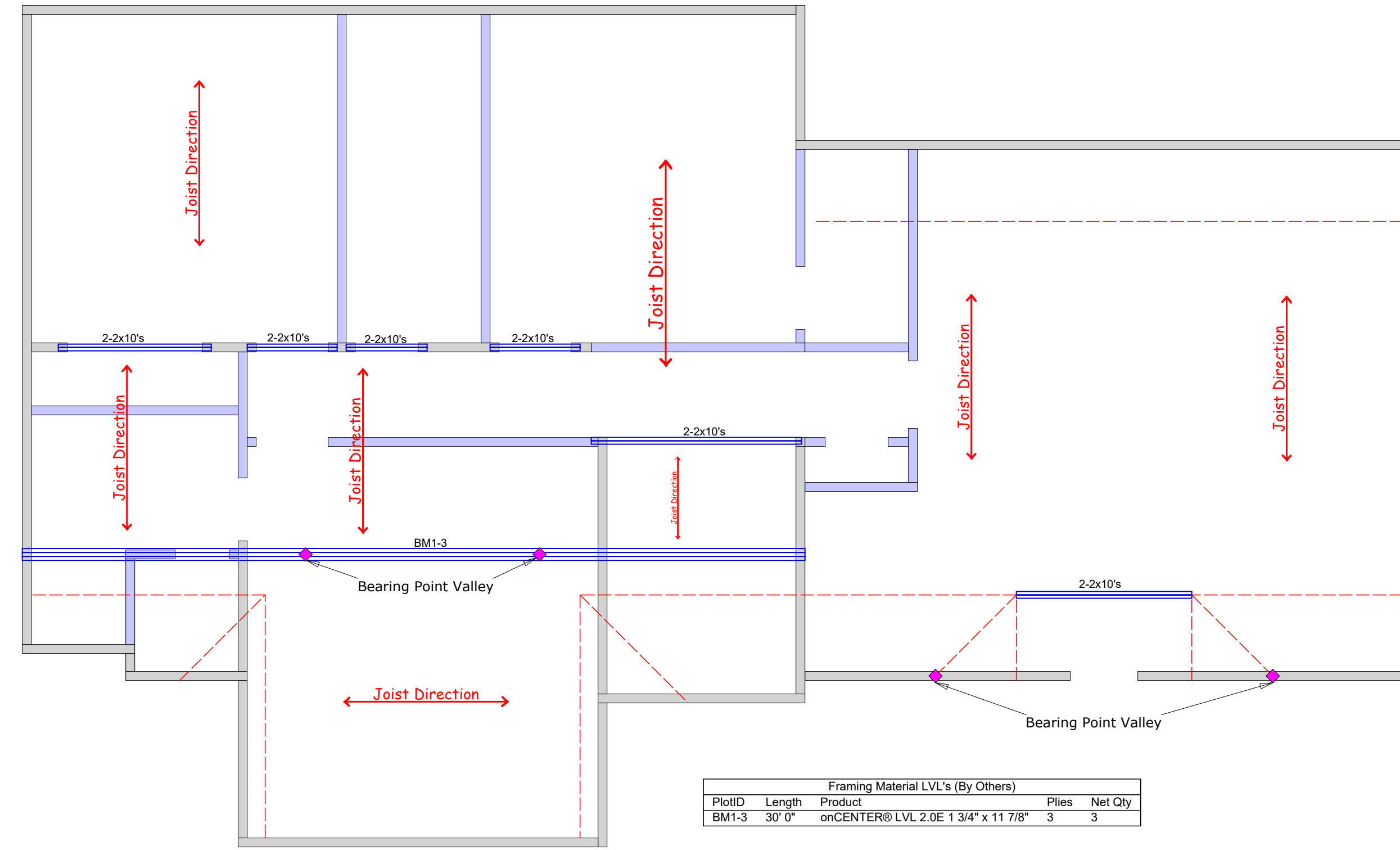
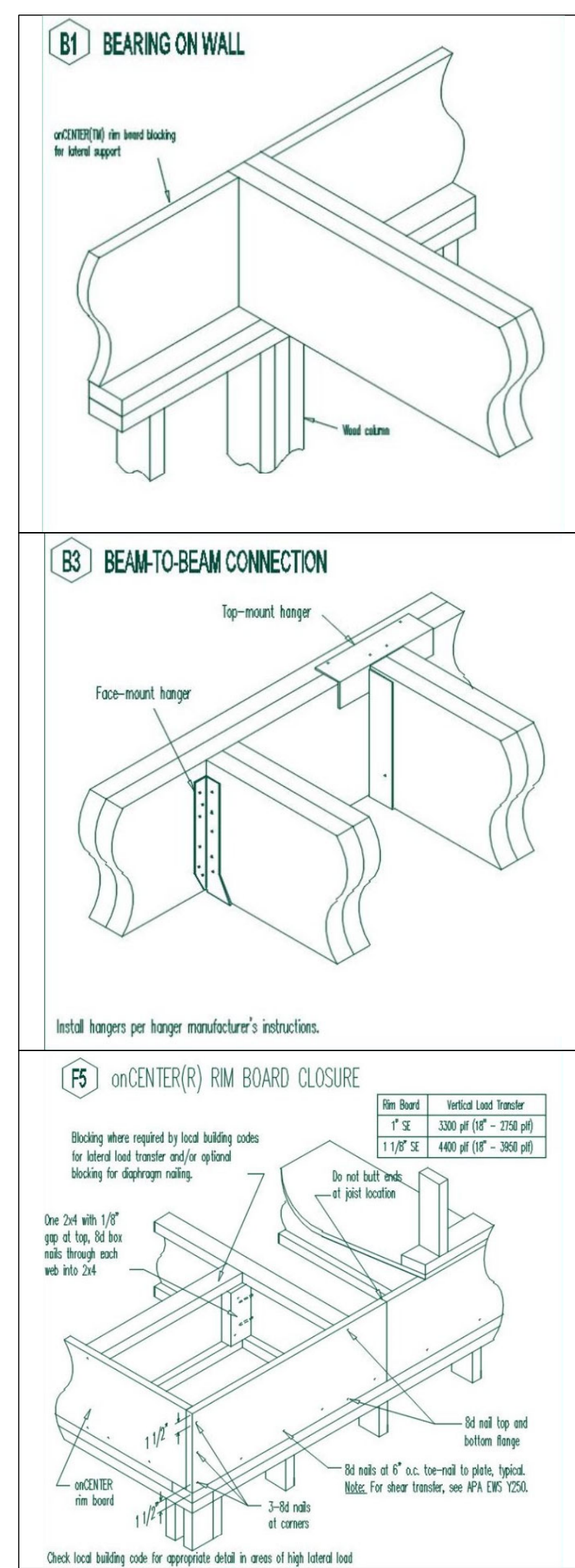
MILTON BUILT HOMES

**YUNCANNON DESIGNS**  
 CUSTOM HOME PLANS  
 FUQUAY-VARINA, NC - (919) 421-1374

DRAWN BY : URY  
 CKD BY : URY  
 DATE : 01/18/19  
 REVISIONS :

SHEET  
**A-6**



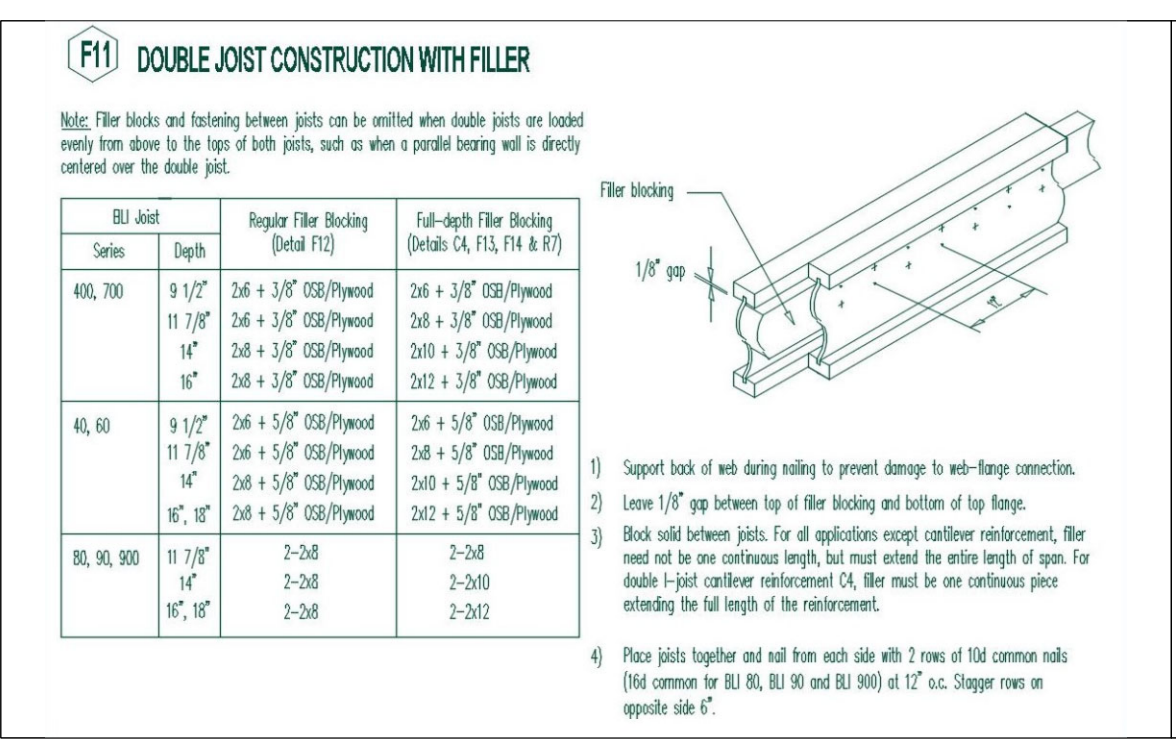


The attached materials list represents BlueLinX Engineered Lumber products needed to frame layout(s) shown based on the interpretation of user, but has not been reviewed by a BlueLinX engineer. Purchaser is to verify material quantities, lengths, locations, and sizes and resolve clouded items.


Specified products are sized only for gravity loads shown. These loads should be verified by the purchaser. If additional loads or framing areas need to be accounted for, notify supplier of BlueLinX products so that material can be sized and price adjusted. Unless noted otherwise, hip, valley and ridge boards have not been designed and no products were designed to resist the building's lateral loads.

prior to installation, review layout with applicable product guide and/or installation sheet. If this information is not included, contact your supplier of BlueLinX products. Coordinate building plans and details with this layout. To prevent member damage from plumbing or mechanical cuts. Review this layout plan before placement. Follow I-joist web hole charts. Do not cut material beyond scope of product guide(s) without prior approval.

Glue and nail minimum 23/32" APA rated OSB or plywood to floor I-joists. Use fastener schedule for side-loaded onCENTER(TM) LVL beams. For proper installation of hangers and connectors, follow manufacturer's guidelines. Connections not shown are by others. Roofs shall have adequate drainage to prevent ponding. These products were designed for "dry use" conditions only, and must be protected from long term exposure to high moisture. Moisture protection (by others) may be required. Detail F19 Squash Block/Column shall match size of column above



onCENTER 2.0E LVL MULTIPLE PLY FASTENING					
FASTENER TYPE	LVL DEPTH	AMERICAN BUSH	NUMBER PER JOIST	1/2\"/>	
1/4\"/>					
1/2\"/>					
3/8\"/>					
3/4\"/>					
1\"/>					



# Professional BUILDERS SUPPLY

...it's about the service!!!

3941 USHwy 421 North  
Wilmington, NC 28401  
(910) 386-4300

DRAWN BY:  
JJC

DATE:  
03-12-2019

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

SALESPERSON:  
Matthew Kemper

**BUILDER NAME:**  
Milton Built Homes, LLC

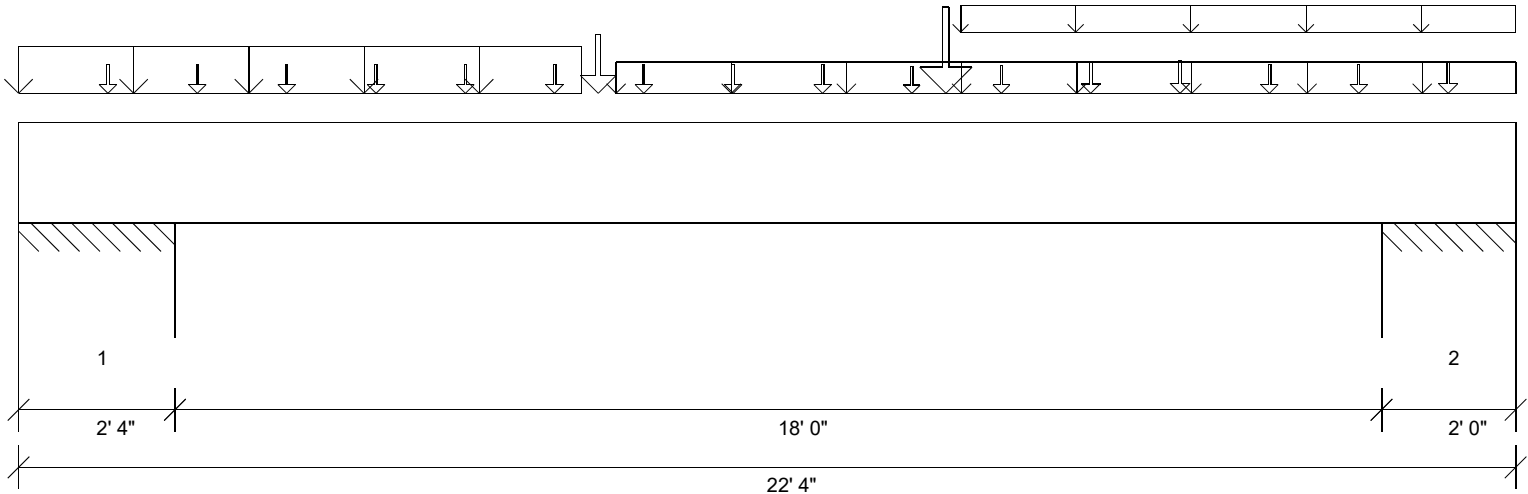
**PROJECT NAME:**  
Lot 7 Raven Ridge  
(Plan # 2662-15)

**LEVEL NAME:**  
2nd Floor Framing  
Layout (Ceiling)

**PAGE:** 2







Graphical Illustration - Not To Scale  
 Member Cut Length - 22'- 4"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'	Bottom:	18'		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	12'- 6 3/4"	48999.22 lb ft	84416.79 lb ft	Passed - 58%	1.25	D + 0.75(L + Lr)
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	18'- 10"	7244.56 lb	17955.00 lb	Passed - 40%	1.00	D + L
Live Load Deflection	11'- 4 5/16"	0'- 5/16"	N/A (L/360)	Passed - L/669	-	0.75(L + Lr)
Total Load Deflection	11'- 5 1/16"	0'- 9/16"	N/A (L/240)	Passed - L/385	-	D + 0.75(L + Lr)
Max. Reaction			Supported Mt   Supporting Mt			
	0'- 1 1/2"	50.90 lb	38281.25 lb   32156.25 lb	Passed - 0%	1.25	D + 0.75(L + Lr)
	0'- 1 1/2"	-273.58 lb	27562.50 lb   -	Passed - 1%	0.90	D
	2'- 2 1/2"	8689.58 lb	27562.50 lb   32156.25 lb	Passed - 32%	1.00	D + L
	20'- 5 1/2"	9331.37 lb	27562.50 lb   32156.25 lb	Passed - 34%	1.00	D + L
	22'- 2 1/2"	-345.71 lb	27562.50 lb   -	Passed - 1%	0.90	D

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	22'- 4"	Self Weight	25 lb/ft	-	-	-
Uniform	-0'	8'- 4 3/4"	User Load	150 lb/ft	-	200 lb/ft	-
Uniform	8'- 11"	22'- 4"	User Load	60 lb/ft	-	80 lb/ft	-
Uniform	14'- 5/8"	22'- 4"	Rim1(i4060)	65 lb/ft	-	-	-
Point	1'- 4"	1'- 4"	J1(i4048)	153.00 lb	505.00 lb	-	-
Point	2'- 8"	2'- 8"	J1(i4073)	153.00 lb	505.00 lb	-	-
Point	4'	4'	J1(i4075)	153.00 lb	505.00 lb	-	-
Point	5'- 4"	5'- 4"	J1(i4074)	153.00 lb	505.00 lb	-	-
Point	6'- 8"	6'- 8"	J1(i4072)	153.00 lb	504.00 lb	-	-
Point	7'- 11 15/16"	7'- 11 15/16"	J1(i4062)	152.00 lb	504.00 lb	-	-
Point	8'- 7 3/4"	8'- 7 3/4"	User Load	1091.00 lb	-	2181.00 lb	-
Point	9'- 3 15/16"	9'- 3 15/16"	J1(i4079)	153.00 lb	504.00 lb	-	-
Point	10'- 7 15/16"	10'- 7 15/16"	J1(i4084)	153.00 lb	505.00 lb	-	-
Point	11'- 11 15/16"	11'- 11 15/16"	J1(i4083)	153.00 lb	505.00 lb	-	-
Point	13'- 3 15/16"	13'- 3 15/16"	J1(i4082)	105.00 lb	348.00 lb	-	-
Point	13'- 10"	13'- 10"	BM4-3(i4056)	2456.00 lb	252.00 lb	2925.00 lb	-
Point	14'- 7 15/16"	14'- 7 15/16"	J1(i4080)	124.00 lb	409.00 lb	-	-
Point	15'- 11 15/16"	15'- 11 15/16"	J1(i4087)	274.00 lb	589.00 lb	-	-
Point	17'- 3 15/16"	17'- 3 15/16"	J1(i4085)	361.00 lb	649.00 lb	-	-
Point	18'- 7 15/16"	18'- 7 15/16"	J1(i4081)	153.00 lb	505.00 lb	-	-
Point	19'- 11 15/16"	19'- 11 15/16"	J1(i4086)	163.00 lb	505.00 lb	-	-
Point	21'- 3 15/16"	21'- 3 15/16"	J1(i4088)	218.00 lb	633.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	2'- 4"	-	4523.00 lb	4309.00 lb	4484.00 lb	-
+++	0'- 1 1/2"	0'- 1 1/2"	E3(i3)	-	204.00 lb	228.00 lb	-
+++	2'- 2 1/2"	2'- 2 1/2"	E8(i7)	4523.00 lb	4105.00 lb	4256.00 lb	-

- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.

- This report is based on modeled conditions input by the user. Actual field conditions may differ from those shown. These results should be reviewed by a qualified design professional.



**Job: Lot 7 Raven Ridge**

Member Type: Beam | Level: 1st Floor  
MiTek SAPPHIRE™ Supply Version 8.2.2.241.Update5  
Designed by Single Member Design Engine

**Label: BM2-3-i4049**

Page: 2 of 18  
Date: 03/12/2019 14:58:06

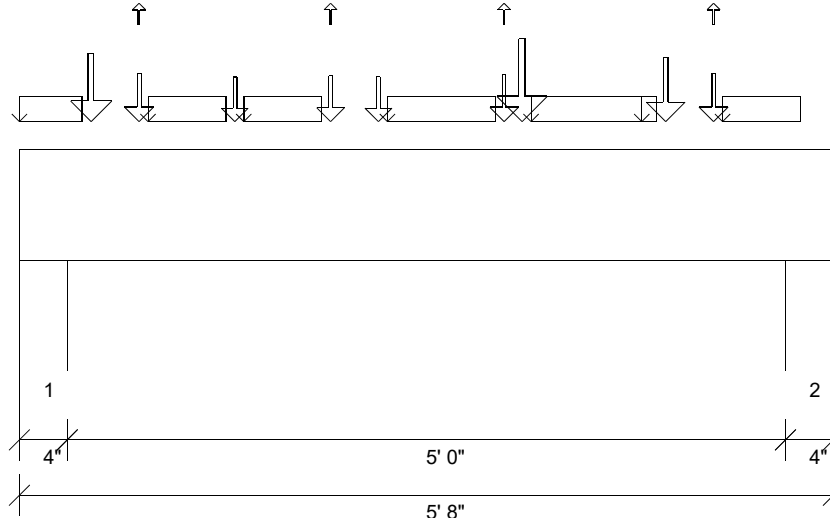
**Member: 3 - onCENTER LVL 2.0E 1 3/4" x 18"**

**Status: Design Passed**

2	20'- 4"	22'- 4"	E9(i8)	4950.00 lb	4689.00 lb	3719.00 lb	-
==>	20'- 5 1/2"	20'- 5 1/2"	E9(i8)	4950.00 lb	4381.00 lb	3637.00 lb	-
==>	22'- 2 1/2"	22'- 2 1/2"	E9(i8)	-	308.00 lb	82.00 lb	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 5'- 8"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 3 1/16"	Bottom:	5'		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	3'- 4 1/2"	3685.51 lb ft	13320.27 lb ft	Passed - 28%	1.00	D + L	
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Shear	4'- 6 3/4"	2167.52 lb	6151.25 lb	Passed - 35%	1.00	D + L	
Live Load Deflection	2'- 10 3/8"	0'	N/A (L/360)	Passed - L/999	-	L	
Total Load Deflection	2'- 10 1/2"	0'- 1/16"	N/A (L/240)	Passed - L/999	-	D + L	
Max. Reaction	0'- 3"	2960.38 lb	Supported Mt: 11484.44 lb	Supported Mt: 12250.07 lb	Passed - 26%	1.00	D + L
	5'- 5"	2694.06 lb	Supported Mt: 11484.41 lb	Supported Mt: 12250.04 lb	Passed - 23%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

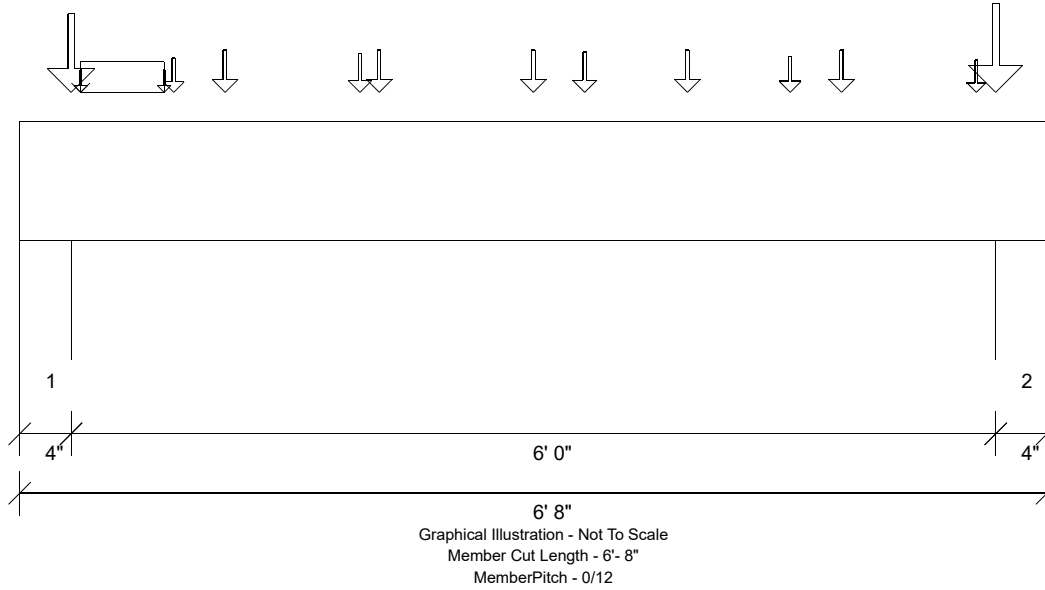
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	5'- 8"	Self Weight	8 lb/ft	-	-	-
Uniform	0'	0'- 5 1/4"	BK1(i4205)	65 lb/ft	-	-	-
Uniform	0'- 10 3/4"	1'- 5 1/4"	BK1(i4267)	65 lb/ft	-	-	-
Uniform	1'- 6 3/4"	2'- 1 1/4"	BK1(i4263)	65 lb/ft	-	-	-
Uniform	2'- 6 3/4"	3'- 3 3/4"	BK1(i4203)	65 lb/ft	-	-	-
Uniform	3'- 6 3/4"	4'- 5 1/4"	BK1(i4135)	65 lb/ft	-	-	-
Uniform	4'- 10 3/4"	5'- 5 1/4"	BK1(i4231)	65 lb/ft	-	-	-
Point	0'- 6"	0'- 6"	J3(i4132)	315.00 lb	513.00 lb	-	-
Point	0'- 10"	0'- 10"	J4(i4094)	98.00 lb	384.00/-14.00 lb	-	-
Point	1'- 6"	1'- 6"	J3(i4183)	89.00 lb	322.00 lb	-	-
Point	2'- 2"	2'- 2"	J4(i4111)	90.00 lb	350.00/-13.00 lb	-	-
Point	2'- 6"	2'- 6"	J3(i4134)	96.00 lb	322.00 lb	-	-
Point	3'- 4 1/2"	3'- 4 1/2"	J4(i4096)	87.00 lb	367.00/-13.00 lb	-	-
Point	3'- 6"	3'- 6"	J3(i4235)	365.00 lb	726.00 lb	-	-
Point	4'- 6"	4'- 6"	J3(i4176)	311.00 lb	450.00 lb	-	-
Point	4'- 10"	4'- 10"	J4(i4099)	98.00 lb	384.00/-14.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E46(i103)	950.00 lb	1998.00/-27.00 lb	-	-
2	5'- 4"	5'- 8"	E44(i101)	887.00 lb	1820.00/-27.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 3 1/16"	Bottom:	6'		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination		
Critical Moment (Pos)	3'- 4"	3640.19 lb ft	13320.27 lb ft	Passed - 27%	1.00	D + L		
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft					
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft					
Critical Shear	1'- 1 1/4"	1907.79 lb	6151.25 lb	Passed - 31%	1.00	D + L		
Live Load Deflection	3'- 4"	0'- 1/16"	N/A (L/360)	Passed - L/999	-	L		
Total Load Deflection	3'- 4"	0'- 1/16"	N/A (L/240)	Passed - L/999	-	D + L		
Max. Reaction	0'- 3"	3301.93 lb	Supported Mt	11484.41 lb	12250.04 lb	Passed - 29%	1.00	D + L
	6'- 5"	3554.12 lb	Supporting Mt	11484.44 lb	12250.08 lb	Passed - 31%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

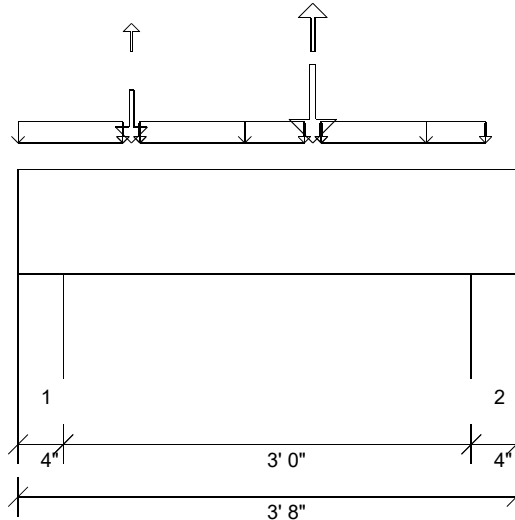
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	6'- 8"	Self Weight	8 lb/ft	-	-	-
Uniform	0'- 4 3/4"	0'- 11 1/4"	Bk1(i4141)	22 lb/ft	88 lb/ft	-	-
Point	0'- 4"	0'- 4"	J3(i4149)	445.00 lb	835.00 lb	-	-
Point	0'- 4 3/4"	0'- 4 3/4"	Bk1(i4141)	1.00 lb	6.00 lb	-	-
Point	0'- 11 1/4"	0'- 11 1/4"	Bk1(i4141)	1.00 lb	6.00 lb	-	-
Point	1'	1'	J5(i4116)	67.00 lb	207.00 lb	-	-
Point	1'- 4"	1'- 4"	J3(i4115)	141.00 lb	322.00 lb	-	-
Point	2'- 2 1/2"	2'- 2 1/2"	J5(i4102)	135.00 lb	246.00 lb	-	-
Point	2'- 4"	2'- 4"	J3(i4171)	141.00 lb	322.00 lb	-	-
Point	3'- 4"	3'- 4"	J3(i4179)	141.00 lb	322.00 lb	-	-
Point	3'- 8"	3'- 8"	J5(i4175)	154.00 lb	258.00 lb	-	-
Point	4'- 4"	4'- 4"	J3(i4129)	141.00 lb	322.00 lb	-	-
Point	5'	5'	J5(i4103)	78.00 lb	235.00 lb	-	-
Point	5'- 4"	5'- 4"	J3(i4126)	141.00 lb	322.00 lb	-	-
Point	6'- 2 1/2"	6'- 2 1/2"	J5(i4212)	55.00 lb	175.00 lb	-	-
Point	6'- 4"	6'- 4"	J3(i4248)	591.00 lb	930.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E48(i107)	1074.00 lb	2210.00/-1.00 lb	-	-
2	6'- 4"	6'- 8"	E46(i103)	1227.00 lb	2346.00/-1.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 3'- 8"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 4 5/8"	Bottom:	3'		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	2'- 2"	977.91 lb ft	3429.65 lb ft	Passed - 29%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	2'- 6 3/4"	773.90 lb	2497.50 lb	Passed - 31%	1.00	D + L
Live Load Deflection	1'- 10 3/8"	0'	N/A (L/360)	Passed - L/999	-	0.75(L + Lr)
Total Load Deflection	1'- 10 3/8"	0'	N/A (L/240)	Passed - L/999	-	D + 0.75(L + Lr)
Max. Reaction			<u>Supported Mt</u> <u>Supporting Mt</u>			
	0'- 3"	1165.03 lb	5578.16 lb    10500.08 lb	Passed - 21%	1.25	D + 0.75(L + Lr)
	0'- 3"	-2.78 lb	5578.16 lb    -	Passed - 0%	1.25	D + Lr
	3'- 5"	969.75 lb	5578.16 lb    10500.08 lb	Passed - 17%	1.25	D + 0.75(L + Lr)
	3'- 5"	-93.76 lb	5578.16 lb    -	Passed - 2%	1.25	D + Lr

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

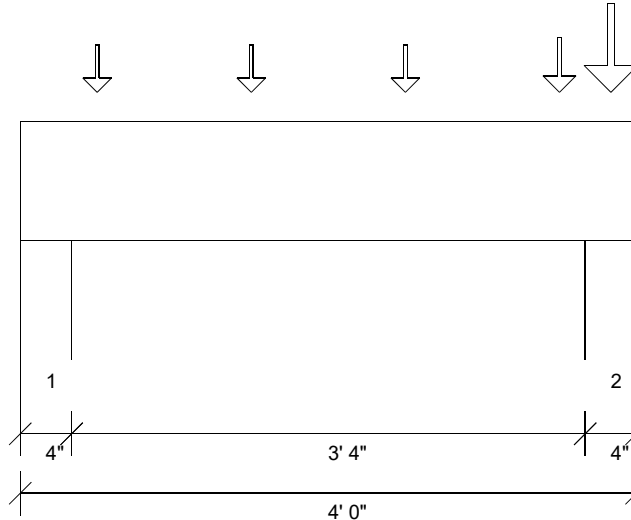
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	3'- 8"	Self Weight	6 lb/ft	-	-	-
Uniform	0'	0'- 9 1/4"	BK1(i4131)	7 lb/ft	27 lb/ft	-	-
Uniform	0'- 10 3/4"	2'- 1 1/4"	Bk1(i4119)	7 lb/ft	27 lb/ft	-	-
Uniform	2'- 2 3/4"	3'- 5 1/4"	BK1(i4254)	7 lb/ft	27 lb/ft	-	-
Point	0'- 9 1/4"	0'- 9 1/4"	BK1(i4131)	-	2.00 lb	-	-
Point	0'- 10"	0'- 10"	J3(i4169)	241.00 lb	486.00/-52.00 lb	168.00/-170.00 lb	-
Point	0'- 10 3/4"	0'- 10 3/4"	BK1(i4119)	-	2.00 lb	-	-
Point	2'- 1 1/4"	2'- 1 1/4"	BK1(i4119)	-	2.00 lb	-	-
Point	2'- 2"	2'- 2"	J3(i4136)	373.00 lb	636.00/-181.00 lb	582.00/-586.00 lb	-
Point	2'- 2 3/4"	2'- 2 3/4"	BK1(i4254)	-	2.00 lb	-	-
Point	3'- 5 1/4"	3'- 5 1/4"	BK1(i4254)	-	2.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E13(i57)	355.00 lb	674.00/-109.00 lb	352.00/-355.00 lb	-
2	3'- 4"	3'- 8"	E39(i96)	305.00 lb	543.00/-124.00 lb	398.00/-401.00 lb	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 4"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'	Bottom:	0'- 10 1/2"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	1'- 6"	673.49 lb ft	3429.65 lb ft	Passed - 20%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	1'- 1 1/4"	545.11 lb	2497.50 lb	Passed - 22%	1.00	D + L
Live Load Deflection	1'- 11 3/4"	0'	N/A (L/360)	Passed - L/999	-	L
Total Load Deflection	1'- 11 13/16"	0'	N/A (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 3"	912.74 lb	<u>Supported Mt</u> 5578.12 lb	Passed - 16%	1.00	D + L
	3'- 9"	2290.36 lb	<u>Supporting Mt</u> 10500.00 lb	Passed - 41%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

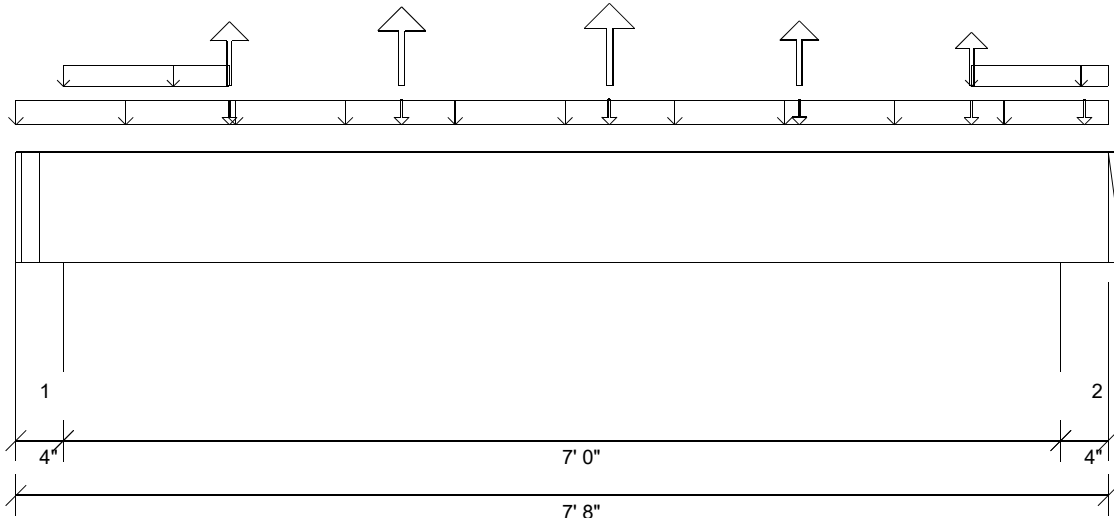
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	4'	Self Weight	6 lb/ft	-	-	-
Point	0'- 6"	0'- 6"	J4(i4184)	133.00 lb	327.00 lb	-	-
Point	1'- 6"	1'- 6"	J4(i4090)	133.00 lb	327.00 lb	-	-
Point	2'- 6"	2'- 6"	J4(i4193)	133.00 lb	327.00 lb	-	-
Point	3'- 6"	3'- 6"	J4(i4236)	265.00 lb	327.00 lb	-	-
Point	3'- 10"	3'- 10"	E97(i547)	446.00 lb	761.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E44(i101)	278.00 lb	654.00 lb	-	-
2	3'- 8"	4'	E4(i1)	856.00 lb	1415.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 7'- 8"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'	Bottom:	1'- 4"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	4'- 2"	2889.51 lb ft	3429.65 lb ft	Passed - 84%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	1'- 6"	1346.39 lb	2497.50 lb	Passed - 54%	1.00	D + L
Live Load Deflection	3'- 10 1/16"	0'- 1/16"	N/A (L/360)	Passed - L/999	-	L
Total Load Deflection	3'- 9 15/16"	0'- 1/8"	N/A (L/240)	Passed - L/875	-	D + L
Max. Reaction			<u>Supported Mt</u> <u>Supporting Mt</u>			
	0'- 3"	-1245.99 lb	5578.08 lb	-	1.00	D + L
	7'- 5"	-1261.06 lb	5578.13 lb	-	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	7'- 8"	Self Weight	6 lb/ft	-	-	-
Uniform	0'	7'- 8"	User Load	60 lb/ft	-	-	-
Uniform	0'- 4"	1'- 6"	FC1 Floor Material	1 lb/ft	5 lb/ft	-	-
Uniform	6'- 8 1/2"	7'- 8"	FC1 Floor Material	1 lb/ft	5 lb/ft	-	-
Point	1'- 6"	1'- 6"	J5(i4116)	-165.00 lb	55.00/-390.00 lb	-	-
Point	2'- 8 1/2"	2'- 8 1/2"	J5(i4102)	-332.00 lb	61.00/-413.00 lb	-	-
Point	4'- 2"	4'- 2"	J5(i4175)	-358.00 lb	64.00/-433.00 lb	-	-
Point	5'- 6"	5'- 6"	J5(i4103)	-172.00 lb	58.00/-394.00 lb	-	-
Point	6'- 8 1/2"	6'- 8 1/2"	J5(i4212)	-125.00 lb	42.00/-294.00 lb	-	-
Point	7'- 6"	7'- 6"	E68(i136)	60.00 lb	-	-	-

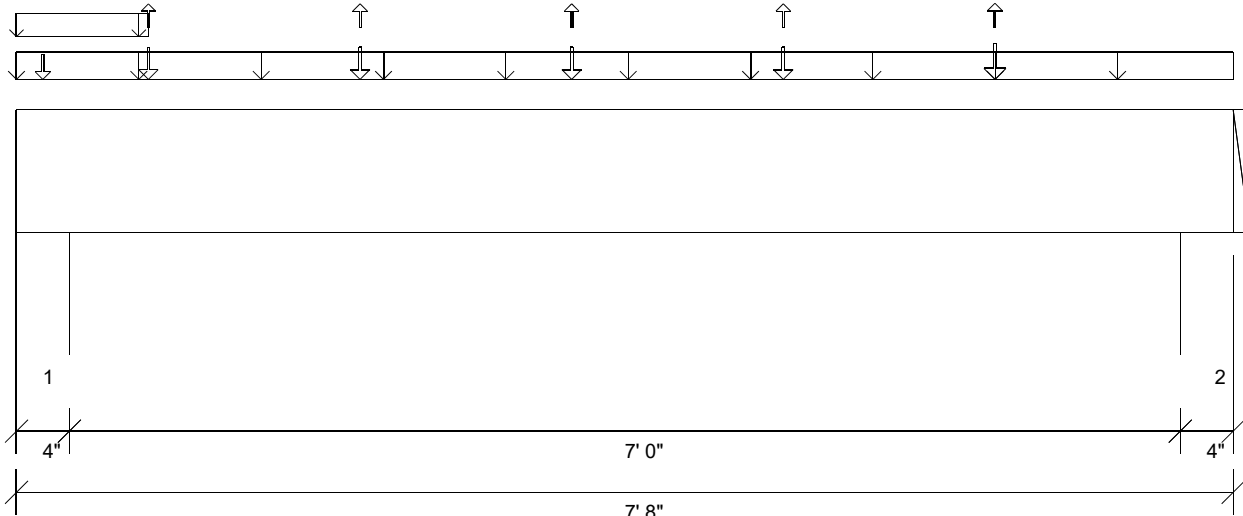
**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E12(i54)	-321.00 lb	140.00/-925.00 lb	-	-
2	7'- 4"	7'- 8"	E33(i87)	-262.00 lb	151.00/-999.00 lb	-	-

**Errors, Warnings & Notes:**

- \* CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.





Graphical Illustration - Not To Scale  
 Member Cut Length - 7'- 8"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'	Bottom:	1'- 2 1/2"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	3'- 7 1/2"	779.05 lb ft	3429.65 lb ft	Passed - 23%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	6'- 6 3/4"	363.04 lb	2497.50 lb	Passed - 15%	1.00	D + L
Live Load Deflection	3'- 10 1/4"	0'	N/A (L/360)	Passed - L/999	-	L
Total Load Deflection	3'- 10 1/16"	0'	N/A (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 3"	470.80 lb	<u>Supported Mt</u> 5577.56 lb	Passed - 8%	1.00	D + L
	7'- 5"	435.95 lb	<u>Supporting Mt</u> 10498.83 lb	Passed - 8%	1.00	D + L
			5578.13 lb	10500.00 lb		

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

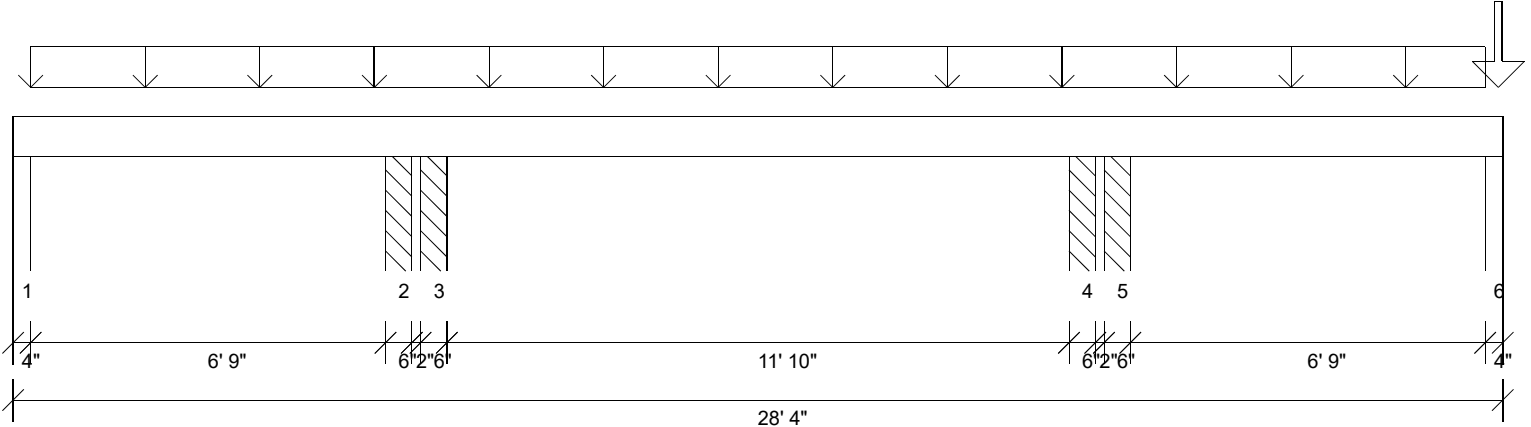
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	7'- 8"	Self Weight	6 lb/ft	-	-	-
Uniform	0'	7'- 8"	User Load	60 lb/ft	-	-	-
Uniform	0'	0'- 10"	FC1 Floor Material	1 lb/ft	5 lb/ft	-	-
Point	0'- 2"	0'- 2"	E93(i157)	16.00 lb	-	-	-
Point	0'- 10"	0'- 10"	J7(i4147)	21.00 lb	47.00/-8.00 lb	-	-
Point	2'- 2"	2'- 2"	J7(i4166)	12.00 lb	59.00/-9.00 lb	-	-
Point	3'- 6"	3'- 6"	J7(i4170)	12.00 lb	59.00/-9.00 lb	-	-
Point	4'- 10"	4'- 10"	J7(i4221)	12.00 lb	59.00/-9.00 lb	-	-
Point	6'- 2"	6'- 2"	J7(i4241)	17.00 lb	81.00/-13.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E33(i87)	313.00 lb	158.00/-24.00 lb	-	-
2	7'- 4"	7'- 8"	E6(i753)	285.00 lb	151.00/-24.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 28'- 4"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length Top:	27'- 8"	Bottom:	27'- 8"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	20'- 4"	3286.53 lb ft	10813.27 lb ft	Passed - 30%	1.25	D + Lr
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	19'- 11 3/4"	1653.99 lb	7689.06 lb	Passed - 22%	1.25	D + Lr
Live Load Deflection	20'- 9"	0'	N/A (L/360)	Passed - L/414	-	Lr
Total Load Deflection	20'- 9"	0'	N/A (L/240)	Passed - L/394	-	D + Lr
Max. Reaction			<u>Supported Mt</u> <u>Supporting Mt</u>			
	0'- 3"	665.70 lb	11484.28 lb    12249.89 lb	Passed - 6%	1.25	D + Lr
	7'- 4"	-917.17 lb	16734.31 lb    -	Passed - 6%	0.90	D
	8'	2677.31 lb	15750.00 lb    15225.00 lb	Passed - 18%	0.90	D
	20'- 4"	2695.61 lb	15750.00 lb    15225.00 lb	Passed - 18%	0.90	D
	21'	-940.59 lb	15750.00 lb    -	Passed - 6%	0.90	D
	28'- 1"	1108.57 lb	11484.40 lb    12250.02 lb	Passed - 10%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

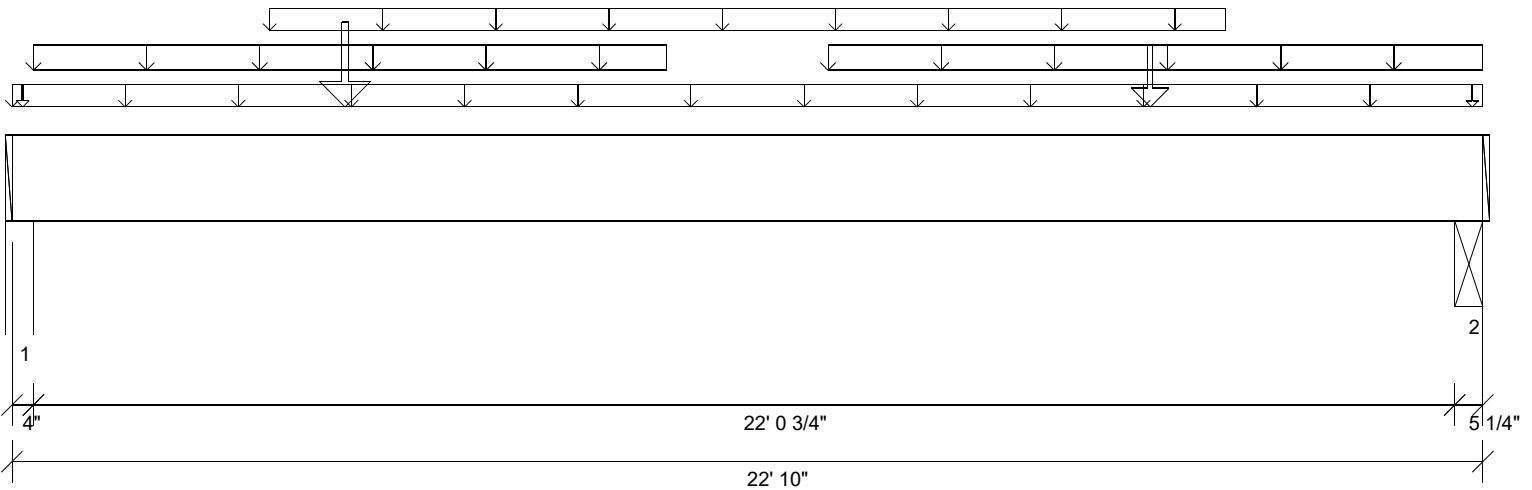
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	28'- 4"	Self Weight	8 lb/ft	-	-	-
Uniform	0'- 4"	28'	User Load	150 lb/ft	-	120 lb/ft	-
Point	28'- 3"	28'- 3"	J1(i4073)	152.00 lb	500.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E12(i54)	382.00 lb	-	390.00/-122.00 lb	-
2	7'- 1"	7'- 7"	PBO1(i532)	-	-	530.00 lb	-
3	7'- 9"	8'- 3"	PBO3(i534)	1813.00 lb	-	1373.00 lb	-
4	20'- 1"	20'- 7"	PBO4(i535)	1813.00 lb	-	1373.00 lb	-
5	20'- 9"	21'- 3"	PBO2(i533)	-	-	530.00 lb	-
6	28'	28'- 4"	E7(i752)	534.00 lb	500.00 lb	390.00/-122.00 lb	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 22'- 10"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length Top:	0'	Bottom:	22'- 3/4"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	5'- 2 1/16"	31174.67 lb ft	68289.58 lb ft	Passed - 46%	1.25	D + Lr
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	1'- 8"	6435.13 lb	19950.00 lb	Passed - 32%	1.25	D + Lr
Live Load Deflection	11'- 1/4"	0'- 7/16"	N/A (L/360)	Passed - L/595	-	Lr
Total Load Deflection	11'- 15/16"	0'- 13/16"	N/A (L/240)	Passed - L/335	-	D + Lr
Max. Reaction	0'- 3"	6597.35 lb	Supported Mt/ 17226.50 lb	Passed - 38%	1.25	D + Lr
	22'- 5 3/4"	5381.33 lb	Supporting Mt/ 20671.96 lb	Passed - 26%	1.25	D + Lr

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

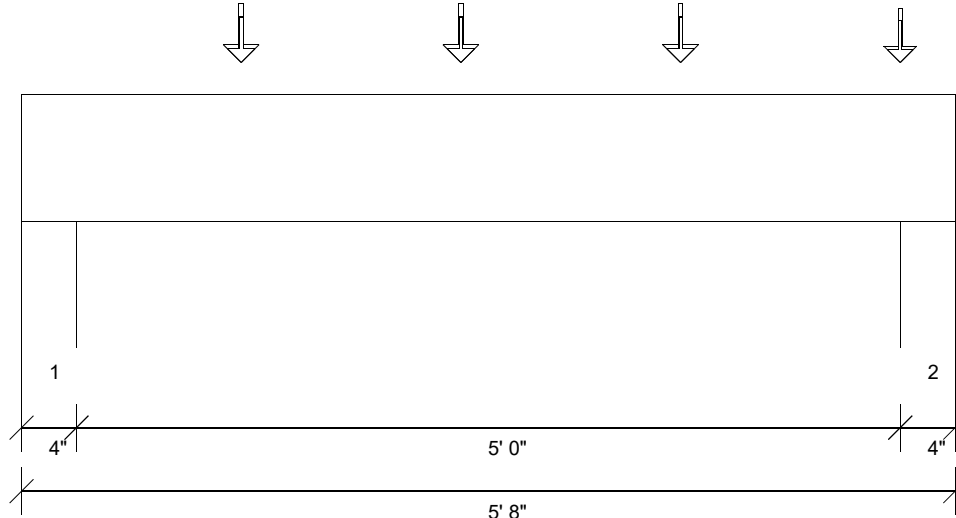
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	22'- 10"	Self Weight	22 lb/ft	-	-	-
Uniform	-0'	22'- 10"	FC2 Floor Material	7 lb/ft	13 lb/ft	-	-
Uniform	0'- 4"	10'- 2"	E58(i122)	65 lb/ft	-	-	-
Uniform	4'	18'- 10"	FC2 Floor Material	-	13 lb/ft	-	-
Uniform	12'- 8"	22'- 10"	E59(i124)	65 lb/ft	-	-	-
Point	0'- 2"	0'- 2"	E91(i162)	28.00 lb	-	-	-
Point	5'- 2 1/16"	5'- 2 1/16"	E58(i122)	2043.00 lb	-	4086.00 lb	-
Point	17'- 8 1/16"	17'- 8 1/16"	E59(i124)	1289.00 lb	-	2578.00 lb	-
Point	22'- 8"	22'- 8"	E60(i125)	3.00 lb	-	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E5(i2)	2859.00 lb	250.00 lb	3739.00 lb	-
2	22'- 4 3/4"	22'- 10"	BM2-3(i4049)	2456.00 lb	252.00 lb	2925.00 lb	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 5'- 8"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 3/8"	Bottom:	5'		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	2'- 8"	1040.97 lb ft	3429.65 lb ft	Passed - 30%	1.00	D + L	
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Shear	1'- 1 1/4"	653.11 lb	2497.50 lb	Passed - 26%	1.00	D + L	
Live Load Deflection	2'- 9 7/8"	0'	N/A (L/360)	Passed - L/999	-	L	
Total Load Deflection	2'- 9 7/8"	0'	N/A (L/240)	Passed - L/999	-	D + L	
Max. Reaction	0'- 3"	659.76 lb	Supported Mt/ 5578.28 lb	Supported Mt/ 10500.32 lb	Passed - 12%	1.00	D + L
	5'- 5"	914.39 lb	5578.28 lb	10500.32 lb	Passed - 16%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

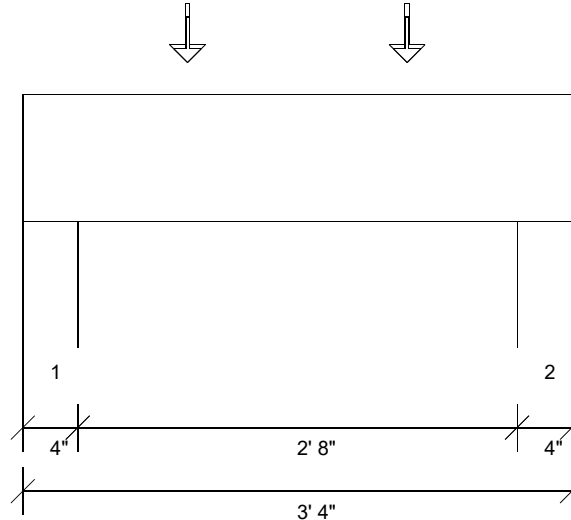
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	5'- 8"	Self Weight	6 lb/ft	-	-	-
Point	1'- 4"	1'- 4"	J2(i3771)	83.00 lb	166.00 lb	-	-
Point	1'- 4"	1'- 4"	J4(i3758)	50.00 lb	100.00 lb	-	-
Point	2'- 8"	2'- 8"	J2(i3742)	83.00 lb	166.00 lb	-	-
Point	2'- 8"	2'- 8"	J4(i3735)	50.00 lb	100.00 lb	-	-
Point	4'	4'	J2(i3732)	83.00 lb	166.00 lb	-	-
Point	4'	4'	J4(i3740)	50.00 lb	100.00 lb	-	-
Point	5'- 4"	5'- 4"	J2(i3779)	71.00 lb	143.00 lb	-	-
Point	5'- 4"	5'- 4"	J4(i3759)	43.00 lb	86.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E77(i147)	229.00 lb	425.00 lb	-	-
2	5'- 4"	5'- 8"	E76(i146)	318.00 lb	602.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 3'- 4"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 6"	Bottom:	2'- 8"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	1'- 8 3/16"	305.13 lb ft	3429.65 lb ft	Passed - 9%	1.00	D + L	
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Shear	1'- 1 1/4"	348.42 lb	2497.50 lb	Passed - 14%	1.00	D + L	
Live Load Deflection	1'- 8"	0'	N/A (L/360)	Passed - L/999	-	L	
Total Load Deflection	1'- 8"	0'	N/A (L/240)	Passed - L/999	-	D + L	
Max. Reaction	0'- 3"	409.13 lb	<u>Supported Mt</u> 5578.13 lb	<u>Supporting Mt</u> 10500.02 lb	Passed - 7%	1.00	D + L
	3'- 1"	408.96 lb	5578.13 lb	10500.02 lb	Passed - 7%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

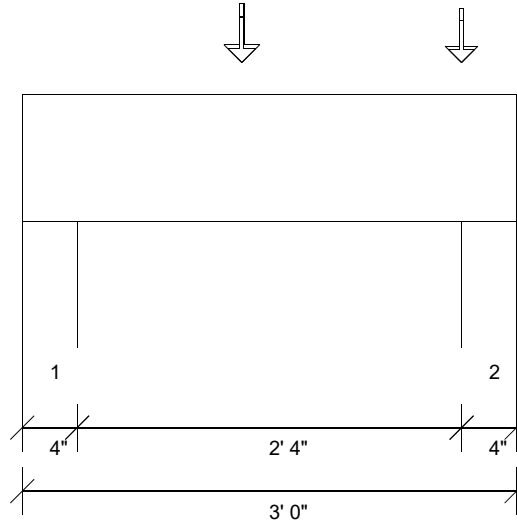
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	3'- 4"	Self Weight	6 lb/ft	-	-	-
Point	1'	1'	J2(i3712)	83.00 lb	166.00 lb	-	-
Point	1'	1'	J4(i3717)	50.00 lb	100.00 lb	-	-
Point	2'- 4"	2'- 4"	J2(i3750)	83.00 lb	166.00 lb	-	-
Point	2'- 4"	2'- 4"	J4(i3769)	50.00 lb	100.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E76(i146)	143.00 lb	266.00 lb	-	-
2	3'	3'- 4"	E78(i148)	143.00 lb	266.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 3'  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 3/8"	Bottom:	2'- 4"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	1'- 4"	261.81 lb ft	3429.65 lb ft	Passed - 8%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	1'- 1 1/4"	240.04 lb	2497.50 lb	Passed - 10%	1.00	D + L
Live Load Deflection	1'- 5 9/16"	0'	N/A (L/360)	Passed - L/999	-	L
Total Load Deflection	1'- 5 9/16"	0'	N/A (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 3"	246.70 lb	<u>Supported Mt</u> 5578.13 lb	Passed - 4%	1.00	D + L
	2'- 9"	513.38 lb	<u>Supporting Mt</u> 10500.02 lb	Passed - 9%	1.00	D + L
			5578.12 lb	10499.99 lb		

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

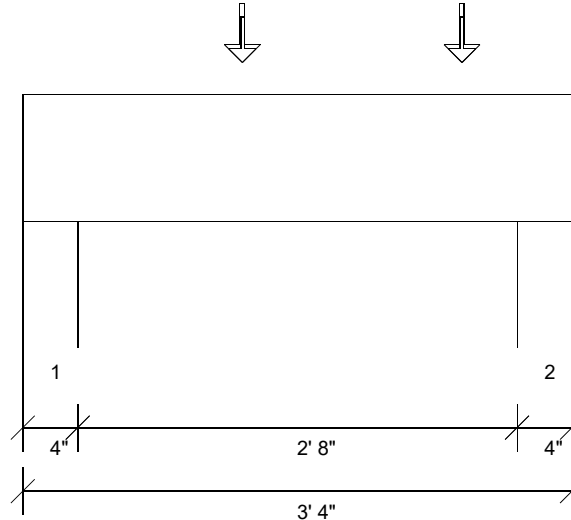
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	3'	Self Weight	6 lb/ft	-	-	-
Point	1'- 4"	1'- 4"	J2(i3780)	83.00 lb	166.00 lb	-	-
Point	1'- 4"	1'- 4"	J4(i3763)	50.00 lb	100.00 lb	-	-
Point	2'- 8"	2'- 8"	J2(i3786)	71.00 lb	143.00 lb	-	-
Point	2'- 8"	2'- 8"	J4(i3760)	43.00 lb	86.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E78(i148)	84.00 lb	151.00 lb	-	-
2	2'- 8"	3'	E80(i150)	181.00 lb	344.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 3'- 4"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'- 3 5/8"	Bottom:	2'- 8"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	1'- 4"	336.09 lb ft	3429.65 lb ft	Passed - 10%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	1'- 1 1/4"	308.67 lb	2497.50 lb	Passed - 12%	1.00	D + L
Live Load Deflection	1'- 7 7/8"	0'	N/A (L/360)	Passed - L/999	-	L
Total Load Deflection	1'- 7 7/8"	0'	N/A (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 3"	315.33 lb	<u>Supported Mt</u> 5578.12 lb	Passed - 6%	1.00	D + L
	3'- 1"	502.76 lb	<u>Supporting Mt</u> 10499.99 lb	Passed - 9%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

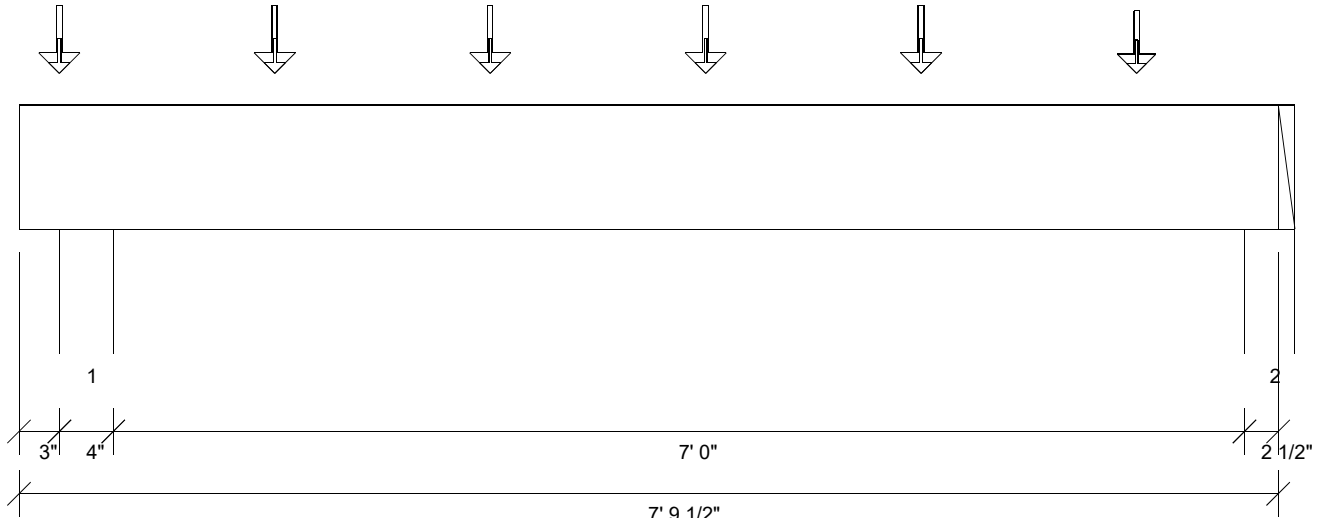
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	3'- 4"	Self Weight	6 lb/ft	-	-	-
Point	1'- 4"	1'- 4"	J2(i3719)	83.00 lb	166.00 lb	-	-
Point	1'- 4"	1'- 4"	J4(i3778)	50.00 lb	100.00 lb	-	-
Point	2'- 8"	2'- 8"	J2(i3772)	83.00 lb	166.00 lb	-	-
Point	2'- 8"	2'- 8"	J4(i3724)	50.00 lb	100.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4"	E80(i150)	112.00 lb	203.00 lb	-	-
2	3'	3'- 4"	E82(i152)	174.00 lb	329.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
 Member Cut Length - 7'- 9 1/2"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0'	Bottom:	1'- 2 1/2"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	4'- 3"	2010.95 lb ft	3429.65 lb ft	Passed - 59%	1.00	D + L	
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft				
Critical Shear	1'- 4 1/4"	967.82 lb	2497.50 lb	Passed - 39%	1.00	D + L	
Live Load Deflection	4'- 11/16"	0'- 1/16"	N/A (L/360)	Passed - L/999	-	L	
Total Load Deflection	4'- 11/16"	0'- 1/16"	N/A (L/240)	Passed - L/999	-	D + L	
Max. Reaction	0'- 5"	1377.98 lb	Supported Mt: 5578.13 lb	Supported Mt: 10500.00 lb	Passed - 25%	1.00	D + L
	7'- 8"	1030.98 lb	3187.44 lb	6562.38 lb	Passed - 32%	1.00	D + L

**Design Notes:**

- \* The deflection at the cantilever for either live and/or total loads is less than 3/8" and therefore has been excluded from the deflection ratio considerations.
- \* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	7'- 9 1/2"	Self Weight	6 lb/ft	-	-	-
Point	0'- 3"	0'- 3"	J1(i3716)	107.00 lb	213.00 lb	-	-
Point	0'- 3"	0'- 3"	J4(i3784)	27.00 lb	55.00 lb	-	-
Point	1'- 7"	1'- 7"	J1(i3747)	107.00 lb	213.00 lb	-	-
Point	1'- 7"	1'- 7"	J4(i3777)	27.00 lb	55.00 lb	-	-
Point	2'- 11"	2'- 11"	J1(i3726)	107.00 lb	213.00 lb	-	-
Point	2'- 11"	2'- 11"	J4(i3783)	27.00 lb	55.00 lb	-	-
Point	4'- 3"	4'- 3"	J1(i3713)	107.00 lb	213.00 lb	-	-
Point	4'- 3"	4'- 3"	J4(i3715)	27.00 lb	55.00 lb	-	-
Point	5'- 7"	5'- 7"	J1(i3739)	107.00 lb	213.00 lb	-	-
Point	5'- 7"	5'- 7"	J4(i3749)	27.00 lb	55.00 lb	-	-
Point	6'- 11"	6'- 11"	J1(i3736)	93.00 lb	187.00 lb	-	-
Point	6'- 11"	6'- 11"	J4(i3738)	24.00 lb	48.00 lb	-	-

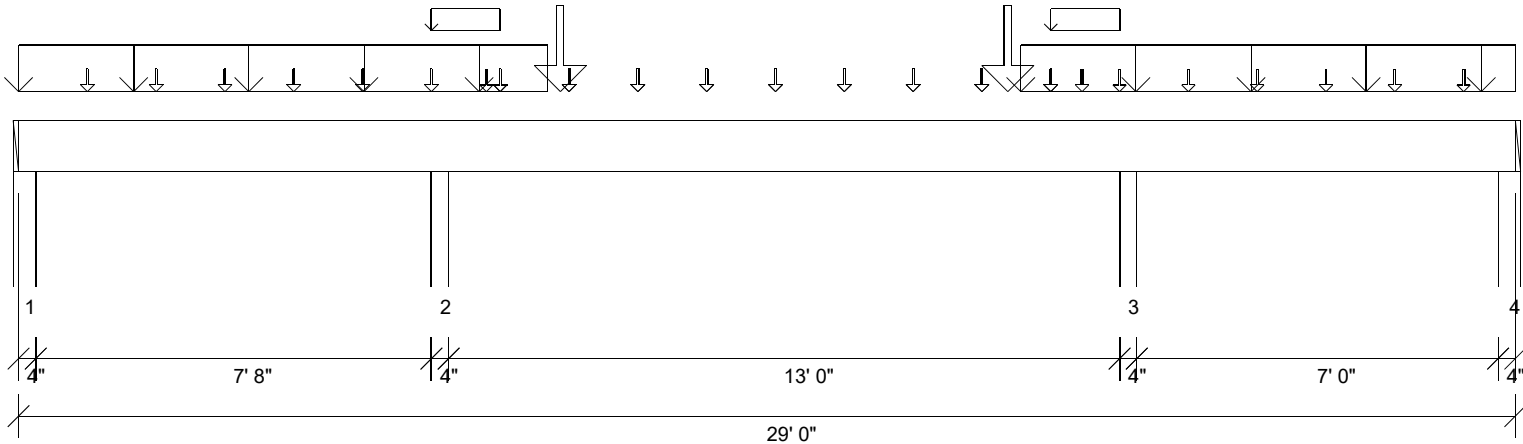
**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'- 3"	0'- 7"	E95(i168)	480.00 lb	912.00 lb	-	-
2	7'- 7"	7'- 9 1/2"	E97(i547)	354.00 lb	663.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.





Graphical Illustration - Not To Scale  
 Member Cut Length - 29'  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length Top:	0'	Bottom:	1'- 2 1/2"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	21'- 6"	12716.31 lb ft	39896.69 lb ft	Passed - 32%	1.25	D + Lr
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	20'- 4 1/8"	8186.51 lb	14806.64 lb	Passed - 55%	1.25	D + Lr
Live Load Deflection	14'- 9 9/16"	0'- 1/8"	N/A (L/360)	Passed - L/999	-	Lr
Total Load Deflection	14'- 9 3/4"	0'- 3/16"	N/A (L/240)	Passed - L/896	-	D + 0.75(L + Lr)
Max. Reaction			<u>Supported Mt</u> <u>Supporting Mt</u>			
	0'- 3"	978.78 lb	17226.63 lb    18375.08 lb	Passed - 6%	1.25	D + Lr
	0'- 3"	-660.28 lb	17226.63 lb    -	Passed - 4%	1.25	D + Lr
	8'- 2"	11754.03 lb	17226.68 lb    18375.14 lb	Passed - 68%	1.25	D + Lr
	21'- 6"	11812.03 lb	17226.68 lb    18375.14 lb	Passed - 69%	1.25	D + Lr
	28'- 9"	756.11 lb	17226.59 lb    18375.04 lb	Passed - 4%	1.25	D + Lr
	28'- 9"	-959.77 lb	17226.59 lb    -	Passed - 6%	1.25	D + Lr

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	29'	Self Weight	16 lb/ft	-	-	-
Uniform	0'	10'- 3"	User Load	150 lb/ft	-	200 lb/ft	-
Uniform	8'	9'- 4"	FC3 Floor Material	1 lb/ft	3 lb/ft	-	-
Uniform	19'- 5"	29'	User Load	150 lb/ft	-	200 lb/ft	-
Uniform	20'	21'- 4"	FC3 Floor Material	1 lb/ft	3 lb/ft	-	-
Point	1'- 4"	1'- 4"	J4(i3728)	54.00 lb	108.00 lb	-	-
Point	2'- 8"	2'- 8"	J4(i3758)	54.00 lb	108.00 lb	-	-
Point	4'	4'	J4(i3735)	54.00 lb	108.00 lb	-	-
Point	5'- 4"	5'- 4"	J4(i3740)	54.00 lb	108.00 lb	-	-
Point	6'- 8"	6'- 8"	J4(i3759)	54.00 lb	108.00 lb	-	-
Point	8'	8'	J4(i3721)	53.00 lb	106.00 lb	-	-
Point	9'- 3/4"	9'- 3/4"	J3(i3775)	9.00 lb	17.00 lb	-	-
Point	9'- 4"	9'- 4"	J4(i3717)	52.00 lb	105.00 lb	-	-
Point	9'- 4"	9'- 4"	J3(i3720)	45.00 lb	89.00 lb	-	-
Point	10'- 6"	10'- 6"	User Load	2392.00 lb	-	4783.00 lb	-
Point	10'- 8"	10'- 8"	J3(i3753)	72.00 lb	144.00 lb	-	-
Point	10'- 8"	10'- 8"	J4(i3769)	52.00 lb	105.00 lb	-	-
Point	12'	12'	J3(i3745)	72.00 lb	144.00 lb	-	-
Point	12'	12'	J4(i3722)	52.00 lb	104.00 lb	-	-
Point	13'- 4"	13'- 4"	J3(i3743)	72.00 lb	144.00 lb	-	-
Point	13'- 4"	13'- 4"	J4(i3763)	52.00 lb	105.00 lb	-	-
Point	14'- 8"	14'- 8"	J3(i3751)	72.00 lb	144.00 lb	-	-
Point	14'- 8"	14'- 8"	J4(i3760)	52.00 lb	104.00 lb	-	-
Point	16'	16'	J3(i3746)	72.00 lb	144.00 lb	-	-
Point	16'	16'	J4(i3752)	52.00 lb	104.00 lb	-	-
Point	17'- 4"	17'- 4"	J3(i3785)	72.00 lb	144.00 lb	-	-
Point	17'- 4"	17'- 4"	J4(i3755)	52.00 lb	104.00 lb	-	-
Point	18'- 8"	18'- 8"	J3(i3774)	72.00 lb	144.00 lb	-	-
Point	18'- 8"	18'- 8"	J4(i3778)	52.00 lb	105.00 lb	-	-

- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.

- This report is based on modeled conditions input by the user. Actual field conditions may differ from those shown. These results should be reviewed by a qualified design professional.



**Job: Lot 7 Raven Ridge**  
 Member Type: Beam | Level: 2nd Floor  
 MiTek SAPPHERE™ Supply Version 8.2.2.241.Update5  
 Designed by Single Member Design Engine

**Label: BM1-3-i3555**

Page: 17 of 18  
 Date: 03/12/2019 14:58:07

**Member: 3 - onCENTER LVL 2.0E 1 3/4" x 11 7/8"**

**Status: Design Passed**

Point	19'- 2"	19'- 2"	User Load	2392.00 lb	-	4783.00 lb	-
Point	20'	20'	J3(i3725)	54.00 lb	107.00 lb	-	-
Point	20'	20'	J4(i3724)	52.00 lb	105.00 lb	-	-
Point	20'- 7 1/4"	20'- 7 1/4"	J3(i3767)	18.00 lb	35.00 lb	-	-
Point	21'- 4"	21'- 4"	J4(i3784)	30.00 lb	59.00 lb	-	-
Point	22'- 8"	22'- 8"	J4(i3777)	31.00 lb	61.00 lb	-	-
Point	24'	24'	J4(i3783)	31.00 lb	61.00 lb	-	-
Point	25'- 4"	25'- 4"	J4(i3715)	31.00 lb	61.00 lb	-	-
Point	26'- 8"	26'- 8"	J4(i3749)	31.00 lb	61.00 lb	-	-
Point	28'	28'	J4(i3738)	27.00 lb	54.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			Snow
				Dead	Floor Live	Roof Live	
1	0'	0'- 4"	E64(i134)	233.00 lb	257.00/-242.00 lb	781.00/-787.00 lb	-
2	8'	8'- 4"	E69(i138)	4820.00 lb	1769.00 lb	6901.00 lb	-
3	21'- 4"	21'- 8"	E95(i168)	4719.00 lb	1602.00 lb	6968.00 lb	-
4	28'- 8"	29'	E91(i162)	63.00 lb	150.00/-276.00 lb	734.00/-900.00 lb	-

**Errors, Warnings & Notes:**

- \* CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



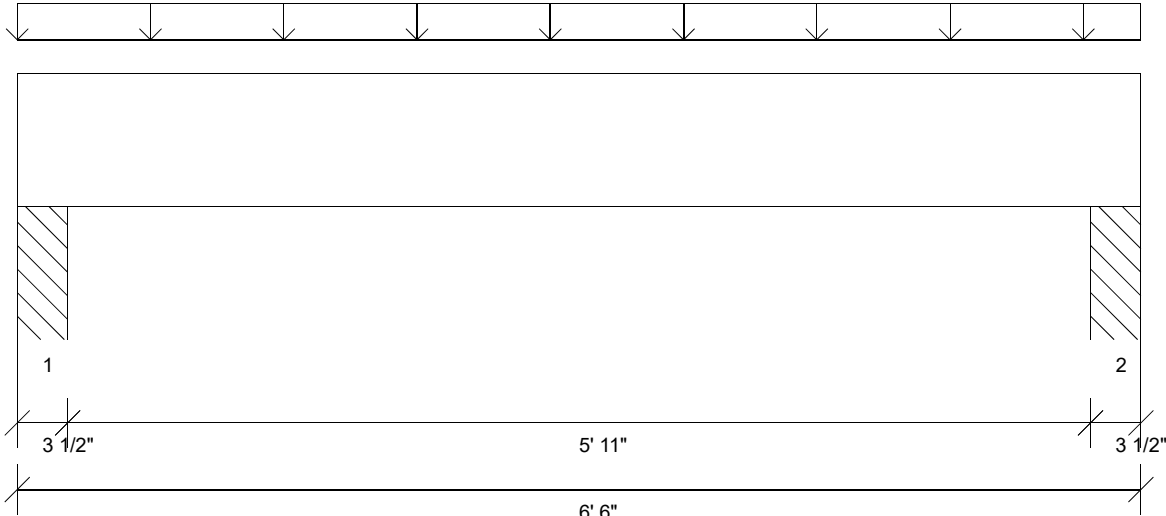
**Job: Lot 7 Raven Ridge**  
 Member Type: Beam | Level: 2nd Floor  
 MiTek SAPPHERE™ Supply Version 8.2.2.241.Update5  
 Designed by Single Member Design Engine

**Label: 2-2x10's-i3843**

Page: 18 of 18  
 Date: 03/12/2019 14:58:07

**Member: 2 - 2x10 SPF No.2**

**Status: Design Passed**



Graphical Illustration - Not To Scale  
 Member Cut Length - 6'- 6"  
 MemberPitch - 0/12

**Design Information:**

Building Code:	IBC 2012	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 6'- 6"	Bottom:	6'- 6"		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	3'- 3"	672.33 lb ft	3429.65 lb ft	Passed - 20%	1.00	D + L
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)		0.00 lb ft	0.00 lb ft			
Critical Shear	1'- 3/4"	319.43 lb	2497.50 lb	Passed - 13%	1.00	D + L
Live Load Deflection	3'- 3"	0'	N/A (L/360)	Passed - L/999	-	L
Total Load Deflection	3'- 3"	0'	N/A (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 2 1/2"	474.59 lb	Supported Mt  4940.63 lb	Passed - 10%	1.00	D + L
	6'- 3 1/2"	474.59 lb	Supporting Mt  7612.51 lb	Passed - 10%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	6'- 6"	Self Weight	6 lb/ft	-	-	-
Uniform	0'	6'- 6"	User Load	70 lb/ft	70 lb/ft	-	-

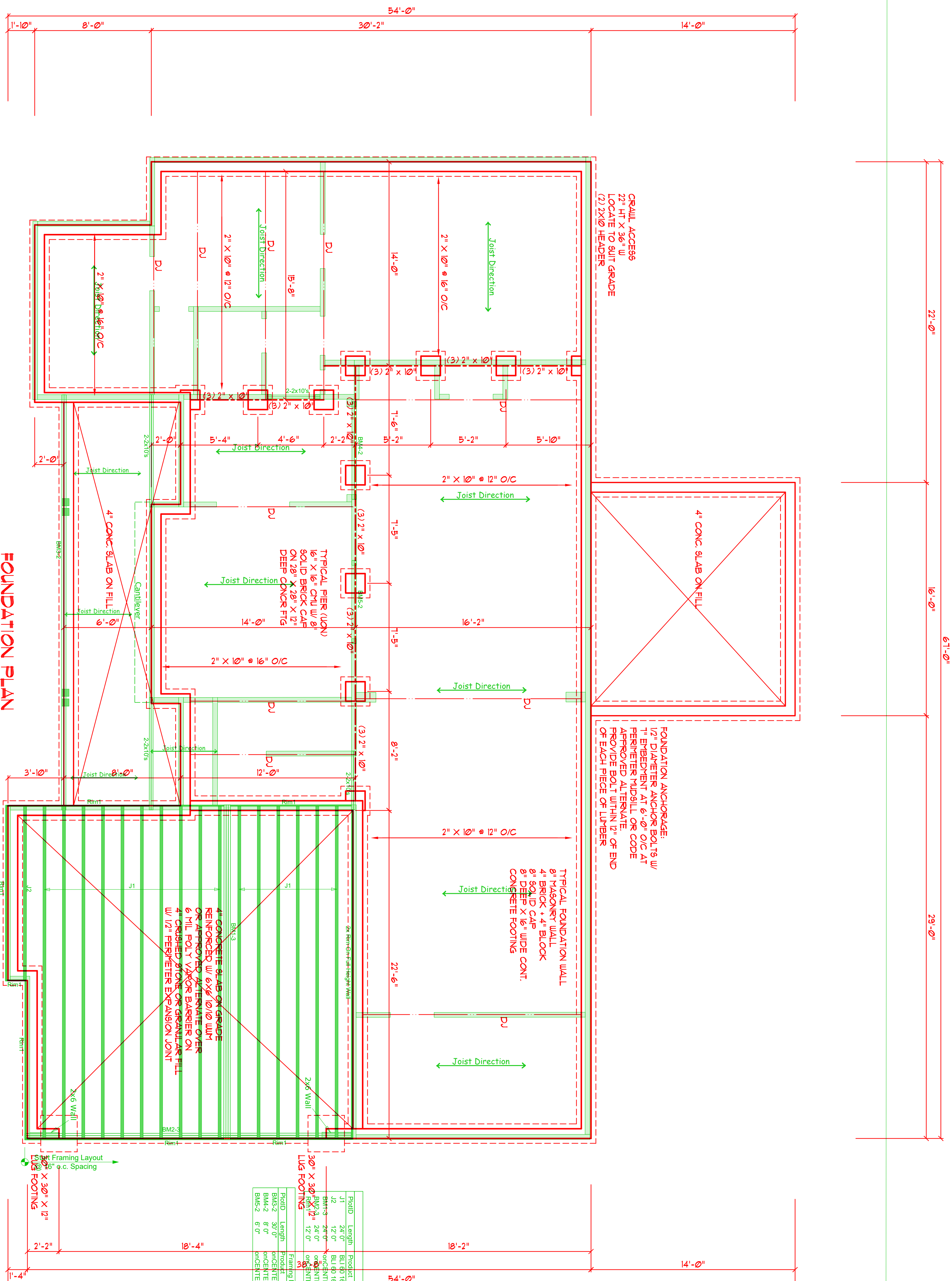
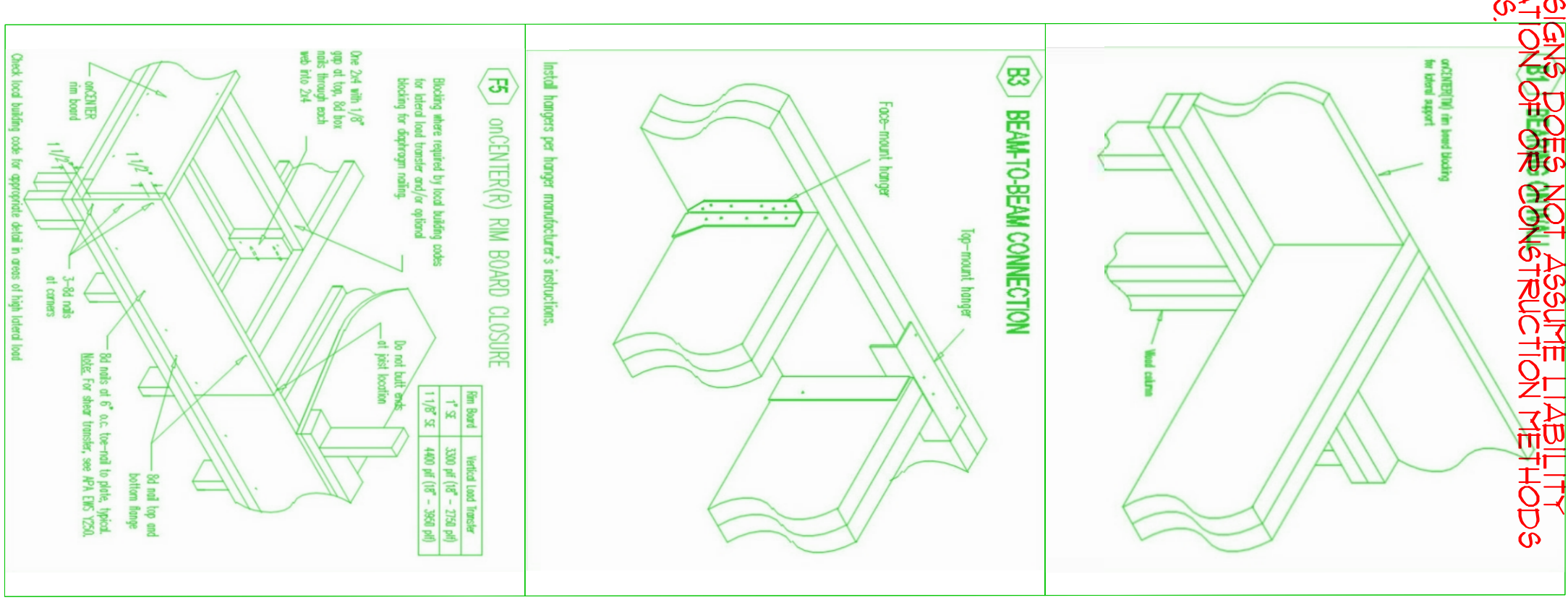
**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 3 1/2"	PBO5(i3789)	247.00 lb	227.00 lb	-	-
2	6'- 2 1/2"	6'- 6"	PBO6(i3816)	247.00 lb	228.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as sloped dead loads.
- \* Calculation of lateral stability factor (KL) is based on the width of one ply.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

BUILDER SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT TIME OF CONSTRUCTION.  
 ALL CONSTRUCTION SHALL CONFORM TO THE 2018 EDITION OF THE NC STATE BUILDING CODE.  
 CODES GOVERN OVER DRAWING DIMENSIONS GOVERN OVER SCALE.  
 VERIFY ALL MECHANICAL REQUIREMENTS BEFORE FRAMING.  
 UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE.



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

**FOUNDATION ANCHORAGE:**  
 1/2" DIAMETER ANCHOR BOLTS W/ T' EMBEDMENT AT 6" O.C. AT PERIMETER MIDSPAN OR CODE APPROVED ALTERNATE PROVIDE BOLT WITHIN 12" OF END OF EACH PIECE OF LUMBER.

**TYPICAL FOUNDATION WALL:**  
 8" TYPICAL WALL  
 4" BRICK W/ 4" BELL  
 8" SOLID CAP BLOCK  
 8" DEEP X 16" WIDE CONT. CONCRETE FOOTING

**4" CONCRETE SLAB ON GRADE REINFORCED W/ 6X6 @ 12" O.C. WITH OR AFFORDABLE ALTERNATE OVER 6" HILL POLY VAPOR BARRIER ON 4" GRANULAR FILL OR GRANULAR FILL W/ 1/2" PERIMETER EXPANSION JOINT**

Product	Length	Width	Height	Notes
11	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
12	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
13	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
14	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
15	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
16	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
17	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
18	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
19	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
20	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
21	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
22	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
23	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
24	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
25	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
26	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
27	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
28	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
29	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
30	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
31	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
32	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
33	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
34	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
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40	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
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46	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
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97	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
98	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
99	24'-0"	16'-0"	16'-0"	FOUNDATION WALL
100	24'-0"	16'-0"	16'-0"	FOUNDATION WALL

- FOUNDATION NOTES**
- 1) SPECIFIC NOTES ON THE PLANS TAKE PRECEDENCE OVER THESE GENERAL NOTES.
  - 2) STRUCTURAL CONCRETE IS TO BE 4000 PSI PRECAST AND PLACED IN ACCORDANCE WITH ACI 308 AND 318.
  - 3) FOOTINGS TO BE ON UNDISTURBED EARTH. A MIN OF 12" BELOW ADJACENT FINISHED GRADE OR AS OTHERWISE DIRECTED BY THE LOCAL INSPECTOR.
  - 4) BEARING CAPACITY OF 2000 PSF. CONTRACTOR TO VERIFY SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
  - 5) FOOTINGS AND PILES SHALL BE ENCASED UNDER THEIR RESPECTIVE EARTH. PROVIDE 3" MIN. FOOTING PROJECTION FROM FACE OF MASONRY.
  - 6) MASONRY DEPTH OF UNBALANCED FILL AGAINST MASONRY WALLS TO BE AS SPECIFIED IN VOLUME VII, SECTION R-504.3 OF THE NC STATE CODE.
  - 7) PLASTER TO BE BONDED TO PERIMETER FOUNDATION WALL.
  - 8) PROVIDE FOUNDATION WATERPROOFING AND DRAIN WITH POSITIVE SLOPE TO OUTLET AS REQUIRED BY FOUNDATION WALL.
  - 9) PROVIDE PERIMETER INSULATION WITH BASEMENT SLABS.
  - 10) CORNER FOUNDATION WALL AS REQUIRED TO ACCOMMODATE BRICK VENEER.
  - 11) CRAWL SPACE TO BE GRADED LEVEL AND CLEAR OF ALL DEBRIS.

**ALLOWABLE FIER HEIGHTS**

SIZE	HOLLOW	SOLID
8"X6"	2'-0"	5'-0"
12"X6"	4'-0"	8'-0"
16"X6"	5'-4"	12'-0"
24"X24"	8'-0"	

FOOTINGS 30"X30"X10" MINIMUM UNLESS NOTED OTHERWISE

**NOTE**  
 1) USE 2X10 @ 16" O.C. @ 9' PF.  
 2) MINIMUM SPECIFIED (U.O.U.)  
 3) JOIST DIRECTION DESIGNATED BY ARROWS ABOVE.  
 4) DOUBLE ALL JOIST PARALLEL TO WALLS ABOVE.  
 5) MINIMUM JOIST SPACE ACCESS TO BE 12" HEIGHT X 36" WIDTH.  
 6) JOIST SPACING TO BE (3)2X10'S @ 9' PF.  
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**CRAWL SPACE VENTILATION**  
 PROVIDE AT LEAST 10 SQ. FT. NET FREE VENTILATION AREA FOR EACH 50 SQ. FT. OF CRAWL SPACE AREA.  
 21ST / 50" = 1465 SQ. FT. REQ'D.  
 REDUCE REQUIRED AREA TO 10 SQ. FT. NET FREE VENTILATION AREA FOR EACH 5000 SQ. FT. OF CRAWL SPACE WITH APPROVED VAPOR BARRIER.  
 PROVIDE (1) VENT WITHIN 3'-0" OF EACH CORNER.  
 REFER TO MANUFACTURER SPECIFICATIONS FOR VENT SIZE AND DETERMINE NUMBER OF VENTS REQUIRED.

**DOUBLE JOIST CONSTRUCTION WITH FILL**

**SQUASH BLOCKS AT CONCEALED LOADS**

**JOIST SPACING BETWEEN PILES OR BEAMS**

**Plan No. 2662-15 A-3**

**YUNICANNON DESIGNS**  
 CUSTOM HOME PLANS  
 FLOUAT-VARINA, NC - (919) 421-1374

**MILTON BUILT HOMES**

**DOUBLE JOIST CONSTRUCTION WITH FILL**

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

DATE: 07/20/15

REVISIONS:

DESIGN BY: JMK  
 CHECK BY: JMK  
 DATE: 07/20/15

6 SHEET

1 OF 3