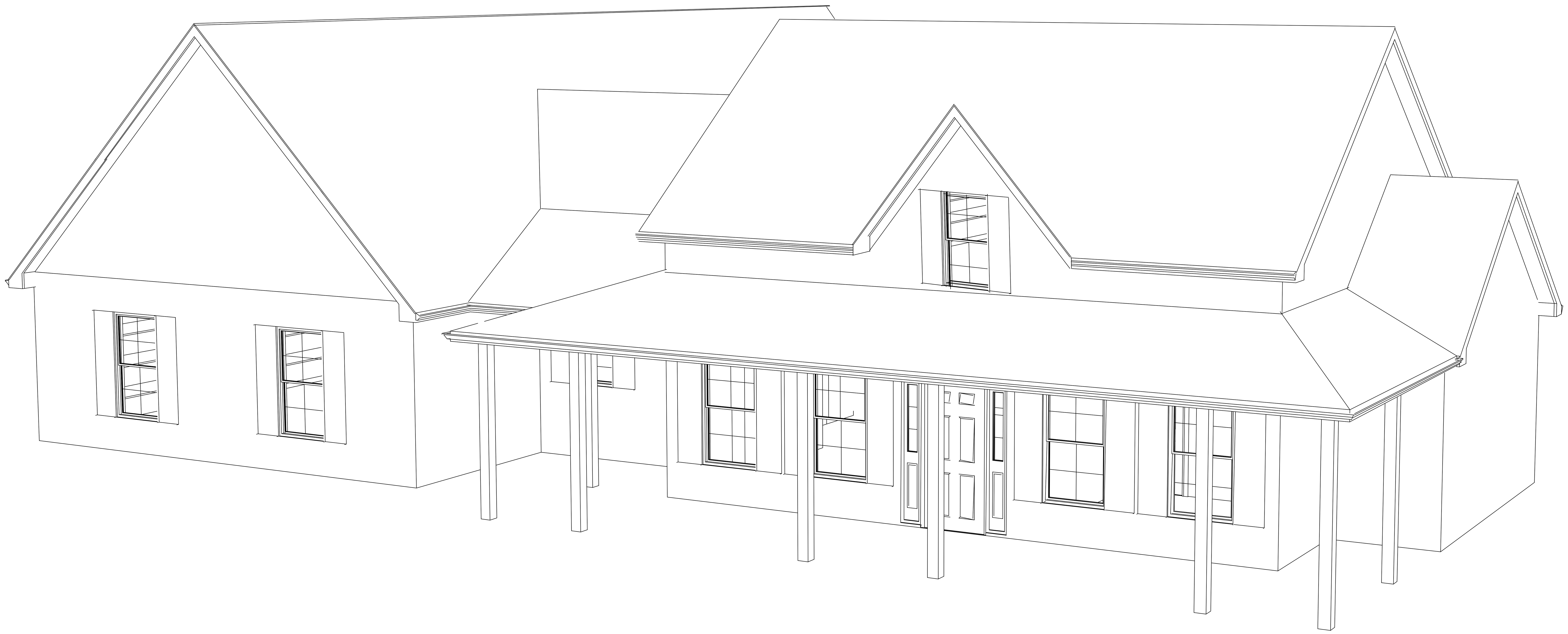
NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes
and is subject to field inspection and verification.

APPROVED
Limited building only review
Permit holder responsible for
full compliance with the code

08/03/2021

Harnett
COUNTY
NORTH CAROLINA



PAGE: 1

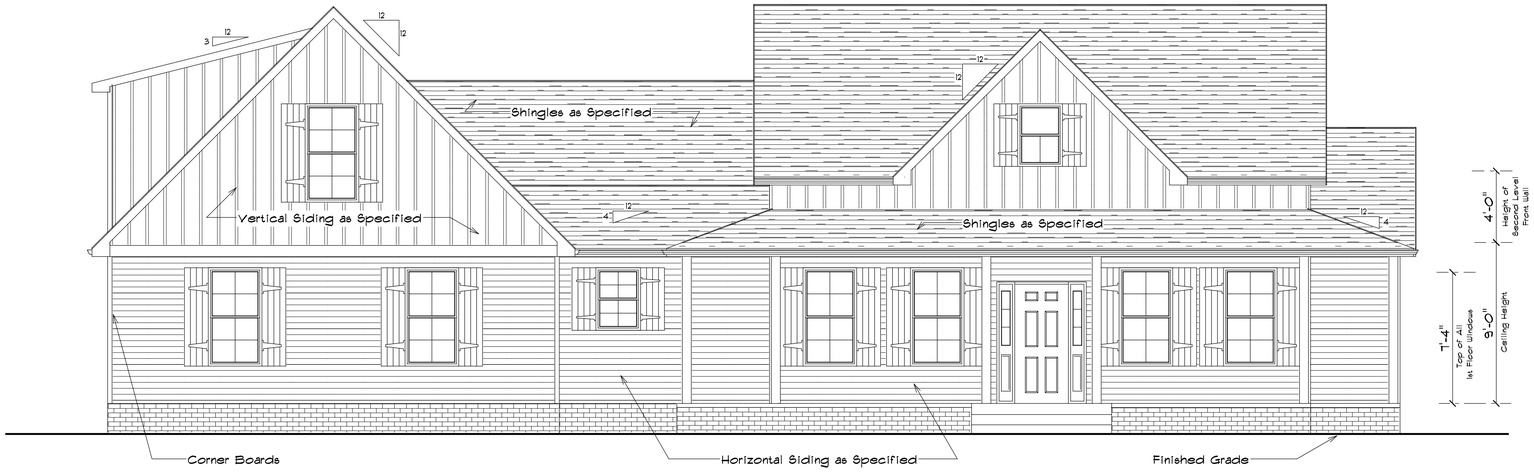
DATE: 02/16/21

3D STREET VIEW

KENDALL & SHELBY TART RESIDENCE

688 Turner Ashby Rd,
Martinsville, VA 24112

JOE GIBBS



KENDALL & SHELBY TARTART RESIDENCE

688 Turner Ashby Rd,
Martinsville, VA 24112

JOE GIBBS

FRONT & REAR ELEVATION

DATE: 02/16/21

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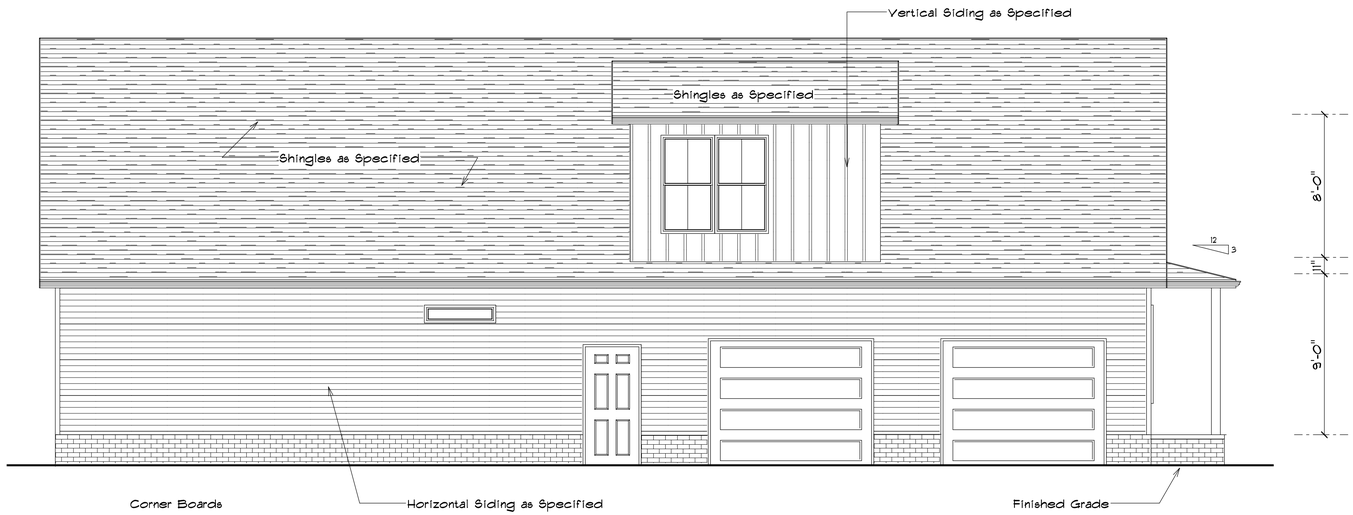
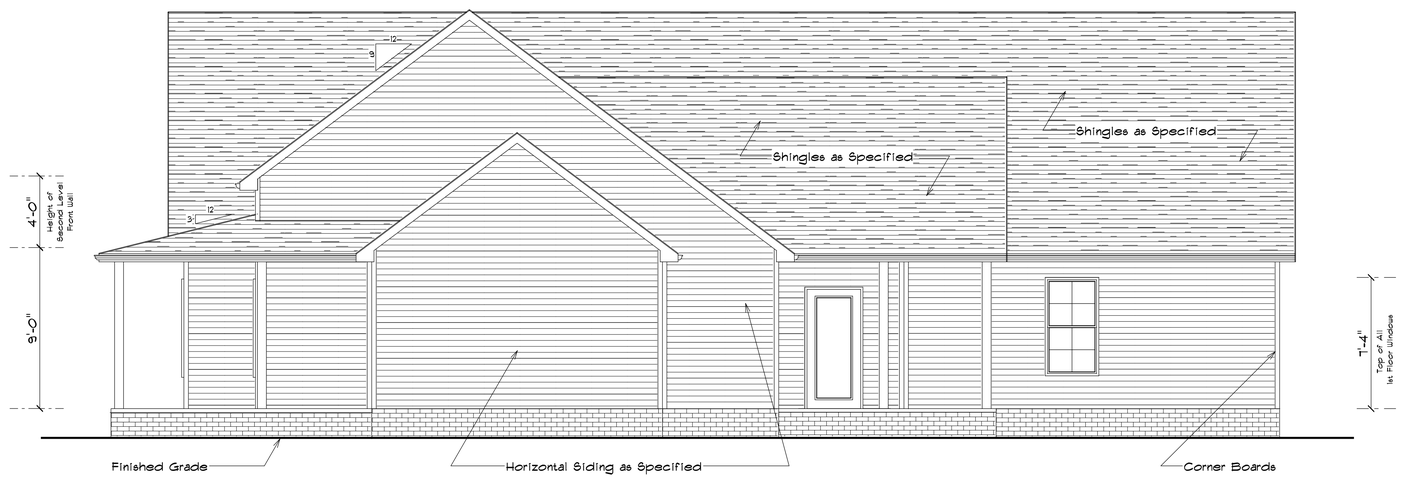


LEFT ELEVATION

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



RIGHT ELEVATION

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

PAGE: 6

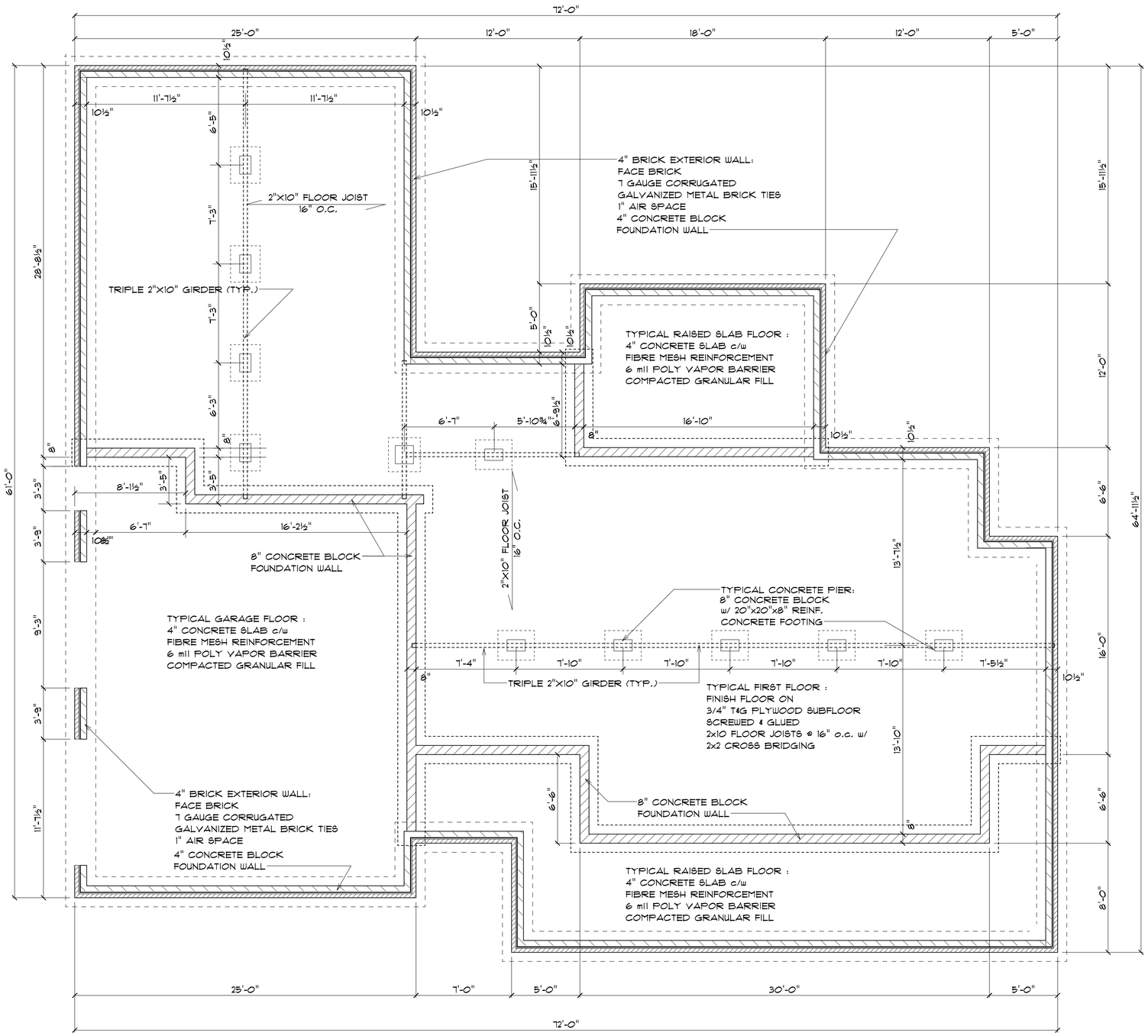
DATE: 02/16/21

LEFT & RIGHT ELEVATION

KENDALL & SHELBY TARTART RESIDENCE

688 Turner Ashby Rd,
Martinsville, VA 24112

JOE GIBBS



CRAWL SPACE

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

PAGE: 2

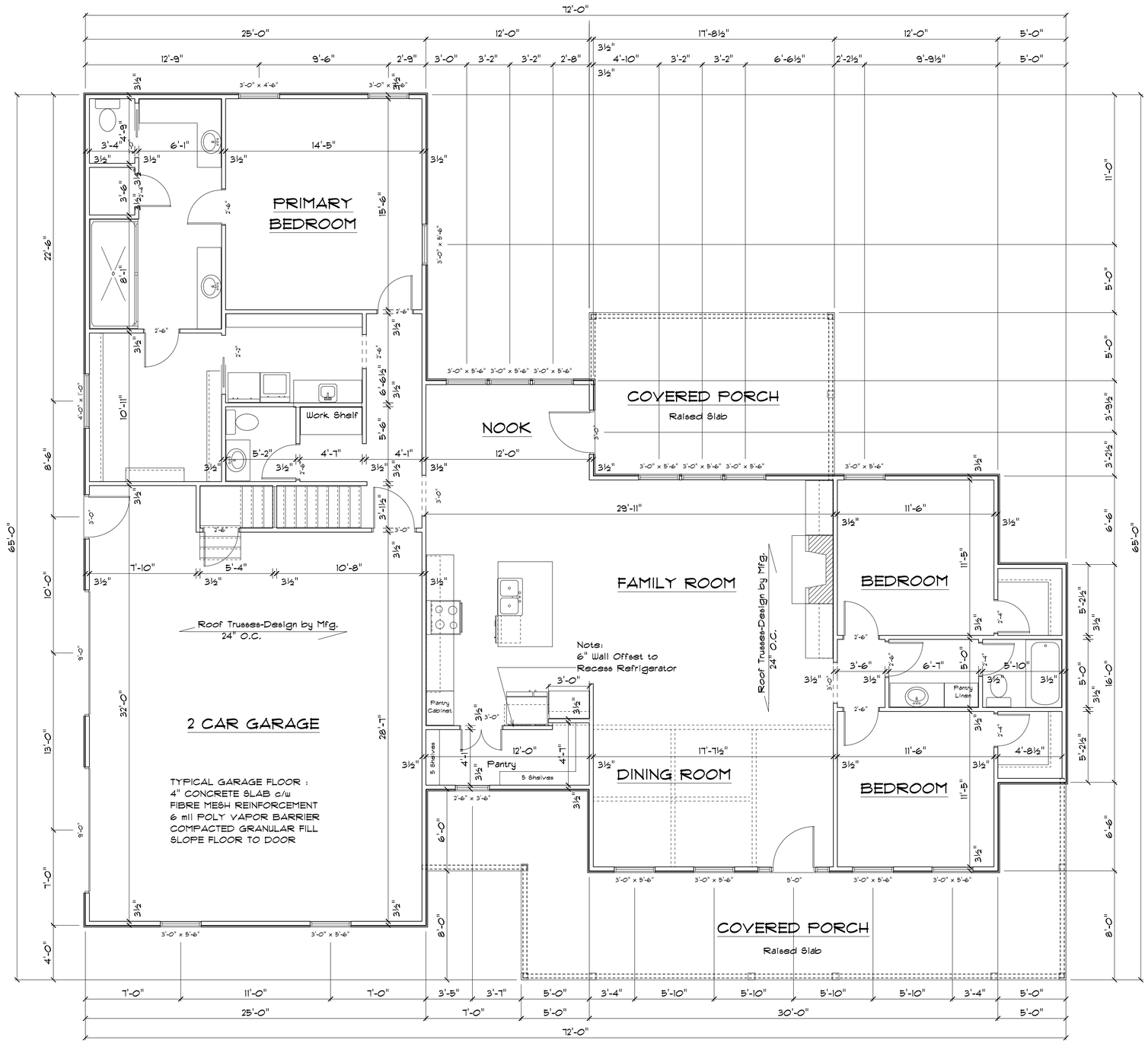
DATE: 07/29/21 RVS

CRAWL SPACE

KENDALL & SHELBY TARTART RESIDENCE

688 Turner Ashby Rd,
Martinsville, VA 24112

JOE GIBBS



1ST FLOOR PLAN

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

AREA	
Heated Area	
1st Floor	2101
2nd Floor	458
Total	2559
Unheated Area	
1st Floor	1385
2nd Floor	403
Total	1788
Total Area	
1st Floor	3486
2nd Floor	861
Total	4347

PAGE: 3

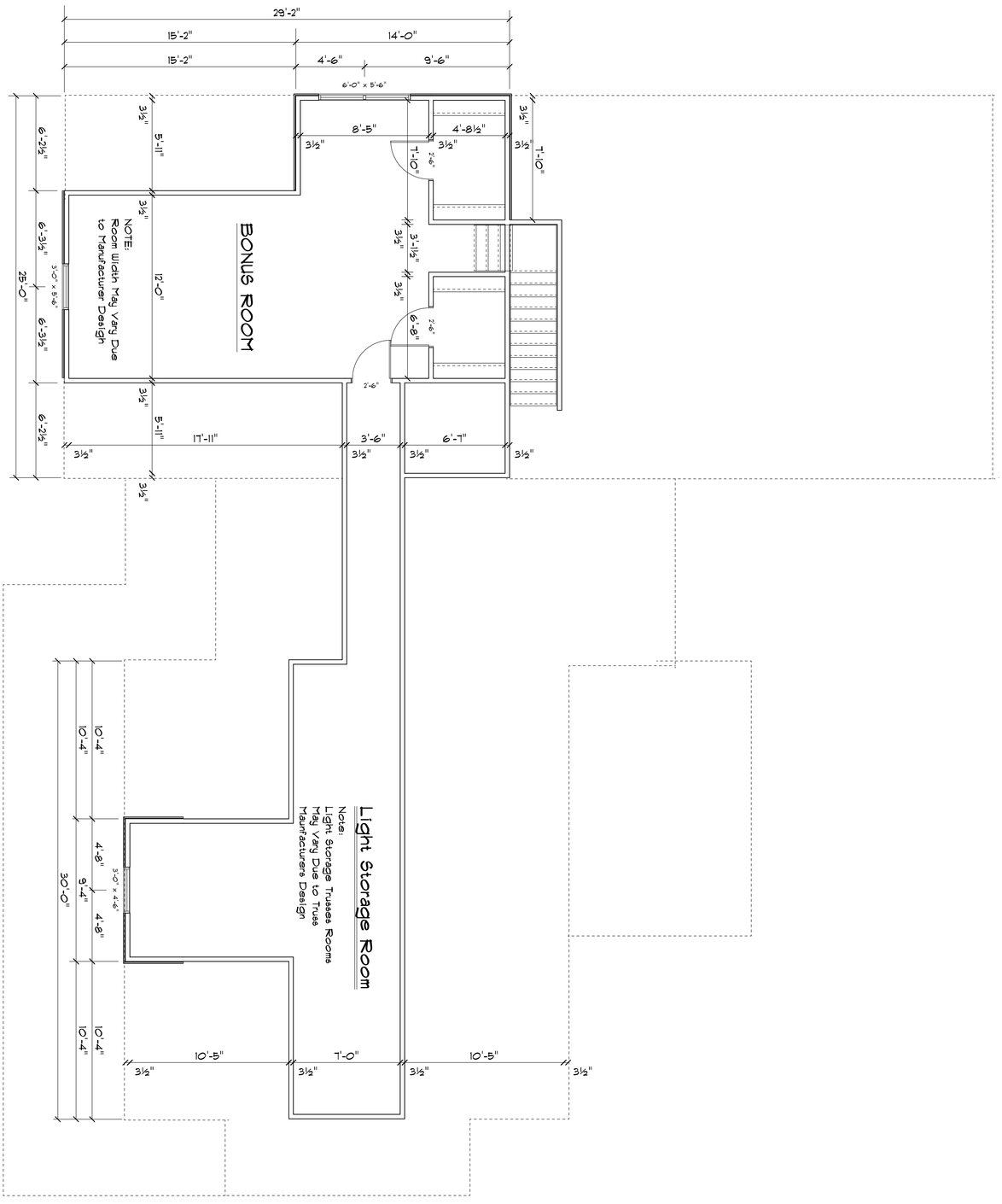
DATE: 02/16/21

1ST FLOOR PLAN

KENDALL & SHELBY TART RESIDENCE

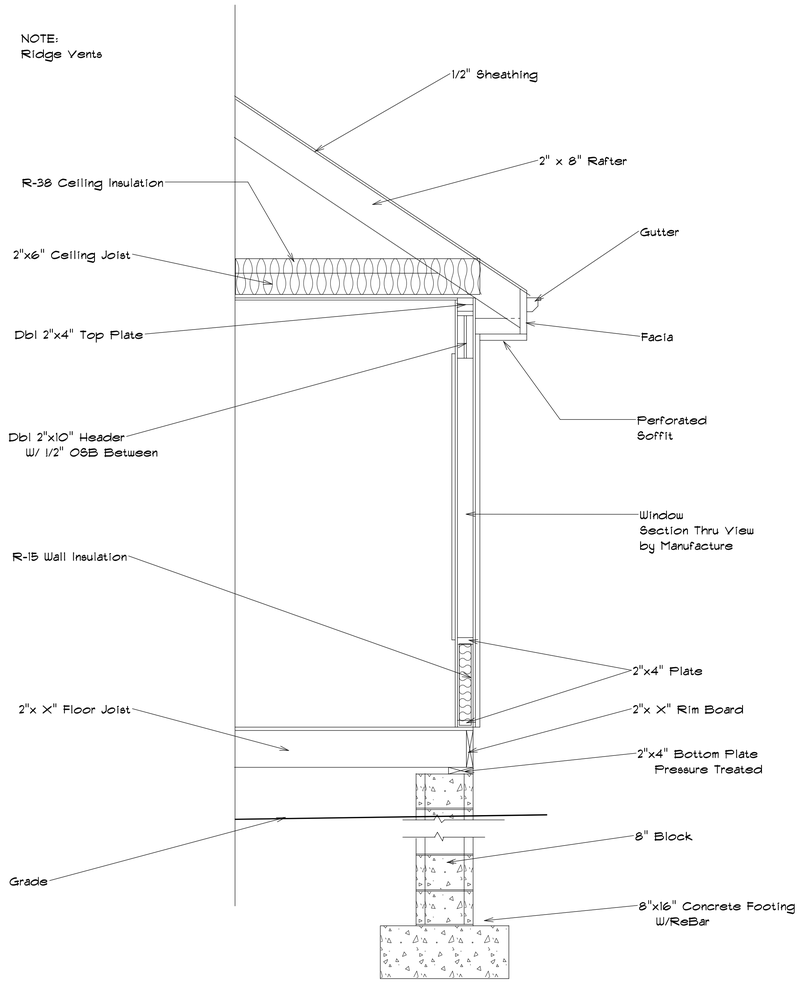
688 Turner Ashby Rd,
Martinsville, VA 24112

JOE GIBBS



2ND FLOOR PLAN

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



SECTION THROUGH

PAGE: 7

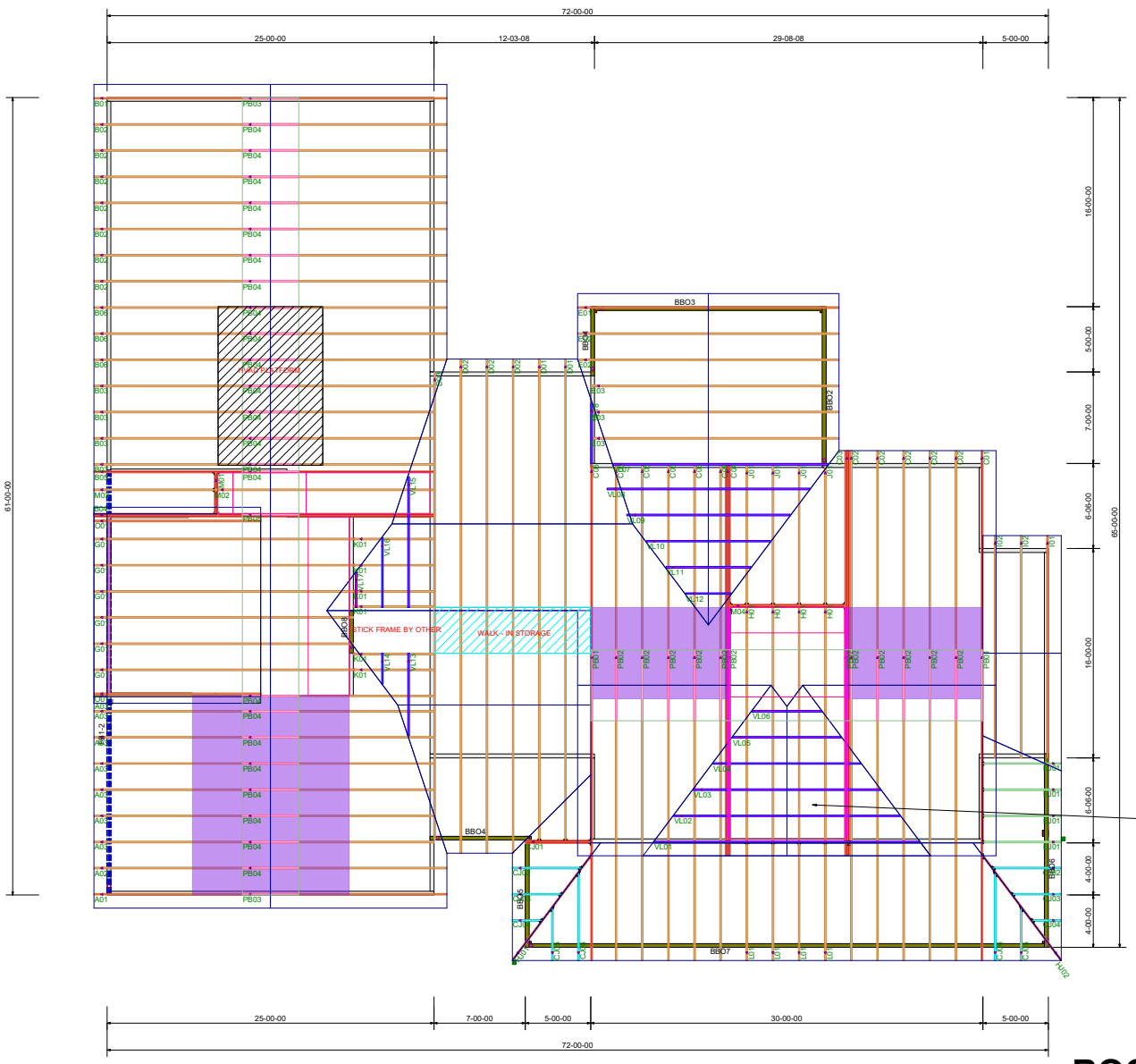
DATE: 02/16/21

SECTION THRU

KENDALL & SHELBY TARTART
RESIDENCE

688 Turner Ashby Rd,
Martinsville, VA 24112

JOE GIBBS



Products						
PlotID	Length	Product	Plies	Net Qty	Fab Type	
FB1-2	34-00-08	2.0 RigidLam DF LVL 1-3/4 x 11-7/8	2	2	FP	

Truss Connector Total List		
Manuf	Product	Qty
USP	JUS26	2
USP	MSH29	5
USP	MSHA26L	1
USP	One RT10A	6
USP	One RT7A	110
USP	THD26	2
USP	THDH26-2	4

ROOF TRUSS FRAMING

DRAWING SCALE : 1/4" = 1'

Kempsville Building Materials
A Division of the Carter Lumber Company

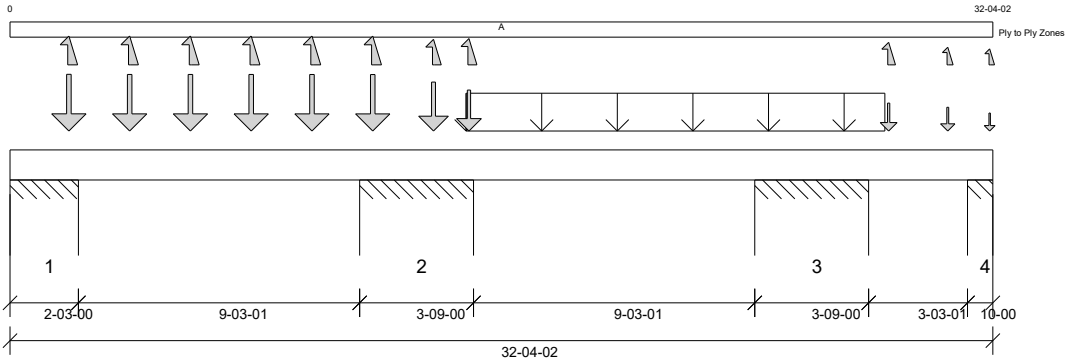
MICHEAL SHEAN
TART
ROOF TRUSS PLACEMENT PLAN

REVISIONS	
DATE	BY
3-23-21	PG

PROJECT NUMBER
21030031
SHEET NUMBER
1 / 1

MiTek	Customer: Street 1: City: Customer P...	Job Name: **A** Level: **1st FLOOR** Label: **FB1-2 - i47** Type: **Beam**	**2 Ply Member** **2.0 RigidLam DF LVL 1-3/4 x 11-7/8**	Status: **Design Passed**

Illustration Not to Scale. Pitch: 0/12 | Designed by Single Member Design Engine in MiTek® Structure Version 8.5.0.207.Update6.26 | Report Version: 2020.10.28 07/29/2021 10:22



DESIGN INFORMATION

Building Code:	IRC2015
Design Methodology:	ASD
Risk Category:	II (General Construction) Residential
Service Condition:	Dry
LL Deflection Limit:	L/360, 0.75" (absolute)
TL Deflection Limit:	L/240, 1.00" (absolute)

Lateral Restraint Requirements:

Both ends of the member and the outer supports must be laterally restrained. Top and bottom edges of the member must be fully restrained or have the following maximum unbraced length:

Top: 13'- 7 1/2" Bottom: 0'

Bearing Stress of Support Material:

- 875 psi Wall @ 0'- 1 1/2"
- 875 psi Wall @ 2'- 1 1/2"
- 875 psi Wall @ 11'- 7 9/16"
- 875 psi Wall @ 15'- 1 9/16"
- 875 psi Wall @ 24'- 7 5/8"
- 875 psi Wall @ 28'- 1 9/16"
- 875 psi Wall @ 31'- 7 1/8"

ANALYSIS RESULTS

Design Criteria	Location	Load Combination	LDF	Design	Limit	Result
Max Pos. Moment:	19'- 11 3/8"	D + L	1.00	3948 lb ft	21278 lb ft	Passed - 19%
Max Neg. Moment:	2'- 1 1/2"	D + 0.75(L + Lr)	1.15	5320 lb ft	24470 lb ft	Passed - 22%
Max Shear:	3'- 2 7/8"	D + 0.75(L + Lr)	1.15	3117 lb	9241 lb	Passed - 34%
Live Load (LL) Pos. Defl.:	19'- 11 7/8"	L		0.040"	L/360	Passed - L/999
Live Load (LL) Neg. Defl.:	28'- 3 1/16"	L		0.012"	L/360	Passed - L/999
Total Load (TL) Pos. Defl.:	7'- 5/16"	D + 0.75(L + Lr + 0.6W)		0.055"	L/240	Passed - L/999

SUPPORT AND REACTION INFORMATION

ID	Input Bearing Length	Controlling Load Combination	LDF	Downward Reaction	Uplift Reaction	Resistance of Member	Resistance of Support	Result
1	7-04	0.6D + 0.6W	1.60	192 lb		26478 lb	22203 lb	Passed - 1%
1	7-04	D + 0.75(L + Lr)	1.15		-2569 lb	-	-	
1	1-06-00	D + 0.75(L + Lr)	1.15	7093 lb		47250 lb	55125 lb	Passed - 15%
1	1-06-00	0.6D + 0.6W	1.60		-564 lb	-	-	
2	1-06-00	D + 0.75(L + Lr)	1.15	5843 lb		47250 lb	55125 lb	Passed - 12%
2	1-06-00	0.6D + 0.6W	1.60		-775 lb	-	-	
2	1-06-00	D + L	1.00	5825 lb		47250 lb	55125 lb	Passed - 12%
3	1-06-00	D + L	1.00	5216 lb		47250 lb	55125 lb	Passed - 11%
3	10-04	D + L	1.00	1542 lb		26906 lb	31391 lb	Passed - 6%
3	10-04	0.6D + 0.6W	1.60		-179 lb	-	-	
4	10-00	D + Lr	1.15	626 lb		26255 lb	30631 lb	Passed - 2%
4	10-00	D + 0.75(L + Lr + 0.6W)	1.60		-157 lb	-	-	

LOADING

Type	Start Loc	End Loc	Source	Face	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
Self Weight	0'	32'- 4 1/8"	Self Weight	Top	11 lb/ft	-	-	-	-
Uniform	15'- 1/8"	28'- 9 1/2"	User Load	Top	188 lb/ft	500 lb/ft	-	-	-
Point	1'- 11 1/4"	1'- 11 1/4"	A02(c01)	Top	699 lb	488 lb	289 lb	563/-19 lb	246/-768 lb
Point	3'- 11 1/4"	3'- 11 1/4"	A03(c02)	Top	699 lb	481 lb	289 lb	563/-19 lb	246/-771 lb
Point	5'- 11 1/4"	5'- 11 1/4"	A03(c01)	Top	699 lb	481 lb	289 lb	563/-19 lb	246/-771 lb
Point	7'- 11 1/4"	7'- 11 1/4"	A03(c05)	Top	699 lb	481 lb	289 lb	563/-19 lb	246/-770 lb
Point	9'- 11 1/4"	9'- 11 1/4"	A03(c04)	Top	698 lb	481 lb	289 lb	562/-19 lb	246/-769 lb
Point	11'- 11 1/4"	11'- 11 1/4"	A03(c07)	Top	697 lb	481 lb	288 lb	561/-19 lb	246/-767 lb
Point	13'- 11 1/4"	13'- 11 1/4"	A03(c06)	Top	629 lb	388 lb	227 lb	441/-15 lb	183/-597 lb
Point	15'- 1 1/4"	15'- 1 1/4"	A03(c03)	Top	571 lb	148 lb	198 lb	382/-11 lb	140/-642 lb
Point	28'- 11"	28'- 11"	B04(c01)	Top	214 lb	-	133 lb	250 lb	142/-451 lb
Point	30'- 10 5/16"	30'- 10 5/16"	M03(c01)	Top	162 lb	-	88 lb	166 lb	98/-188 lb
Point	32'- 2 7/8"	32'- 2 7/8"	B05(c01)	Top	-	-	48 lb	106/-3 lb	51/-97 lb

UNFACTORED REACTIONS

ID	Start Loc	End Loc	Source	Dead (D)	Live (L)	Snow (S)	Roof Live (Lr)	Wind (W)
1	0'	2'- 3"	W1(i4)	1848 lb	1292/-90 lb	729 lb	1461/-91 lb	1248 lb/ -2819 lb
==>	0'- 1 1/2"	0'- 1 1/2"	W1(i4)	-	21/-90 lb	-	32/-1 lb	-
==>	2'- 1 1/2"	2'- 1 1/2"	W1(i4)	1848 lb	1271 lb	729 lb	1429/-90 lb	-
2	11'- 6 1/16"	15'- 3 1/16"	W26(i42)	4608 lb	6494/-886 lb	1450/-40 lb	3561/-905 lb	1248 lb/ -2819 lb
==>	11'- 7 9/16"	11'- 7 9/16"	W26(i42)	3233 lb	2442/-596 lb	1450 lb	2823/-79 lb	-
==>	15'- 1 9/16"	15'- 1 9/16"	W26(i42)	1375 lb	4052/-290 lb	-40 lb	738/-826 lb	-
3	24'- 6 1/8"	28'- 3 1/16"	W27(i43)	1991 lb	5751/-56 lb	138 lb	380/-151 lb	1248 lb/ -2819 lb
==>	24'- 7 5/8"	24'- 7 5/8"	W27(i43)	1805 lb	4447 lb	22 lb	109/-56 lb	-
==>	28'- 1 9/16"	28'- 1 9/16"	W27(i43)	186 lb	1304/-56 lb	116 lb	271/-95 lb	-
4	31'- 6 1/8"	32'- 4 1/8"	W28(i44)	341 lb	160/-185 lb	149 lb	301/-4 lb	1248 lb/ -2819 lb

MiTek	Customer: Street 1: City: Customer P...	Job Name: **A** Level: **1st FLOOR** Label: **FB1-2 - i47** Type: **Beam**	**2 Ply Member** **2.0 RigidLam DF LVL 1-3/4 x 11-7/8**	Status: **Design Passed**

DESIGN 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 projected dead loads.
- Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- Tributary Loads have been generated based on actual spacing between members in the model which may differ from the default system spacing. The actual loads applied to the member are shown in the Specified Loads table.
- 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. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.
- Review all loads and reactions to ensure that the member/bearing/connector/structure can resist adequately. Unless already specified on this report, anchorage for uplift reactions to be specified by others. Installation of member and accessories (if required) as per manufacturer's instruction.
- Design of member is based on a released bearing condition at Support . Ensure that the member is allowed to deflect upward at these supports.

PLY TO PLY CONNECTION

- Zone A: Factored load = 0 plf. Use 12d (0.148"x3.25") nails. LDF = 1.00. Qty = 66. Row = 2, Spacing = 12"
  12d (0.148"x3.25") nails properties: D = 0.148" , L = 3.25". Fastener capacity = 117 lbs. X1 = 2.25" , Y1 = 0.75", Y2 = 1.5"
  Install fasteners from one face.
  X1 = Minimum end distance, X2 = Minimum edge distance, Y2 = Minimum row spacing.

FASTENER INSTALLATION – 2 ROWS (FROM ONE FACE)