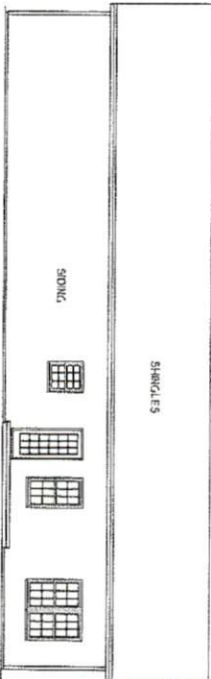


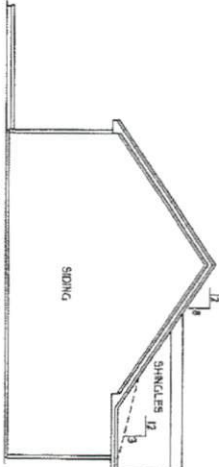
FRONT ELEVATION
SCALE 1/4" = 1'-0"

ATTIC VENTILATION:
THE NET FREE VENTILATING AREA SHALL BE NOT LESS THAN 1 TO 30 OF THE AREA OF THE SPACE VENTILATED AT LEAST TO PREVENT THE SPACE VENTILATED AREA FROM BEING OVERHEATED. VENTILATORS LOCATED IN THE ATTIC SHALL BE PROVIDED WITH CONING VANES AT LEAST 2 FEET ABOVE EAVE OR CORNICE VENTS BE PROVIDED BY EAVE OR CORNICE VENTILATION TO CROSS ATTIC AREA TO BE VENTILATED BY SOFT.

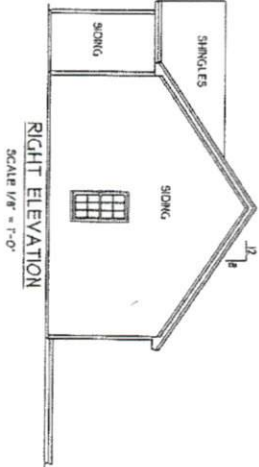
1897/92 - BLD SOFT. NET FREE AREA



REAR ELEVATION
SCALE 1/8" = 1'-0"



LEFT ELEVATION
SCALE 1/8" = 1'-0"



RIGHT ELEVATION
SCALE 1/8" = 1'-0"

ENERGY COMPLIANCE
ZONE 3 - MAX. GLAZING U-FACTOR .35
FLOORS ON EAVE AND CORNICE SHALL BE INSULATED
ZONE 4 - MAX. GLAZING U-FACTOR .35
R-VALUE - CEILING R18, WALLS R15,
FLOORS R11 FOR WAKE, ORANGE COUNTY

DATE: 02/25/2020
SCALE: 1/8" = 1'-0"

1 STORY

020320

ANY DEVIATION OF THE SPECIFIED MEASUREMENTS OR DIMENSIONS SHALL BE AS PERMITTED BY THE ARCHITECT'S SIGNATURE AND SEAL.



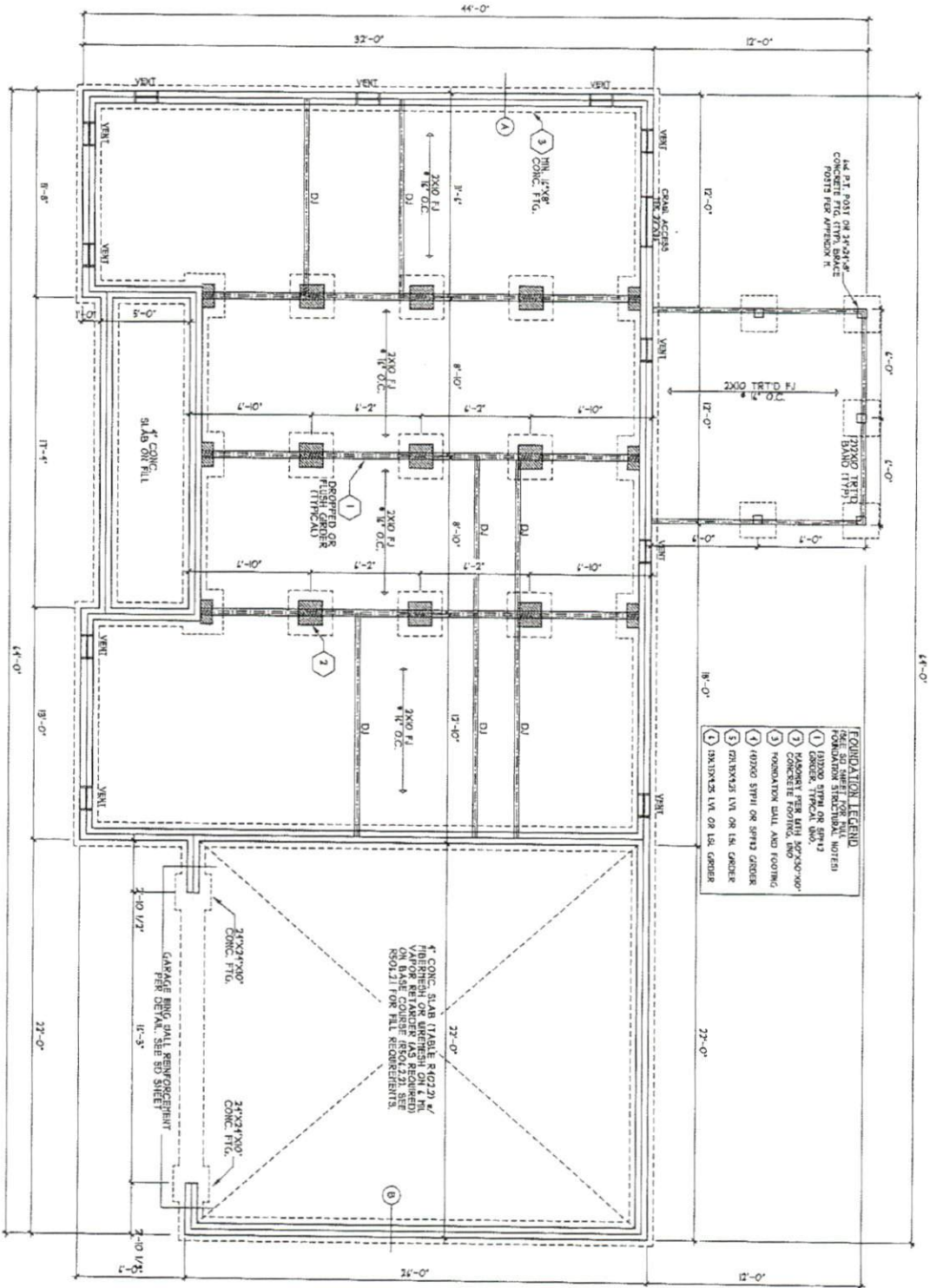
H SQUARED HOME DESIGN, INC.

HEATHER HALL
165 HEATHERSTONE CT
BENSON NC 27504
(919) 207-1403

SQUARE FOOTAGE	
FIRST FLOOR	= 1240
FRONT PORCH	= 88
PATIO/WOOD DECK	= 144
GARAGE	= 572

HEATED FOOTAGE:
#1240

"THE DAKOTA II"
(RIGHT HAND GARAGE)
JRT MANG. PROP.




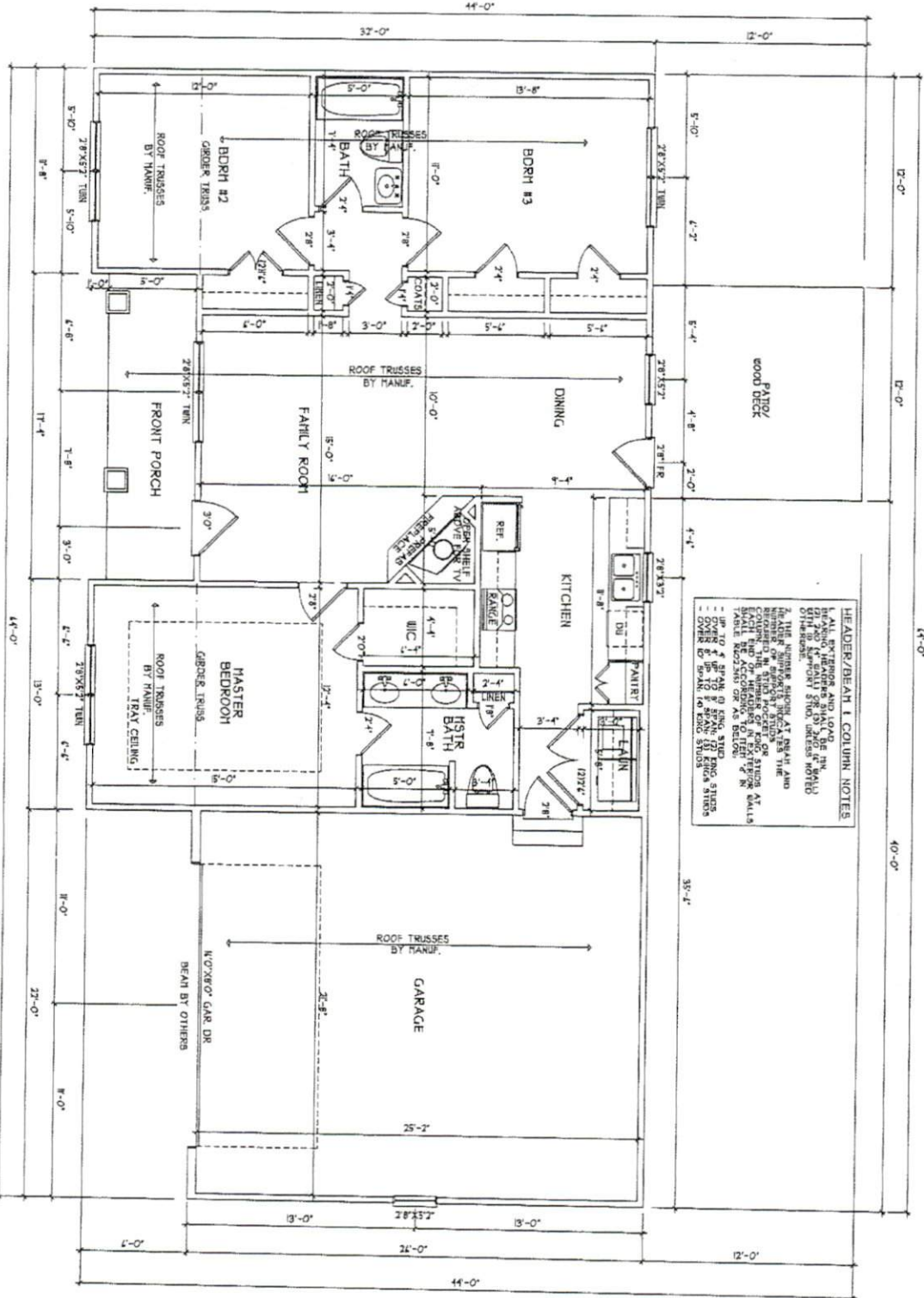
DAMP PROOFING
 FOR DAMP PROOFING, REFER TO SECTION 405.1.01. IN 208 EDITION NC RES. CODES

RND VENTS
 R40/20 = 8.3 SQ. FT. RETO
 R3/8" = 1 VENT
 WITH VAPOR BARRIER
 NONE VENT MUST BE WITHIN 3'-0" OF EVERY CORNER

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

REFER TO THE ARCHITECTURE FOR DISTANCE AND STRUCTURAL NOTES

 H SQUARED HOME DESIGN, INC. HEATHER HALL 165 HEATHERSTONE CT BENSON NC 27504 (919) 207-1403	SQUARE FOOTAGE: FIRST FLOOR = 1240 FRONT PORCH = 88 PATIO/WOOD DECK = 144 GARAGE = 572	HEATED FOOTAGE: #1240	"THE DAKOTA II" (RIGHT HAND GARAGE) JRT MANG. PROP.
	DATE: 07/28/2020 DESIGNER: JRT CHECKER: JRT SCALE: 1/4" = 1'-0"	NOTES: THE PLAN HAS BEEN DRAWN IN ACCORDANCE WITH THE NORTH CAROLINA STATE RESIDENTIAL CONSTRUCTION CODE (NCC) AND ALL APPLICABLE CODES AND REGULATIONS. THE DESIGNER HAS NOT CONDUCTED A VISUAL INSPECTION OF THE SITE OR THE EXISTING STRUCTURE. THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.	NO.: 020320



HEADER/BEAM I COLUMN NOTES

ALL BEAMS, JOISTS, BRACKETS, HANGERS SHALL BE 2" X 8" UNLESS OTHERWISE NOTED.

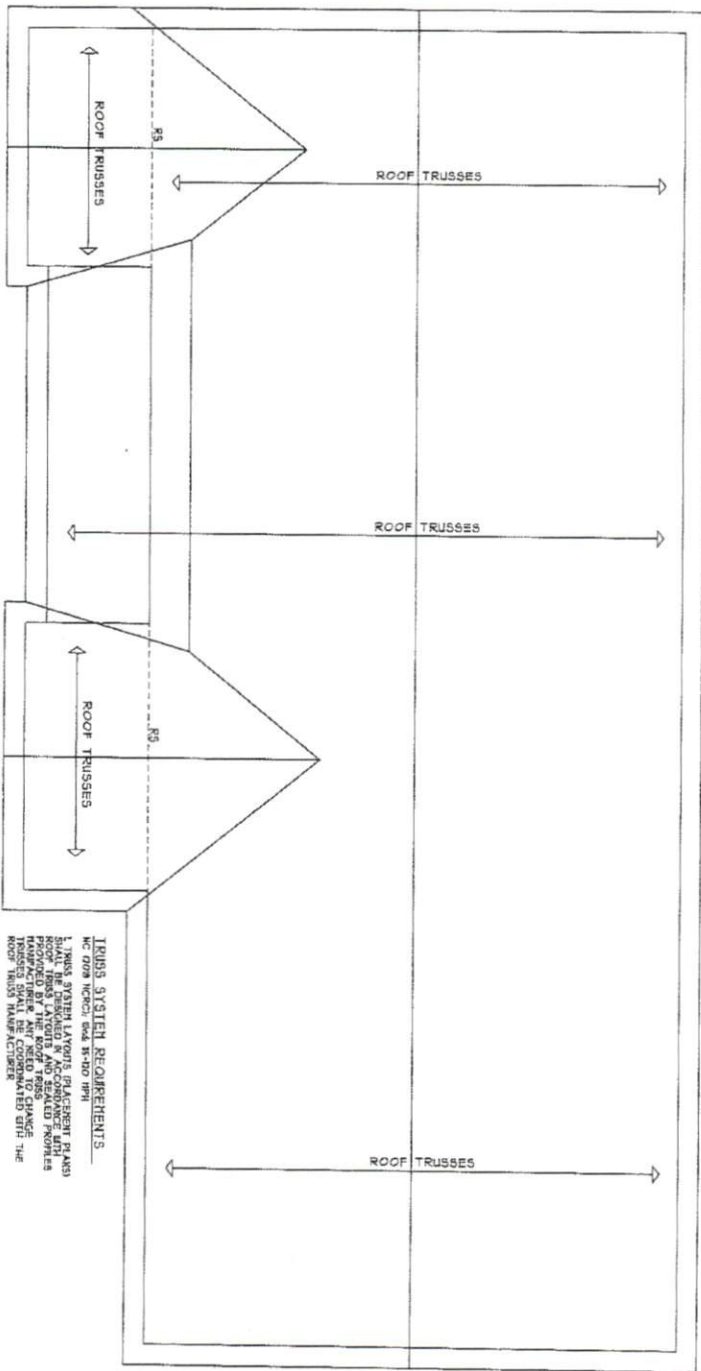
FOR THE NUMBERING SYSTEM AT EACH AND EVERY JOIST, BRACKET, HANGER, AND COLUMN, THE NUMBER OF JOIST SHALL BE ACCORDING TO ITEM # IN TABLE NOTATIONS OR AS BELOW:

- DOWN # FROM TO BE SPAN 127 END STRIPS
- OVER # FROM TO BE SPAN 127 END STRIPS

REFER TO THE SHEETS FOR DETAILS AND STRUCTURAL NOTES

FIRST FLOOR PLAN
SCALE 1/4" = 1'-0"


<p>H SQUARED HOME DESIGN, INC.</p>	<p>HEATHER HALL 185 HEATHERSTONE CT BENSON NC 27504 1919 207-HOG</p>	<p>SQUARE FOOTAGE:</p> <p>FIRST FLOOR = 1240 FRONT PORCH = 86 PATIO/WOOD DECK = 144 GARAGE = 572</p>	<p>HEATED FOOTAGE:</p> <p>#1240</p>	<p>"THE DAKOTA II" (RIGHT HAND GARAGE)</p> <p>JRT MANG. PROP.</p>
	<p>DATE: 07/25/2010</p> <p>1 STORY</p> <p>TITLE: 020320</p>	<p>THIS PLAN WAS PREPARED BY THE ARCHITECT AND IS NOT TO BE USED FOR ANY OTHER PROJECT WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.</p>		



TRUSS SYSTEM REQUIREMENTS
 1. TRUSS SYSTEM LAYOUTS (PLANES) SHALL BE COORDINATED WITH THE ROOF TRUSS LAYOUT AND CONFORMANCE WITH THE TRUSS MANUFACTURER'S REQUIREMENTS SHALL BE COORDINATED WITH THE TRUSS MANUFACTURER.
 2. TRUSS CONNECTIONS SHALL BE MANUFACTURED.
 3. ALL TRUSSES SHALL BE DESIGNED FOR DESIGN LOADS OF 20 PSF OR 25 PSF OR AS SHOWN ON THE TRUSS MANUFACTURER'S DRAWINGS.
 4. ALL TRUSS ANCHORS FOR TRUSSES ARE TO BE SET ON BEARING SHALL MEET THE REQUIREMENTS AS SPECIFIED ON THE TRUSS MANUFACTURER'S DRAWINGS.

REFER TO "TOP SHEET" FOR STANDARD DETAILS, DIMENSIONS, MATERIALS, AND STRUCTURAL NOTES

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

SHEET 020320	DATE 02/25/2020	ANY DEVIATION OF THE TRUSS SYSTEM SHALL BE COORDINATED WITH THE TRUSS MANUFACTURER'S REQUIREMENTS SHALL BE COORDINATED WITH THE TRUSS MANUFACTURER.	 H SQUARED HOME DESIGN, INC.	HEATHER HALL 165 HEATHERSTONE CT SENSON NC 27504 1918 207-403	SQUARE FOOTAGE: FIRST FLOOR = 1240 FRONT PORCH = 86 PATIO/WOOD DECK = 144 GARAGE = 572	HEATED FOOTAGE: #1240	"THE DAKOTA II" (RIGHT HAND GARAGE) JRT MANG. PROP.
					THE PLAN HAS BEEN DRAWN BY THE ARCHITECT AND SHALL BE USED FOR CONSTRUCTION OF THE PROJECT. THE ARCHITECT SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION AS SPECIFIED ON THE TRUSS MANUFACTURER'S DRAWINGS.		

STRUCTURAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2008 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER OR DESIGNER IS NOT RESPONSIBLE FOR AND WILL NOT HAVE CONTROL OF CONSTRUCTION PRACTICES, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK, NOR WILL THE ENGINEER OR DESIGNER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. CONSTRUCTION REVIEW SERVICES ARE NOT PART OF OUR CONTRACT. ALL REVISIONS SHALL BE FRAMED, ANCHORED, TIED AND BRACED IN ACCORDANCE WITH GOOD CONSTRUCTION PRACTICE AND THE BUILDING CODE.

2) DESIGN LOADS (RS-04)

ROOMS	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (INCH)
SLEEPING ROOMS	30	10	L/360
ROOMS OTHER THAN SLEEPING ROOMS	40	10	L/360
ATRIC WITH PERMANENT STAIR	30	10	L/360
ATRIC WITH OUT STORAGE	30	10	L/360
STAIRS	40	10	L/360
EXTERIOR BALCONIES	40	10	L/360
DECKS	40	10	L/360
GUARDRAILS AND HANDRAILS	200	10	L/360
PASSENGER VEHICLE GARAGES	50	10	L/360
FIRE ESCAPES	40	10	L/360
SNOW	0	10	L/360

UNO LOAD (BASED ON 15/20 MPH WIND VELOCITY I EXPOSURE B)

3) WALL BRACING: BRACED WALL PANELS SHALL BE CONSTRUCTED ACCORDING TO SECTION R202.3. THE AMOUNT AND LOCATION OF BRACING SHALL COMPLY WITH TABLE R202.3.1. THE LENGTH OF BRACING PANELS SHALL BE DETERMINED BY SECTION R202.3.1. LATERAL BRACING SHALL BE SATISFIED PER METHOD 3 BY CONTINUOUSLY SHEATHING WALLS WITH STRUCTURAL SHEATHING PER SECTION R202.3.1. NOTE THAT ANY SPECIFIC BRACED WALL DETAIL SHALL BE INSTALLED AS SPECIFIED.

4) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MINIMUM SLUMP OF 4" UNLESS OTHERWISE SPECIFIED. ALL CONCRETE SHALL BE PROPORTIONED, MIXED, HANDLED, PLACED, TESTED AND CURED IN ACCORDANCE WITH ACI STANDARDS. ALL SAMPLES FOR PUMPING SHALL BE TAKEN FROM THE EXIT END OF THE PUMP.

5) ALLOWABLE SOIL BEARING PRESSURE ASSUMED TO BE 2000 PSF. THE CONTRACTOR MUST CONTACT A GEOTECHNICAL ENGINEER AND THE STRUCTURAL ENGINEER IF UNSATISFACTORY SURFACE CONDITIONS ARE ENCOUNTERED. THE SURFACE AREA ADJACENT TO THE FOUNDATION WALL SHALL BE PROVIDED WITH ADEQUATE DRAINAGE AND SHALL BE GRADED SO AS TO DRAINAGE WATER AWAY FROM FOUNDATION WALLS.

6) ALL FRAMING LUMBER SHALL BE SPF #2 #2 - #11 PRO UNLESS NOTED OTHERWISE (UNO). ALL TREATED LUMBER SHALL BE SYP #2 (F-155) - 40% PS - YEN. PLATE MATERIAL MAY BE SYP #3 OR SYP #3 (F-155) - 40% PS - YEN.

7) ALL WOODEN BEAMS AND HEADERS SHALL HAVE THE FOLLOWING END SUPPORTS: (1) 2x4 STUD COVER FOR 6" OAK BEAM SPAN UNO; (2) 2x4 STUDS FOR BEAM SPAN GREATER THAN 6" OAK UNO.

8) L.V.L. SHALL BE LAMINATED VENEER LUMBER: F#-2000 PSF, F#-306 PSF, E#-140 PSF, F.S.L. SHALL BE PARALLEL STRAND LUMBER: F#-2000 PSF, F#-210 PSF, F#-2040 PSF, L.S.L. SHALL BE LAMINATED STRAND LUMBER: F#-2110 PSF, F#-400 PSF, E#-140 PSF. INSTALL ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.

9) ALL ROOF TRUSS AND I-JOIST LAYOUTS SHALL BE PREPARED IN ACCORDANCE WITH ANY SEALED STRUCTURAL DESIGN, TRUSSES AND JOISTS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. ANY CHANGE IN TRUSS OR I-JOIST LAYOUT SHALL BE COORDINATED WITH DESIGNER OR ENGINEER.

10) ALL STRUCTURAL STEEL SHALL BE ASTM A-36. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A SOLID BEARING LENGTH OF 3/4" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS 1/2" DIAMETER x 4" LONG. LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOIST ARE TIE RAILED TO THE SOLE PLATE, AND SOLE PLATE IS RAILED OR BOLTED TO THE BEAM FLANGE x 4" O.C. ALL STEEL TIEING SHALL BE ASTM A501.

11) REBAR SHALL BE DEFORMED STEEL, ASTM A63, GRADE 60.

12) FITCH BEAMS SHALL BE BOLTED TOGETHER USING (2) ROWS OF 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THE THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" O.C. (MAX.) AND STAGGERED AT THE TOP AND BOTTOM OF BEAM IF EDGE DISTANCE WITH 2 BOLTS LOCATED AT 4" FROM EACH END.

13) BRICK INTLS SHALL BE 3 1/2"x3 1/2"x24" STEEL ANGLE FOR UP TO 6" OF SPAN AND 4"x4"x6" STEEL ANGLE WITH 1" LEG VERTICAL FOR SPANS UP TO 6" OAK UNO.

14) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A 75 MPH WIND HEIGHT OF 35 FEET OR LESS SHALL BE 25 PSF.

15) THE POSITIVE AND NEGATIVE DESIGN PRESSURES FOR ANY ROOF OR WALL CLADDING APPLICATION NOT SPECIFICALLY ADDRESSED IN THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2008 EDITION SHALL BE AS FOLLOWS:

- ROOF:
 - 4:8 PITCH - 2250 PITCH OR LESS
 - 3:4 PITCH - 2250 TO 12 PITCH
 - 1:12 PITCH - 12 TO 120 PITCH
- WALLS:
 - 2:1 PITCH - WALLS

HEADER/BEAM & COLUMN NOTES

1. ALL EXTERIOR AND LOAD BEARING HEADERS SHALL BE MIN. (2) 2x4 (4" WALL) OR (3) 2x4 (4" WALL) WITH (2) SUPPORT STUDS, UNLESS NOTED OTHERWISE.

2. THE NUMBER SHOWN AT BEAM AND HEADER SUPPORTS INDICATES THE NUMBER OF SUPPORT STUDS REQUIRED IN STUD SOCKET OR COLUMN. THE NUMBER OF KING STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS SHALL BE ACCORDING TO ITEM "3" OF TABLE R202.3(5) OR AS BELOW:

- UP TO 4' SPAN, (3) KING STUDS
- OVER 4' UP TO 8' SPAN, (2) KING STUDS
- OVER 8' UP TO 12' SPAN, (3) KING STUDS
- OVER 12' SPAN, (4) KING STUDS

FOUNDATION STRUCTURAL NOTES:

NC (2008 NCRC) UNO IS-101 RPH

1) (3) 2x4 SYP #2 OR SPF#2 GRADER, TYPICAL UNO.

2) CONCRETE BLOCK PER SIZE SHALL BE:
 SIZE: HOLLOW MASONRY SOLE MASONRY
 8" x 8" UP TO 12" HIGH UP TO 5'-0" HIGH
 12" x 8" UP TO 12" HIGH UP TO 5'-0" HIGH
 12" x 12" UP TO 12" HIGH UP TO 5'-0" HIGH
 16" x 16" UP TO 12" HIGH UP TO 5'-0" HIGH
 WITH 30" x 30" x 1/2" CONCRETE FOOTING, UNO.

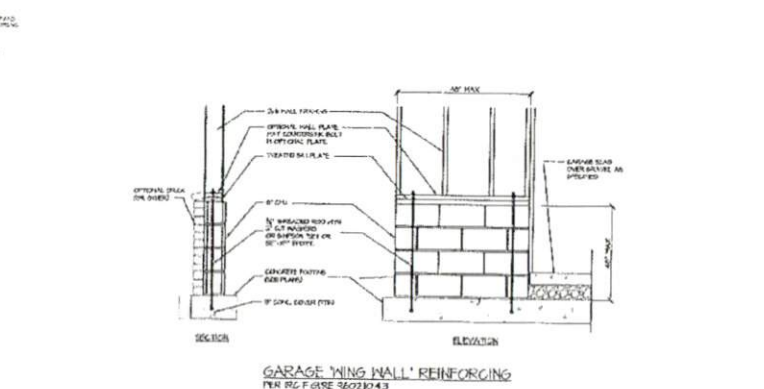
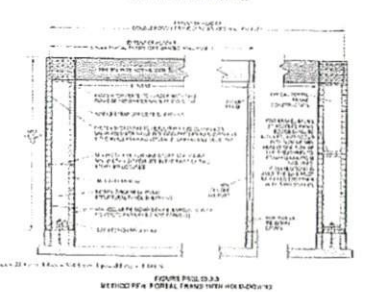
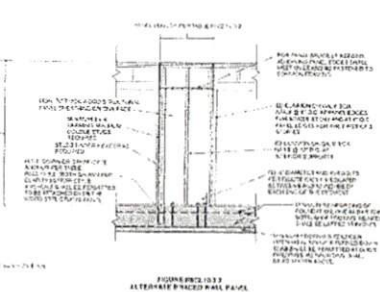
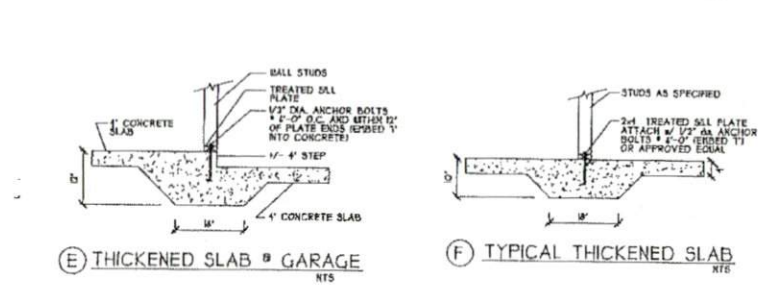
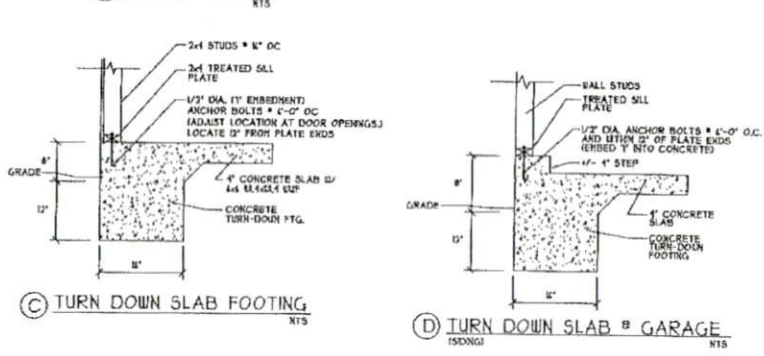
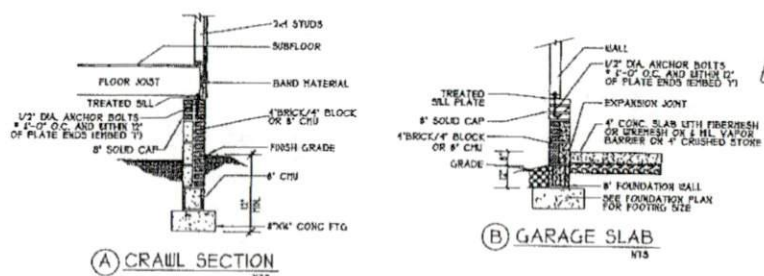
3) WALL FOOTING AS FOLLOWS:
 DEPTH: 6" - UP TO 2-1/2 STORY
 10" - 3 STORY
 WIDTH: 8" - UP TO 2-1/2 STORY
 12" - 3 STORY
 BRICK VENEER
 8" - 1 STORY
 10" - 2 STORY
 12" - 3 STORY

FOR FOUNDATION WALL HEIGHT AND BACKFILL REQUIREMENTS, REFER TO NORTH CAROLINA RESIDENTIAL CODE TABLE R202.1 THROUGH 9. NOTE: ASSUMED SOIL BEARING CAPACITY = 2000 PSF. CONTRACTOR MUST VERIFY SITE CONDITIONS AND CONTACT SOILS ENGINEER IF PANGLOSS OR UNSTABLE SOILS ARE ENCOUNTERED.

4) (1) 2x4 SYP#2 OR SPF#2 GRADER.
 (2) 1.5"x1.25 LVL OR LSL GRADER.
 (3) 1.5"x1.25 LVL OR LSL GRADER.

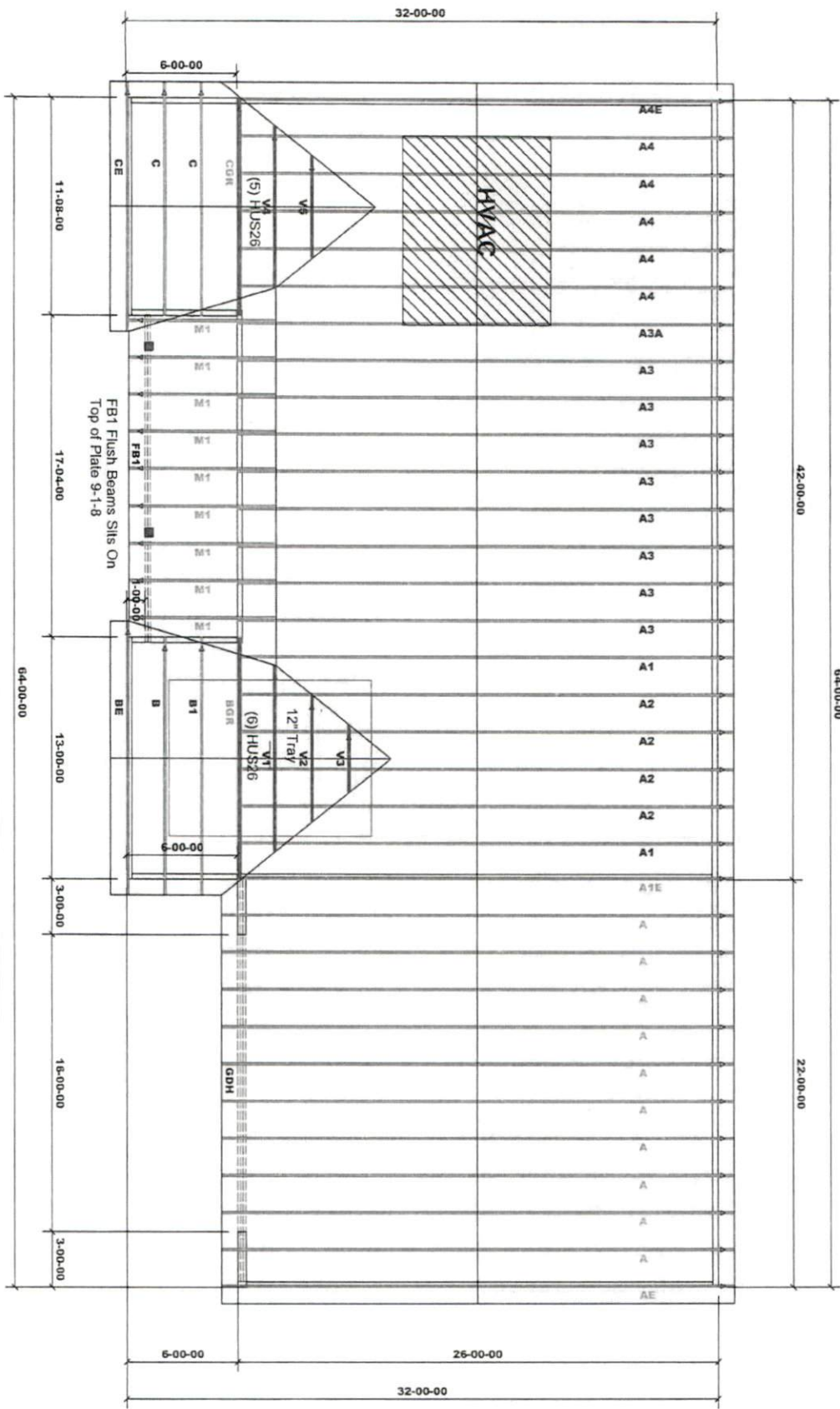
1. "M" DESIGNATES A SIGNIFICANT POINT LOAD TO HAVE SOLID BLOCKING TO PREL. SOLE BLOCK ALL BEARING POINTS NOTED TO HAVE THREE OR MORE STUDS TO FND, TYPICAL.

2. ABBREVIATIONS:
 "S" = SINGLE JOIST
 "D" = DOUBLE JOIST
 "T" = TRIPLE JOIST



BASIC BUILDING
 DETAIL SHEET
 PLEASE NOTE THAT NOT ALL DETAILS APPLY TO
 HEATHER HALL
 105 HEATHERSTONE CT
 BENSON NC 27504
 (888) 207-4403
H SQUARED HOME DESIGN, INC.
 DATE:
 REV:

THIS LAYOUT IS INTENDED FOR THE PURPOSE OF TRUSS LOCATION AND PLACEMENT ONLY. REFER TO THE BUILDING PLANS FOR ACTUAL BUILDING CONSTRUCTION.



Product	Length	Product	Piles	Net Qty	Fab Type
FB1	18'-00-00	1-3/4" x 9-1/4" VERSA-LAM® 2.0 3100 SP	2	2	MFD
GDH	22'-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	3	3	MFD

GENERAL NOTES:

- DO NOT CUT OR MODIFY TRUSSES
- TRUSSES ARE SPACED 24" ON CENTER UNLESS OTHERWISE NOTED
- REFER TO THE INDIVIDUAL TRUSS DESIGN DRAWINGS FOR THE LOCATION OF LATERAL BRACING AND MULTI-PLY CONNECTION REQUIREMENTS.
- PER ANSI TPI 1-2002 THE TRUSS ENGINEER IS RESPONSIBLE FOR TRUSS TO TRUSS CONNECTIONS AND TRUSS PLY TO PLY CONNECTIONS. THIS TRUSS LAYOUT PLAN RECOMMENDS TRUSSES TO BEARING CONNECTIONS AND TRUSSES TO BEAM CONNECTIONS WHICH SHALL BE REVIEWED BY THE BUILDING DESIGNER. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO RESOLVE ALL ROOF FORCES ADEQUATELY TO THE FOUNDATION.

TOP LIVE LOAD: 200 LB/ft²
 TOP DEAD LOAD: 10.0 LB/ft²
 BOTTOM DEAD LOAD: 10.0 LB/ft²
 WIND SPEED: 130 MPH

PROJECT: 2307- FAY - JRT -DAKOTA II
 CUSTOMER: 2307- 84 Fayetteville
 MODEL: THE DAKOTA II
 QUOTE #: 2000367
 PRINT DATE: 5/20/2020
 DRAWN BY: Rodney Evans
 SCALE: N.T.S.

DEDICATED TO QUALITY AND EXCELLENCE
 200 EMMETT ROAD
 DUSH, NORTH CAROLINA 28734
 PHONE: 910-892-8500



Double 1-3/4" x 9-1/4" VERSA-LAM® 2.0 3100 SP

PASSED

Roof/Dropped Beams\FB1() (Dropped Beam)

Dry | 3 spans | No cant.

May 20, 2020 13:51:46

BC CALC® Member Report

Build 7493

Job name:

Address:

City, State, Zip:

Customer:

Code reports: ESR-1040

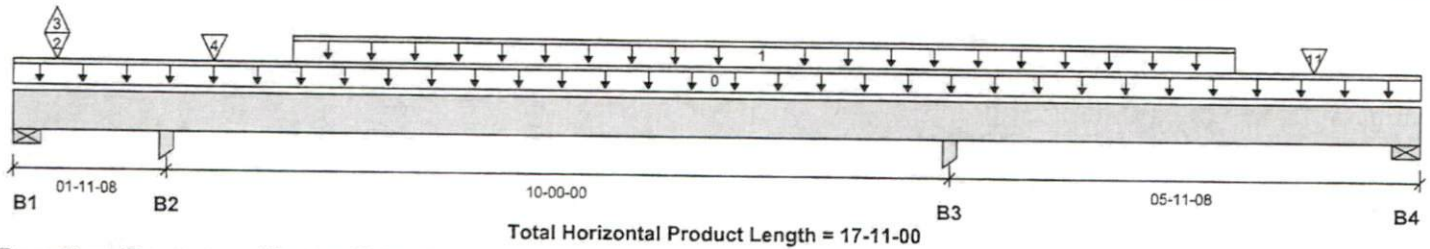
File name: 2000367A.mmdl

Description: Roof/Dropped Beams\FB1()

Specifier:

Designer:

Company:



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"		0 / 242		290 / 77	71 / 380
B2, 5-1/2"		697 / 0		190 / 702	811 / 54
B3, 5-1/2"		602 / 0		161 / 594	653 / 0
B4, 3-1/2"		93 / 0		21 / 74	163 / 67

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	17-11-00	Top		9				00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	03-06-12	15-06-12	Top		57			72	n/a
2	M1(c1)	Conc. Pt. (lbs)	L	00-06-12	00-06-12	Top		64			50	n/a
3	M1(c1)	Conc. Pt. (lbs)	L	00-06-12	00-06-12	Top					-21	n/a
4	M1(c1)	Conc. Pt. (lbs)	L	02-06-12	02-06-12	Top		126			168	n/a
11	M1(c1)	Conc. Pt. (lbs)	L	16-06-12	16-06-12	Top		102			130	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	779 ft-lbs	4.7%	125%	4	06-06-12
Neg. Moment	-1155 ft-lbs	7.1%	125%	5	01-11-08
End Shear	576 lbs	7.5%	125%	4	01-00-12
Cont. Shear	689 lbs	9.0%	125%	5	00-11-08
Total Load Deflection	L/999 (0.022")	n/a	n/a	4	07-00-12
Live Load Deflection	L/999 (0.012")	n/a	n/a	312	07-02-04
Total Neg. Defl.	L/999 (-0.003")	n/a	n/a	4	13-10-15
Max Defl.	0.022"	n/a	n/a	4	07-00-12
Span / Depth	13.0				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	29 lbs	0.6%	0.3%	Spruce-Pine-Fir
B1	Uplift	622 lbs			
B2	Column 5-1/2" x 3-1/2"	1508 lbs	10.8%	10.4%	Unspecified
B3	Column 5-1/2" x 3-1/2"	1255 lbs	9.0%	8.7%	Unspecified
B4	Wall/Plate 3-1/2" x 3-1/2"	256 lbs	4.9%	2.8%	Spruce-Pine-Fir

Cautions

Uplift of -622 lbs found at bearing B1.

BC CALC® Member Report

Build 7493

Job name:

Address:

City, State, Zip:

Customer:

Code reports: ESR-1040

File name: 2000367A.mmdl

Description: Roof/Dropped Beams\FB1()

Specifier:

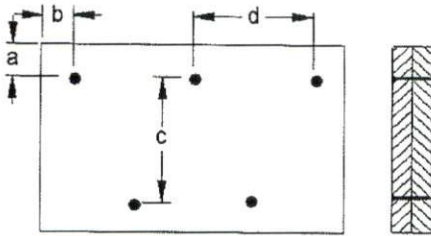
Designer:

Company:

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets Code minimum (L/360) Live load deflection criteria.
- Design meets arbitrary (1") Maximum Total load deflection criteria.
- Design meets arbitrary (0.75") Maximum live load deflection criteria.
- Calculations assume unbraced length of Top: 01-10-08, Bottom: 01-10-08.
- BC CALC® analysis is based on IBC 2012.
- Wind loads determined from building geometry were used in selected product's verification.
- Design based on Dry Service Condition.

Connection Diagram: Full Length of Member



a minimum = 2" c = 5-1/4"
 b minimum = 3" d = 24"

Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®

Triple 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

PASSED

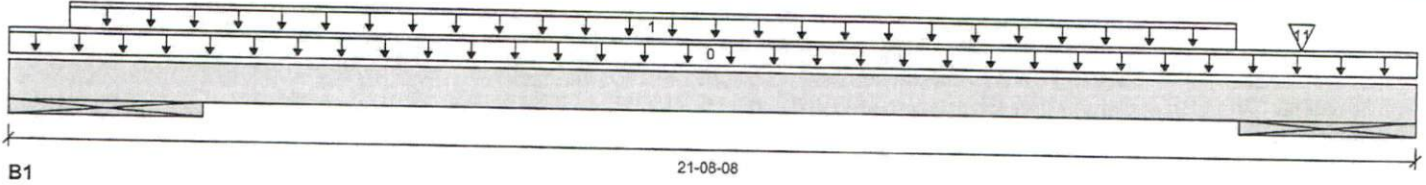
BC CALC® Member Report
 Build 7493
 Job name:
 Address:
 City, State, Zip:
 Customer:
 Code reports: ESR-1040

RoofDropped Beams\GDH(i19) (Dropped Beam)

Dry | 1 span | No cant.

May 20, 2020 13:51:46

File name: 2000367A.mmdl
 Description: RoofDropped Beams\GDH(i19)
 Specifier:
 Designer:
 Company:



Total Horizontal Product Length = 21-08-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 36"		2891 / 0		1374 / 1950	2804 / 0
B2, 32-1/2"		2878 / 0		1383 / 1999	2811 / 0

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	21-08-08	Top	18					00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-11-04	18-11-04	Top	268				279	n/a
11	A(c1)	Conc. Pt. (lbs)	L	19-11-04	19-11-04	Top	557				600	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	17173 ft-lbs	44.1%	125%	1	11-11-04
End Shear	3425 lbs	23.1%	125%	1	03-11-14
Total Load Deflection	L/356 (0.544")	67.5%	n/a	1	10-11-04
Live Load Deflection	L/718 (0.27")	50.2%	n/a	116	10-11-04
Max Defl.	0.544"	54.4%	n/a	1	10-11-04
Span / Depth	16.3				
Conc. Load (B1)	1107 lbs	8.0%	100%		
Conc. Load (B2)	1157 lbs	8.4%	100%		

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 36" x 5-1/4"	5695 lbs	4.2%	4.0%	Unspecified
B2	Wall/Plate 32-1/2" x 5-1/4"	5689 lbs	7.8%	4.4%	Spruce-Pine-Fir

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets Code minimum (L/360) Live load deflection criteria.
- Design meets arbitrary (1") Maximum Total load deflection criteria.
- Design meets arbitrary (0.75") Maximum live load deflection criteria.
- Calculations assume unbraced length of Top: 01-10-08, Bottom: 01-10-08.
- BC CALC® analysis is based on IBC 2012.
- Wind loads determined from building geometry were used in selected product's verification.
- Design based on Dry Service Condition.

BC CALC® Member Report

Build 7493

Job name:

Address:

City, State, Zip:

Customer:

Code reports: ESR-1040

File name: 2000367A.mmdl

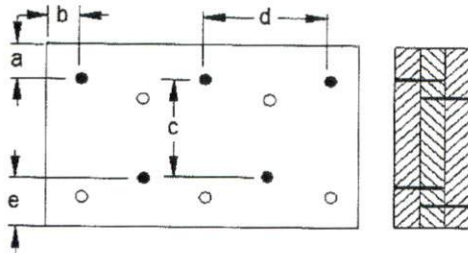
Description: Roof/Dropped Beams\GDH(i19)

Specifier:

Designer:

Company:

Connection Diagram: Full Length of Member



- a minimum = 2" c = 7-7/8"
- b minimum = 3" d = 24"
- e minimum = 3"

Nailing applies to both sides of the member
Connectors are: 3-1/4 in. Pneumatic Gun Nails

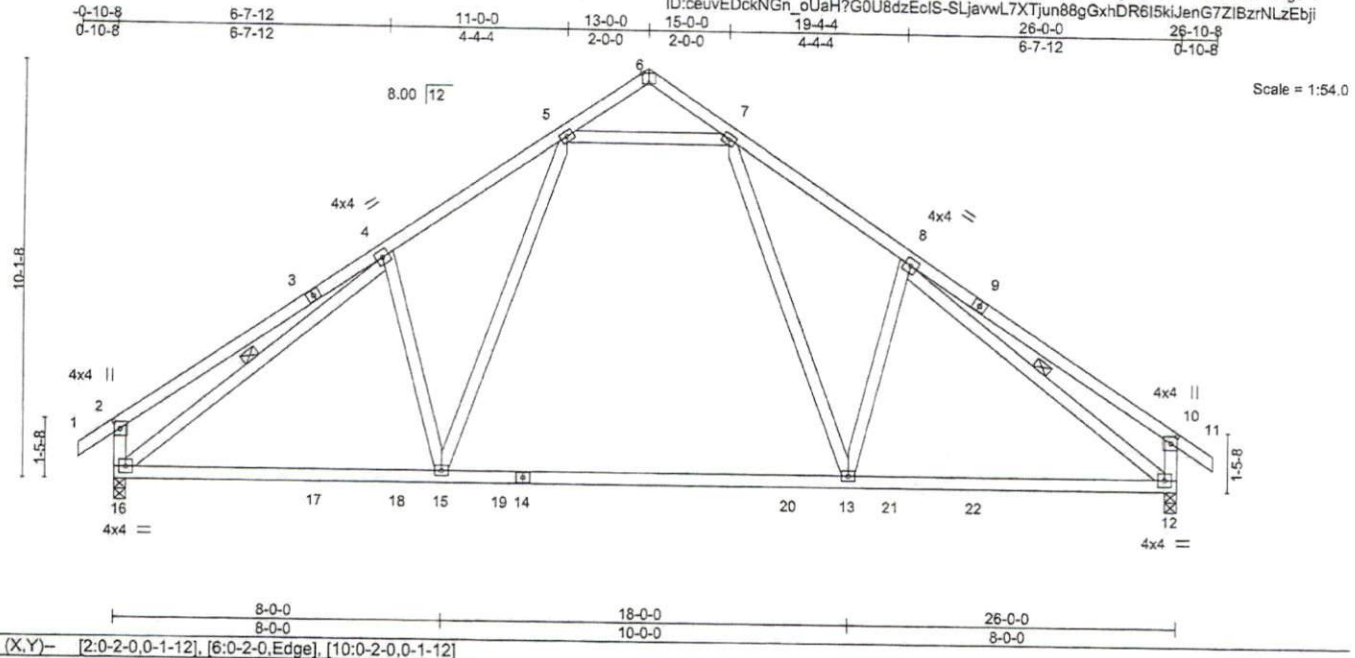
Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®

Job 2000367-2000367A	Truss A	Truss Type ROOF TRUSS	Qty 10	Ply 1	2307- JRT -DAKOTA II	I41377982
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MITEK Industries, Inc. Wed May 20 13:01:53 2020 Page 1



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(LL) -0.39 13-15 >798 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Vert(CT) -0.56 13-15 >551 180		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Horz(CT) 0.03 12 n/a n/a		
				Weight: 164 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 8-12

REACTIONS. (size) 16=0-3-8, 12=0-3-8
Max Horz 16=273(LC 11)
Max Uplift 16=-126(LC 12), 12=-126(LC 13)
Max Grav 16=1165(LC 20), 12=1165(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-381/239, 4-5=-1323/338, 7-8=-1323/338, 8-10=-381/239, 2-16=-403/228, 10-12=-402/228
BOT CHORD 15-16=-130/1191, 13-15=-11/927, 12-13=-82/1056
WEBS 7-13=-152/617, 8-13=-265/281, 5-15=-151/617, 4-15=-265/281, 4-16=-1197/24, 8-12=-1196/24, 5-7=-791/286

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are 3x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 12. This connection is for uplift only and does not consider lateral forces.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



Job 2000367-2000367A	Truss A1	Truss Type Common	Qty 2	Ply 1	2307- JRT -DAKOTA II	141377983
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

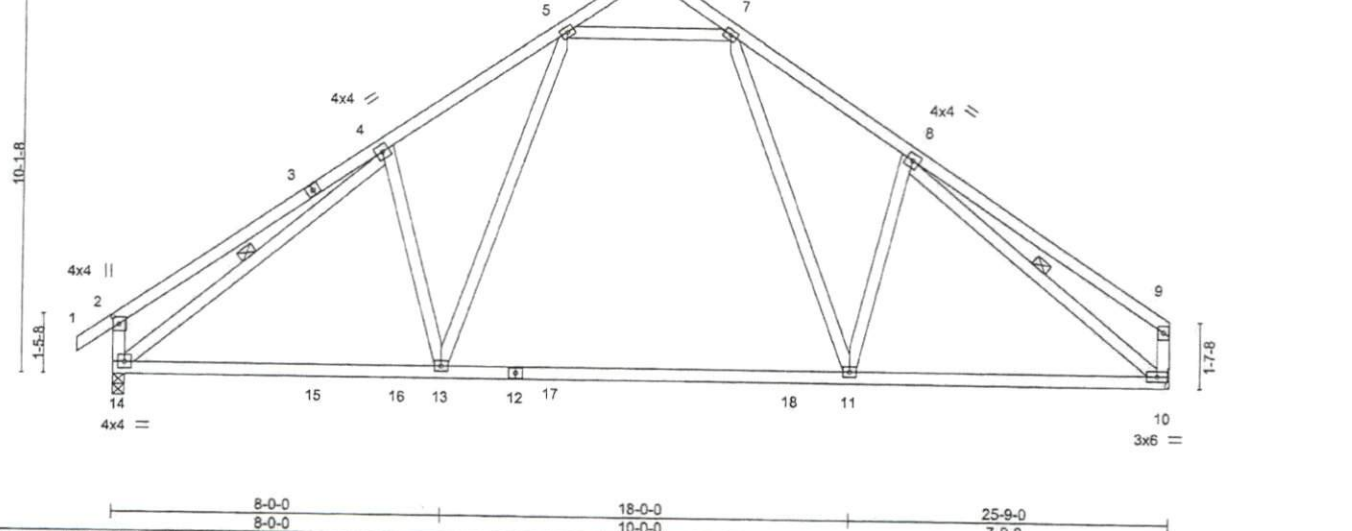
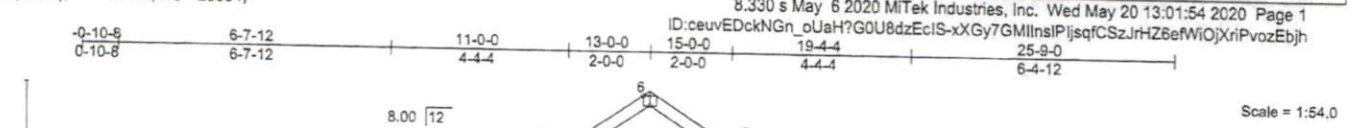


Plate Offsets (X,Y)--	[2:0-2-0,0-1-12], [6:0-2-0,Edge]
-----------------------	----------------------------------

LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.42 11-13 >728 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.59 11-13 >514 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Horz(CT) 0.03 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS			
				Weight: 161 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-14, 8-10

REACTIONS. (size) 14=0-3-8, 10=Mechanical
 Max Horz 14=270(LC 11)
 Max Uplift 14=-125(LC 12), 10=-103(LC 13)
 Max Grav 14=1142(LC 19), 10=1049(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-369/232, 4-5=-1291/330, 7-8=-1237/329, 8-9=-255/166, 2-14=-392/223, 9-10=-267/148
BOT CHORD 13-14=-144/1158, 11-13=-43/883, 10-11=-123/975
WEBS 4-13=-262/277, 5-13=-144/626, 7-11=-140/526, 8-11=-236/271, 4-14=-1174/29, 8-10=-1218/107, 5-7=-762/287

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are 3x4 MT20 unless otherwise indicated.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=103.
 - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.

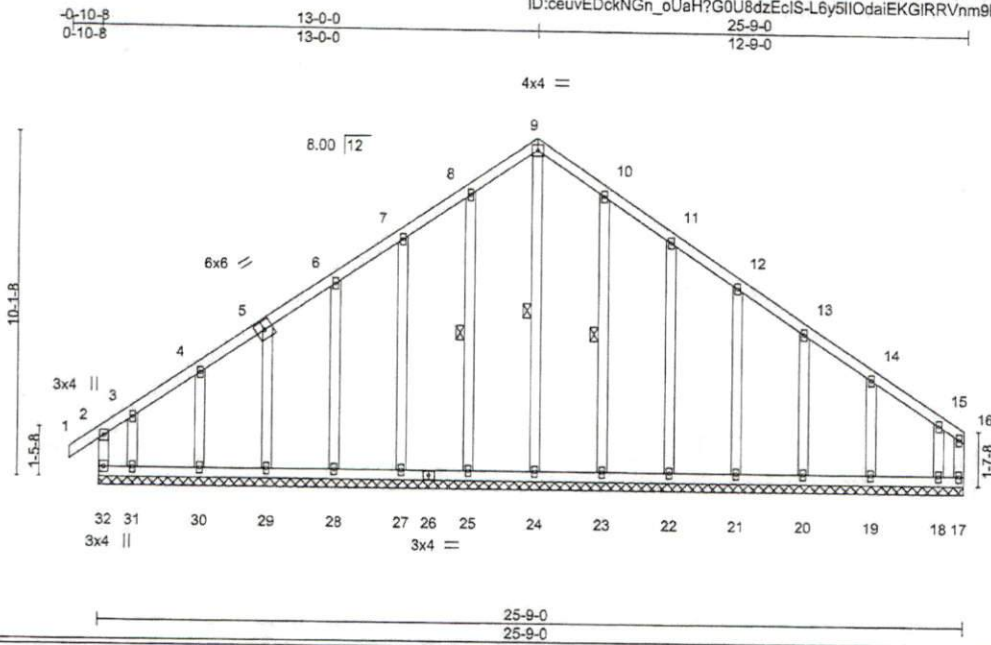


Job 2000367-2000367A	Truss A1E	Truss Type Common Supported Gable	Qty 1	Ply 1	2307- JRT-DAKOTA II	I41377964
-------------------------	--------------	--------------------------------------	----------	----------	---------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

Job Reference (optional)

8.330 s May 6 2020 MITek Industries, Inc. Wed May 20 13:01:57 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-L6y5II0daiEKGIrRVnm9byTtJq7j7k9Dpx3W7zEbj



Scale = 1:65.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.00 1 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 17 n/a n/a		
	Code IRC2015/TPI2014			Weight: 191 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 31-32,30-31,29-30.
 WEBS 1 Row at midpt 9-24, 8-25, 10-23

REACTIONS. All bearings 25-9-0.
 (lb) - Max Horz 32=270(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=281(LC 8), 17=-302(LC 11), 31=-282(LC 9), 18=-268(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=335(LC 9), 17=306(LC 8), 24=270(LC 13), 31=332(LC 10), 18=349(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=-221/274, 8-9=-265/324, 9-10=-265/324, 10-11=-222/274
 WEBS 9-24=-291/175

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32, 17, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, and 18. This connection is for uplift only and does not consider lateral forces.



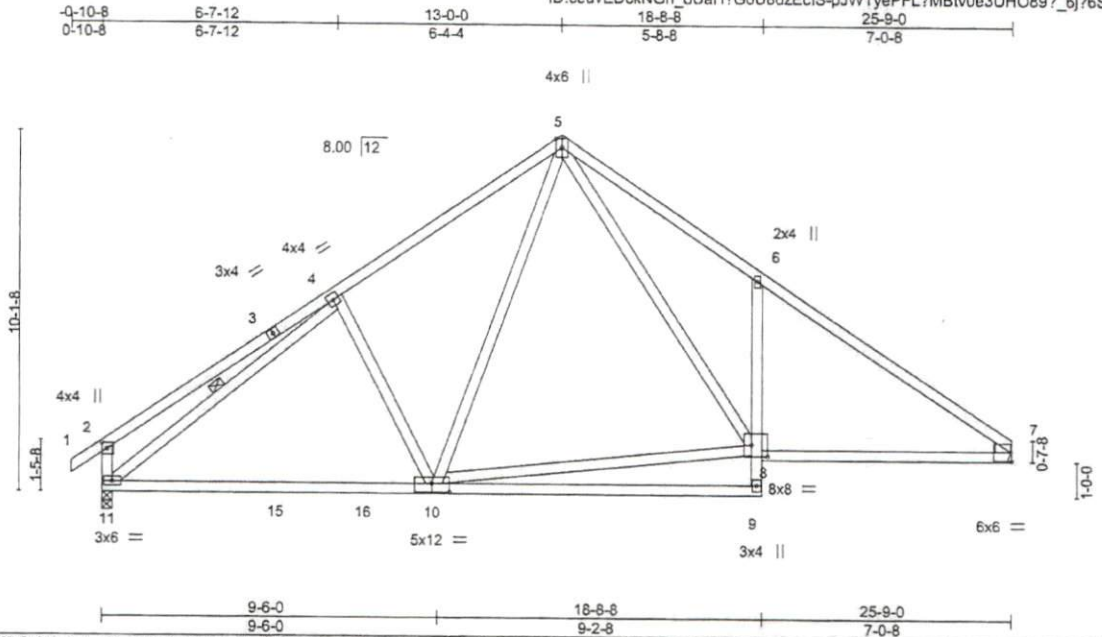
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MITek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	2307-JRT-DAKOTA II	I41377985
2000367-2000367A	A2	Roof Special	4	1		

84 Components (Dunn), Dunn, NC - 28334, 8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:01:58 2020 Page 1
 ID:ceuvEDckNGn_oUaH?GOU8dzEclS-pJWYtPFL?MBv0e3UHO89?_6j?6SU3JSTgc2ZzEbjd



Scale = 1:62.7

Plate Offsets (X,Y)	[2:0-2-0,0-1-12], [7:0-3-13,0-0-4], [7:0-0-3,0-0-2], [7:Edge,0-3-2], [8:0-5-8,0-4-0], [10:0-6-0,0-3-0]
---------------------	--------------------------------------------------------------------------------------------------------

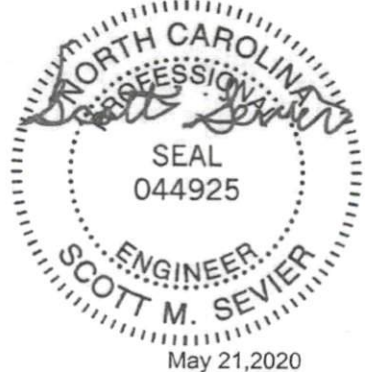
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.17 10-11 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.52	Vert(CT) -0.34 9-10 >917 180		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Horz(CT) 0.03 7 n/a n/a		
				Weight: 161 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 6-9: 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-11
WEDGE Right: 2x4 SP No.3	

REACTIONS. (size) 11=0-3-8, 7=Mechanical
 Max Horz 11=-250(LC 10)
 Max Uplift 11=-125(LC 12), 7=-104(LC 13)
 Max Grav 11=1087(LC 1), 7=1023(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-380/197, 4-5=-1106/324, 5-6=-1426/447, 6-7=-1459/270, 2-11=-403/196
 BOT CHORD 10-11=-185/1016, 6-8=-422/297, 7-8=-119/1127
 WEBS 4-10=-280/266, 5-10=-111/458, 8-10=-39/659, 5-8=-257/776, 4-11=-990/85

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=1b) 7=104.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

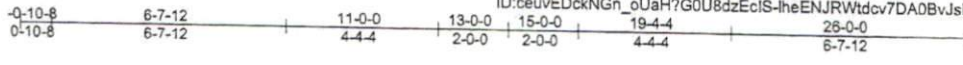
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss A3	Truss Type ROOF TRUSS	Qty 8	Ply 1	2307- JRT -DAKOTA II	I41377986
-------------------------	-------------	--------------------------	----------	----------	----------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:00 2020 Page 1



Scale = 1:62.7

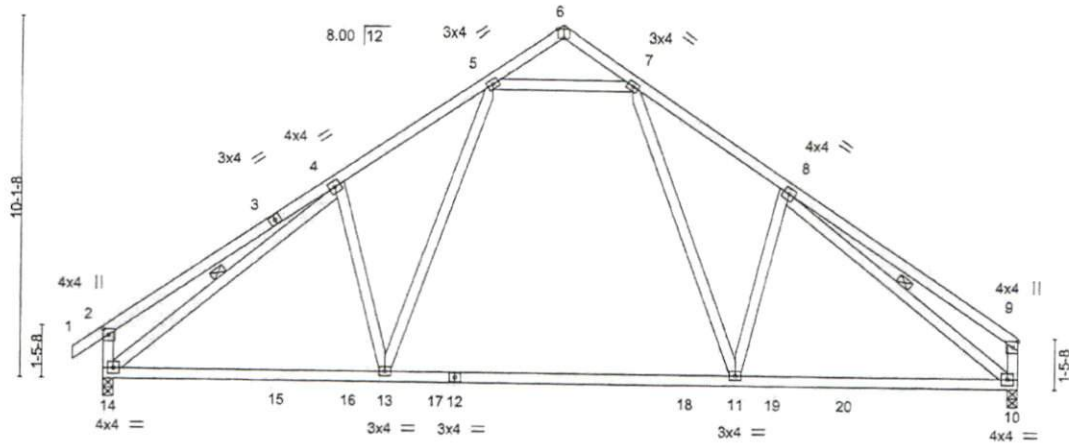


Plate Offsets (X,Y) =	[2:0-2-0,0-1-12], [6:0-2-0,Edge]
-----------------------	----------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL)	-0.39	11-13	>798	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT)	-0.56	11-13	>551		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.46	Horz(CT)	0.03	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS						
							Weight: 162 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-9-9 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-14, 8-10

REACTIONS.	(size)
Max Horz	14=268(LC 9)
Max Uplift	14=-126(LC 12), 10=-105(LC 13)
Max Grav	14=1166(LC 20), 10=1106(LC 21)

FORCES.	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-4=-371/232, 4-5=-1320/333, 7-8=-1329/336, 8-9=-291/175, 2-14=-394/223, 9-10=-292/156
BOT CHORD	13-14=-144/1184, 11-13=-37/920, 10-11=-123/1053
WEBS	7-11=-148/619, 8-11=-269/279, 5-13=-145/607, 4-13=-257/277, 4-14=-1203/32, 8-10=-1250/97, 5-7=-795/288

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

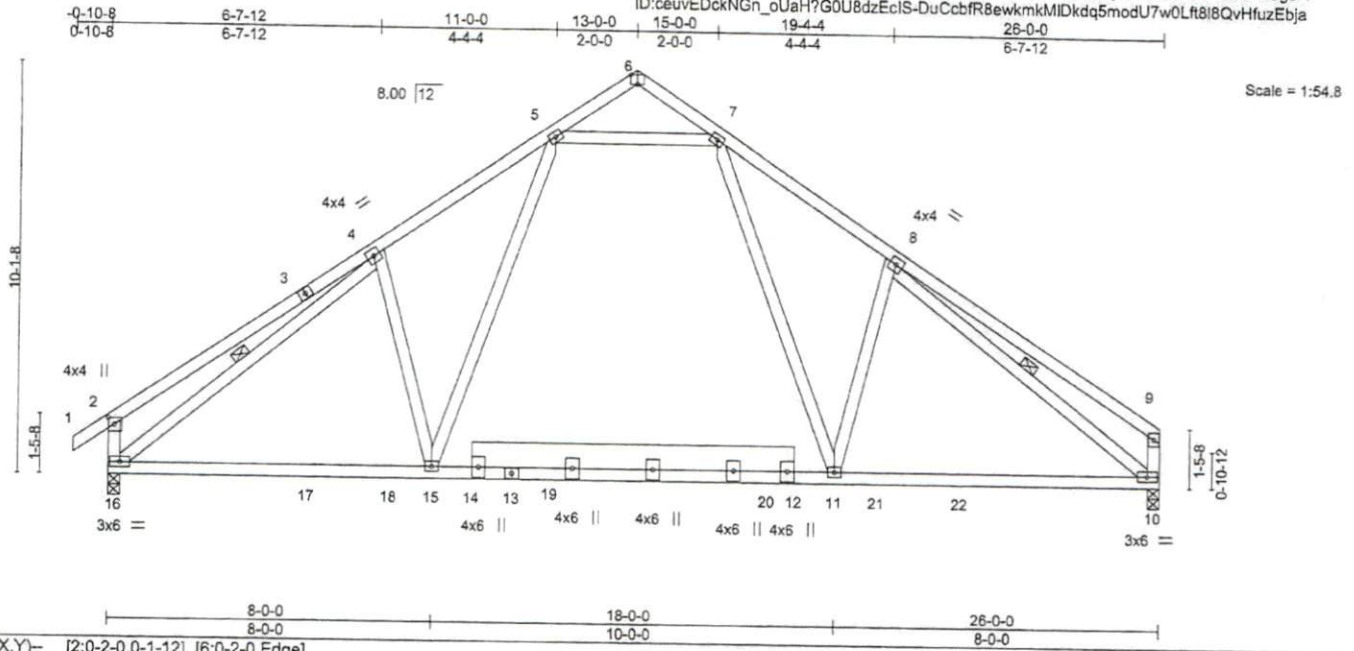


<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/03/2015 BEFORE USE.</p> <p>Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------

Job 2000367-2000367A	Truss A3A	Truss Type ROOF TRUSS	Qty 1	Ply 1	2307-JRT-DAKOTA II	I41377987
-------------------------	--------------	--------------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:01 2020 Page 1
ID:ceuvEDckNGn_oUaH?GOU8dzEclS-DuCbFR8ewkmkMIDkdq5modU7w0Lf8I8QvHfuzEbja



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.61	Vert(LL)	-0.17 15-16	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.84	Vert(CT)	-0.24 15-16	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.44	Horz(CT)	0.03 10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 187 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-10-6 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2 *Except* 12-14: 2x8 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 4-16, 8-10

REACTIONS. (size) 16=0-3-8, 10=0-3-8
 Max Horz 16=268(LC 9)
 Max Uplift 16=-126(LC 12), 10=-105(LC 13)
 Max Grav 16=1159(LC 20), 10=1099(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-384/226, 4-5=-1282/338, 7-8=-1291/341, 8-9=-319/169, 2-16=-412/219, 9-10=-307/152
 BOT CHORD 15-16=-147/1155, 11-15=-40/897, 10-11=-126/1025
 WEBS 7-11=-149/596, 8-11=-271/278, 5-15=-146/583, 4-15=-260/275, 4-16=-1133/44, 8-10=-1179/109, 5-7=-772/291

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) All plates are 3x4 MT20 unless otherwise indicated.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 10. This connection is for uplift only and does not consider lateral forces.
 - 7) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.

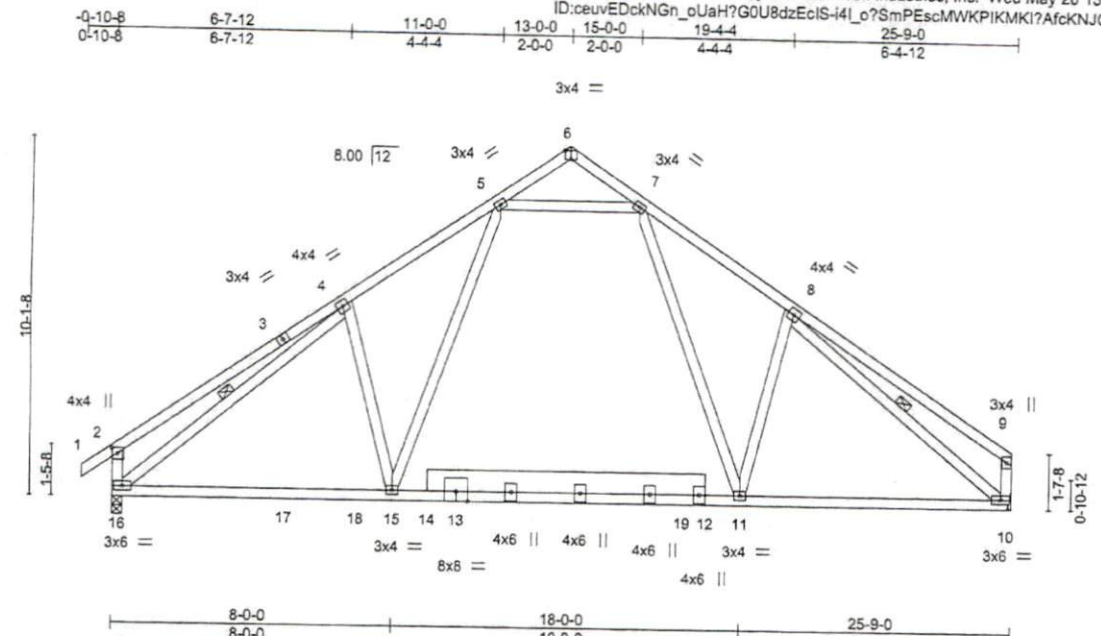


Job 2000367-2000367A	Truss A4	Truss Type ROOF TRUSS	Qty 5	Ply 1	2307-JRT-DAKOTA II	I41377988
-------------------------	-------------	--------------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

Job Reference (optional)

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:02 2020 Page 1
ID:ceuvEDckNgn_oJaH?GOU8dzEclS-i4l_o?SmPEscMWKPIKMKI?AfckKNJOKquM4eqBKzEbjZ



Scale = 1:63.1

Plate Offsets (X,Y)-	[2:0-2-0,0-1-12], [6:0-2-0,Edge]
----------------------	----------------------------------

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.79	Vert(LL) -0.17 15-16 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.41	Vert(CT) -0.26 15-16 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 186 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
12-14: 2x8 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-9-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 8-10

REACTIONS. (size) 16=0-3-8, 10=Mechanical
Max Horz 16=270(LC 9)
Max Uplift 16=125(LC 12), 10=103(LC 13)
Max Grav 16=1132(LC 20), 10=1040(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-381/226, 4-5=-1247/335, 7-8=-1193/334, 8-9=-265/160, 2-16=-408/219, 9-10=-273/144
BOT CHORD 15-16=-147/1125, 11-15=-46/856, 10-11=-127/943
WEBS 4-15=-264/275, 5-15=-145/599, 7-11=-142/499, 8-11=-239/269, 4-16=-1095/41, 8-10=-1140/119, 5-7=-757/290

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Refer to girder(s) for truss to truss connections.
 - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=103.
 - 7) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16. This connection is for uplift only and does not consider lateral forces.
 - 8) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MH-7473 rev. 10/03/2015 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI Quality Criteria, DSB-69 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate 818 Soundside Road Edenton, NC 27932</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------

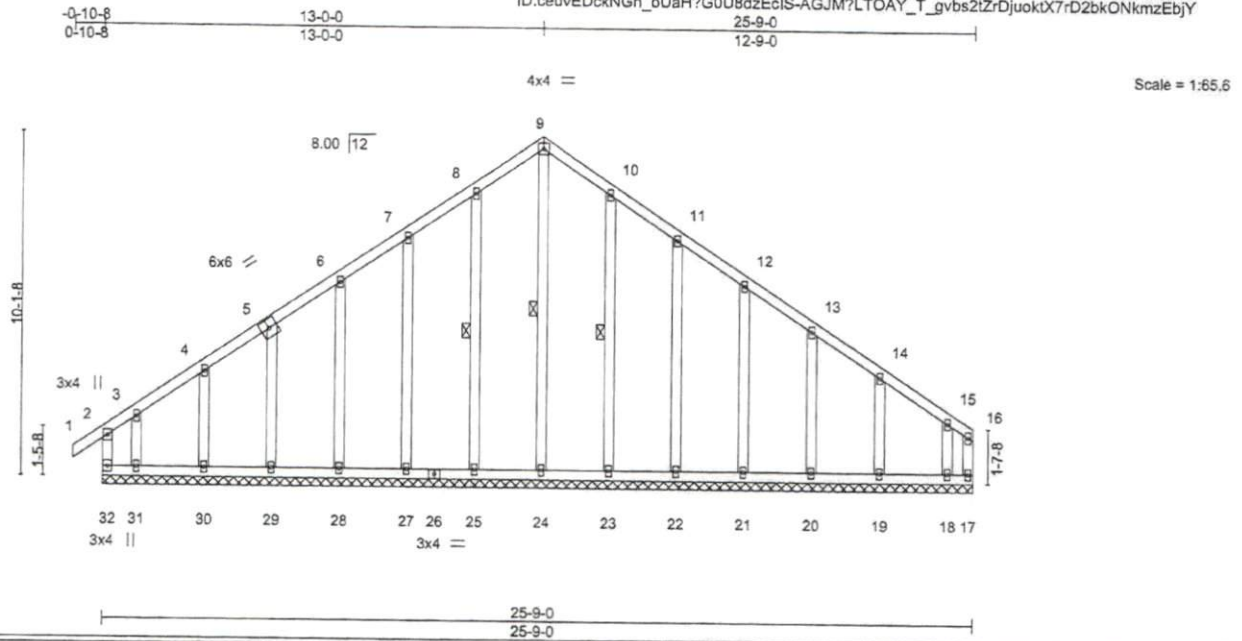
Job 2000367-2000367A	Truss A4E	Truss Type Common Supported Gable	Qty 1	Ply 1	2307- JRT -DAKOTA II	141377989
-------------------------	--------------	--------------------------------------	----------	----------	----------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:03 2020 Page 1

ID:ceuvEDckNGn_oJaH?G0U8dzEclS-AGJM?LTOAY_T_gvbs2IzrDjuoktX7rD2bkONkmzEbjY

Job Reference (optional)



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) -0.00 1 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.00 1 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) -0.00 17 n/a n/a		
	Code IRC2015/TPI2014			Weight: 191 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing, Except: 10-0-0 oc bracing: 31-32,30-31,29-30.
 WEBS 1 Row at midpt 9-24, 8-25, 10-23

REACTIONS. All bearings 25-9-0.
 (lb) - Max Horz 32=270(LC 9)
 Max Uplift All uplift 100 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=281(LC 8), 17=302(LC 11), 31=282(LC 9), 18=268(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=335(LC 9), 17=306(LC 8), 24=270(LC 13), 31=332(LC 10), 18=349(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=221/274, 8-9=265/324, 9-10=265/324, 10-11=222/274
 WEBS 9-24=291/175

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

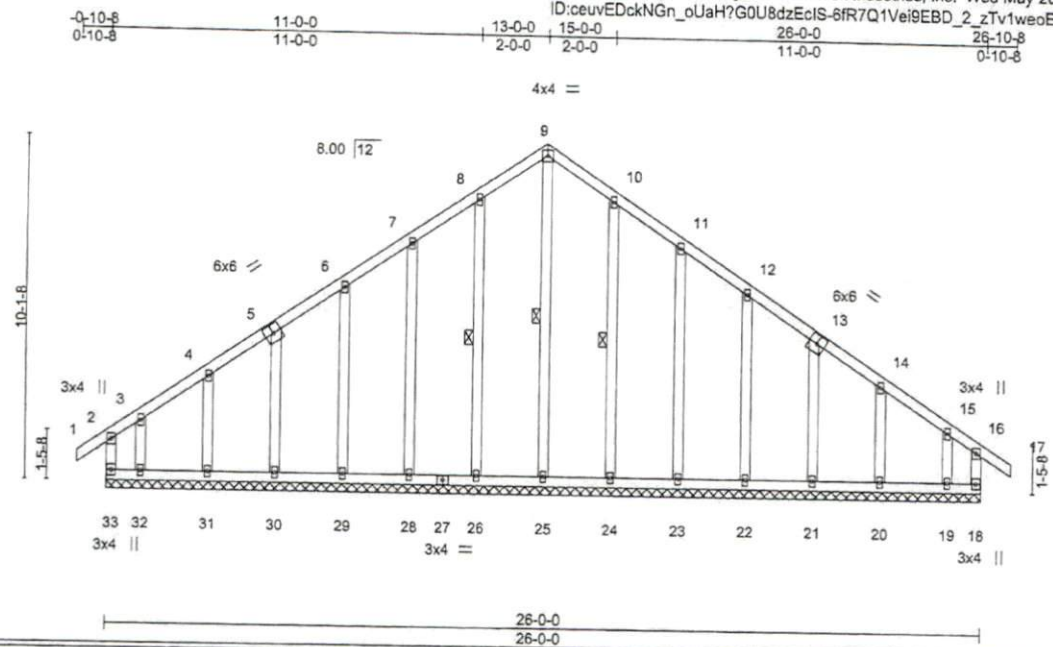


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing Indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss AE	Truss Type GABLE	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41377990
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:05 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEcIS-6FR7Q1Vei9EBD_2_zTv1waoEXYZ2bhL32tUofzEbjW



Scale = 1:65.6

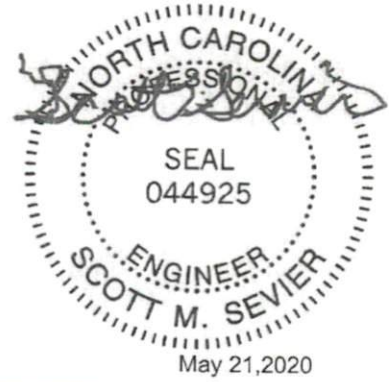
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(LL) -0.00 17 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Vert(CT) -0.00 17 n/r 90		
BCDL 10.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.01 18 n/a n/a		
	Code IRC2015/TPI2014			Weight: 194 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-25, 8-26, 10-24
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 26-0-0.
 (lb) - Max Horz 33=273(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 26, 28, 29, 30, 31, 24, 23, 22, 21, 20 except 33=-260(LC 8), 18=-209(LC 9), 32=-255(LC 9), 19=-216(LC 8)
 Max Grav All reactions 250 lb or less at joint(s) 18, 26, 28, 29, 30, 31, 24, 23, 22, 21, 20 except 33=303(LC 11), 25=269(LC 13), 32=320(LC 10), 19=279(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 7-8=-218/276, 8-9=-262/327, 9-10=-262/327, 10-11=-218/276
 WEBS 9-25=-294/172

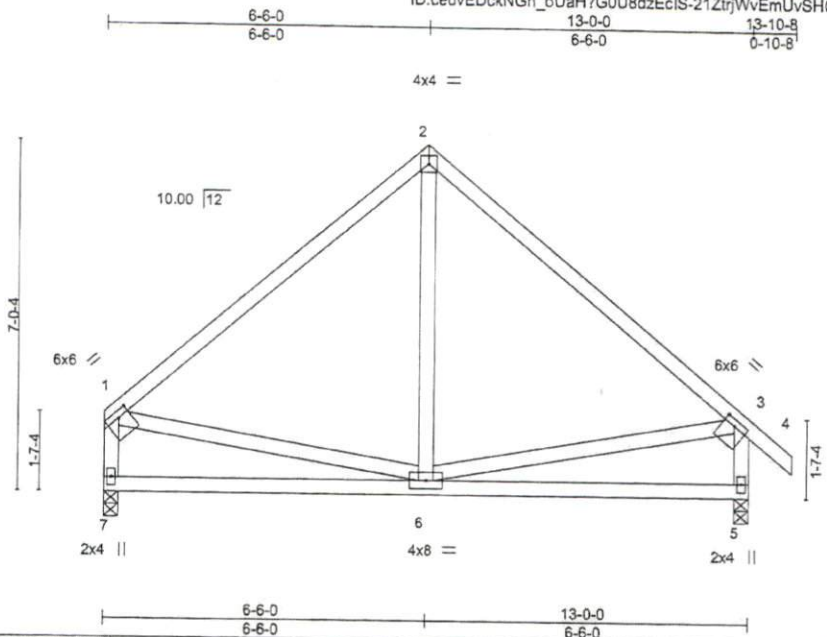
- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 10) N/A
 - 11) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



Job 2000367-2000367A	Truss B	Truss Type Common	Qty 1	Ply 1	2307-JRT-DAKOTA II	I41377991
-------------------------	------------	----------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MITEK Industries, Inc. Wed May 20 13:02:07 2020 Page 1
 ID:ceuvEDckNGn_oUaH7G0U8dzEclIS-21ZtrjWvEmUvSHCM5xv73tUsLBD3g4dWMMbIXzEbjU



Scale = 1:44.6

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.66	Vert(LL)	-0.03	6-7	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.36	Vert(CT)	-0.07	6-7	>999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 78 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=0-3-8
 Max Horz 7=-195(LC 10)
 Max Uplift 7=-42(LC 12), 5=-61(LC 13)
 Max Grav 7=506(LC 1), 5=572(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-473/120, 2-3=-480/127, 1-7=-449/126, 3-5=-515/169
 BOT CHORD 6-7=-187/265

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.



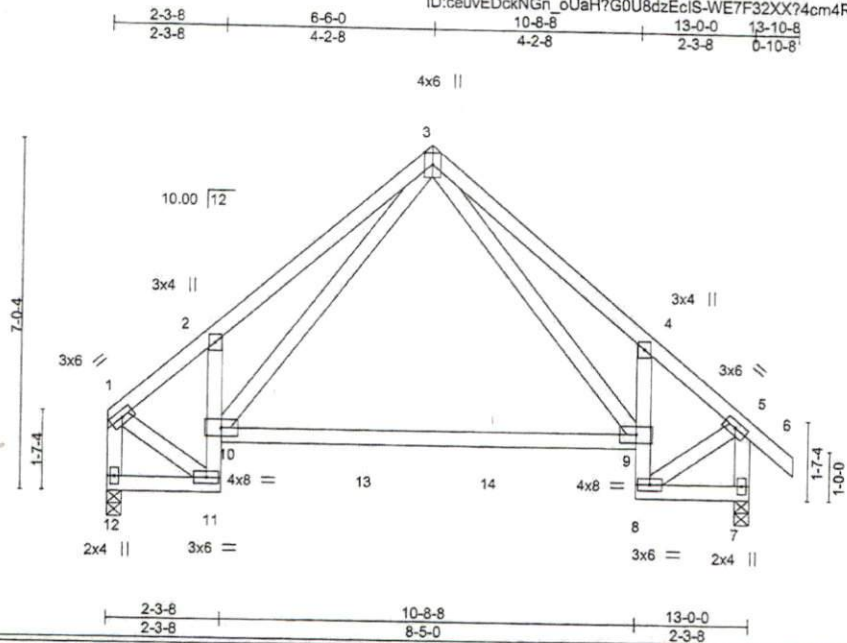
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY TRENCO
 A MITEK Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss B1	Truss Type Roof Special	Qty 1	Ply 1	2307-JRT-DAKOTA II	I41377992
-------------------------	-------------	----------------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:08 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-WE7F32XX74cm4RnZfbTKYGQmOIR4o65nl058P_zEbjT



Scale = 1:44.6

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.23	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(LL) -0.20 9-10 >762 240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.17	Vert(CT) -0.42 9-10 >362 180		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS	Horz(CT) 0.11 7 n/a n/a		
				Weight: 85 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS. (size) 12=0-3-8, 7=0-3-8
 Max Horz 12=-195(LC 8)
 Max Uplift 12=-42(LC 12), 7=-61(LC 13)
 Max Grav 12=506(LC 1), 7=572(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-449/110, 2-3=-823/271, 3-4=-730/257, 4-5=-442/111, 1-12=-538/102, 5-7=-601/151
 BOT CHORD 2-10=-375/218, 9-10=-31/338, 4-9=-357/202
 WEBS 3-9=-153/441, 3-10=-172/523, 1-11=-79/358, 5-8=-48/353

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 7. This connection is for uplift only and does not consider lateral forces.



Job	Truss	Truss Type	Qty	Ply	2307-JRT-DAKOTA II	41377993
2000367-2000367A	BE	Common Supported Gable	1	1		
84 Components (Dunn), Dunn, NC - 28334.					Job Reference (optional)	

8,330 s May 6 2020 MITek Industries, Inc. Wed May 20 13:02:09 2020 Page 1
 ID:ceuvEDckNGn_oJaH?G0U8dzEclS_QgdGOY9mNkdibMICI_z4UzzY9yXXaKw_grixQzEbjS

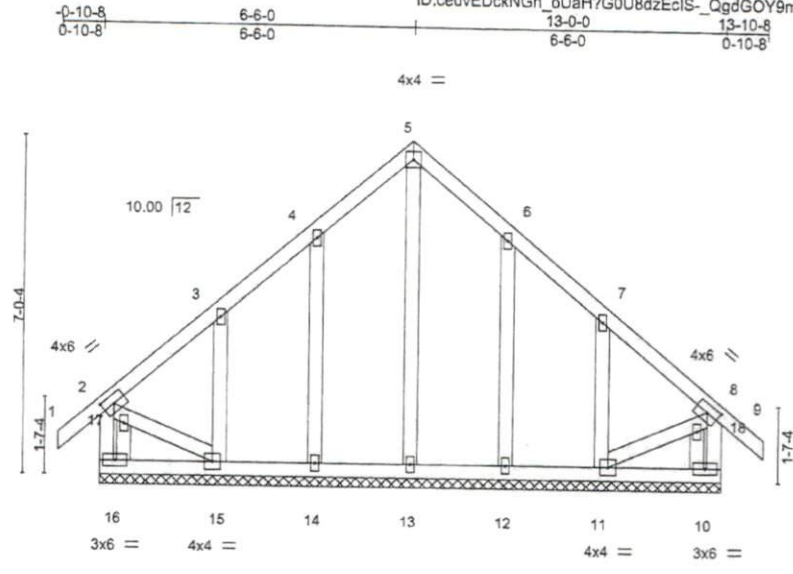


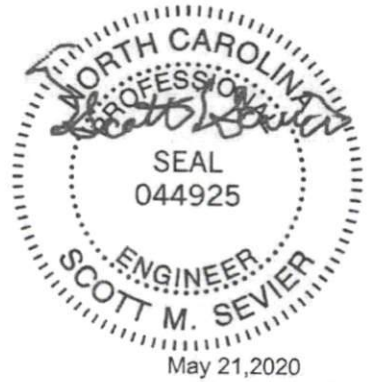
Plate Offsets (X,Y)--		[2:0-2-14,0-2-0], [8:0-2-14,0-2-0]
LOADING (psf)	SPACING-	2-0-0
TCLL 20.0	Plate Grip DOL	1.15
TCDL 10.0	Lumber DOL	1.15
BCLL 0.0 *	Rep Stress Incr	YES
BCDL 10.0	Code	IRC2015/TPI2014
	CSI.	
	TC	0.07
	BC	0.05
	WB	0.10
	Matrix-S	
	DEFL.	in (loc) l/defl L/d
	Vert(LL)	-0.00 9 n/r 120
	Vert(CT)	-0.00 9 n/r 90
	Horz(CT)	0.00 11 n/a n/a
	PLATES	MT20
	GRIP	244/190
	Weight:	95 lb
	FT =	20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS. All bearings 13-0-0.
 (lb) - Max Horz 16=-202(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=-169(LC 12), 11=-165(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

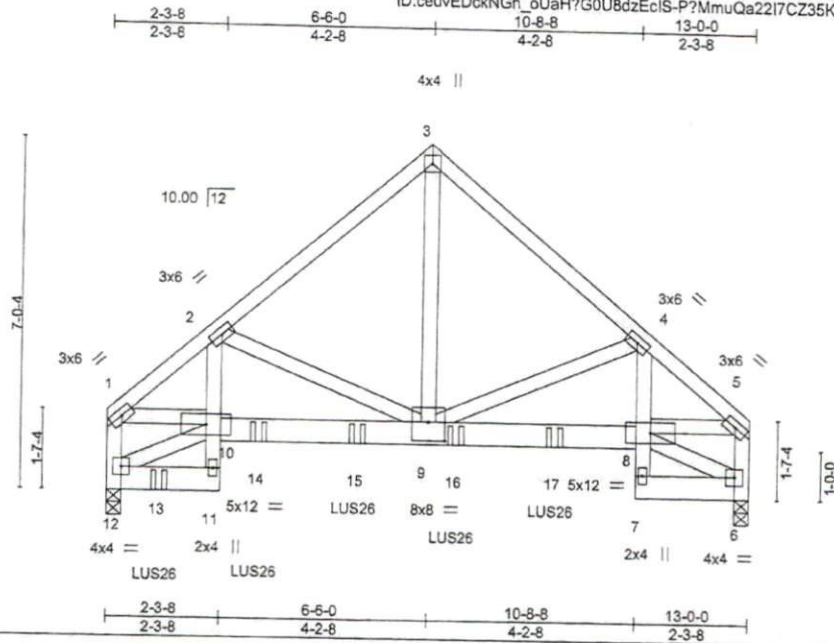
- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job 2000367-2000367A	Truss BGR	Truss Type Roof Special Girder	Qty 1	Ply 2	2307-JRT-DAKOTA II	I41377994
-------------------------	--------------	-----------------------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:12 2020 Page 1
ID:ceuvEDckNGn_oUaH?G0U8dzEclS-P?MmuQa22I7CZ35KuRXgj6bRNmMnKmsMge3MYtZEbJP



Scale = 1:44.6

Plate Offsets (X,Y) [9:0-4-0,0-4-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.29	Vert(LL)	-0.04	9-10	>999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.87	Vert(CT)	-0.09	9-10	>999		
BCLL 0.0 *	Rep Stress Incr	NO	WB 0.74	Horz(CT)	0.06	6	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS						
								Weight: 197 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x6 SP No.2 *Except*
 2-11,4-7: 2x4 SP No.3
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 6=0-3-8
 Max Horz 12=178(LC 11)
 Max Uplift 12=-413(LC 12), 6=-362(LC 13)
 Max Grav 12=3735(LC 1), 6=3288(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-4156/562, 2-3=-3092/450, 3-4=-3092/450, 4-5=-4254/553, 1-12=-3176/425, 5-6=-3255/423
 BOT CHORD 10-11=-44/458, 2-10=-171/1009, 9-10=-468/3281, 8-9=-453/3338, 4-8=-154/1095
 WEBS 3-9=-449/3582, 4-9=-1141/267, 2-9=-1078/274, 1-10=-380/3096, 5-8=-414/3223

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"x3") nails as follows:
 Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
 Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc, 2x4 - 1 row at 0-7-0 oc.
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
 - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
 - Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 12, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 6. This connection is for uplift only and does not consider lateral forces.
 - Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-12 from the left end to 9-0-12 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 997 lb down and 123 lb up at 10-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
 Continued on page 2



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss BGR	Truss Type Roof Special Girder	Qty 1	Ply 2	2307-JRT-DAKOTA II	I41377994
-------------------------	--------------	-----------------------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:12 2020 Page 2
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-P?MmuQa2217CZ35KuRXgi6bRNMmNkm5Mge3MYizEbjP

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
 Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 11-12=-20, 8-10=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 8=-997(B) 13=-998(B) 14=-1003(B) 15=-1003(B) 16=-1003(B) 17=-1003(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

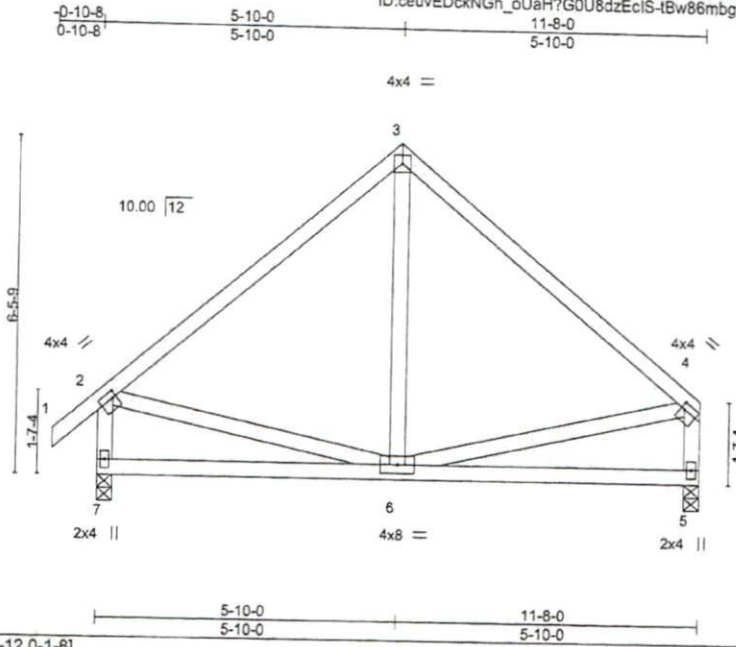
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-09 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss C	Truss Type Common	Qty 2	Ply 1	2307- JRT -DAKOTA II	I41377995
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:13 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-tBw86mbgpcF3ACgWR82vFK7ZtmFITNIWulpv4BzEbJO



Scale = 1:42.7

Plate Offsets (X,Y)- [2:0-0-12,0-1-8], [4:0-0-12,0-1-8]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.50	Vert(LL)	-0.02	5-6	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.28	Vert(CT)	-0.05	5-6	>999	180		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-MS							
									Weight: 71 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 5=0-3-8
 Max Horz 7=181(LC 9)
 Max Uplift 7=-56(LC 12), 5=-37(LC 13)
 Max Grav 7=519(LC 1), 5=452(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-422/118, 3-4=-415/112, 2-7=-468/160, 4-5=-401/117

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.

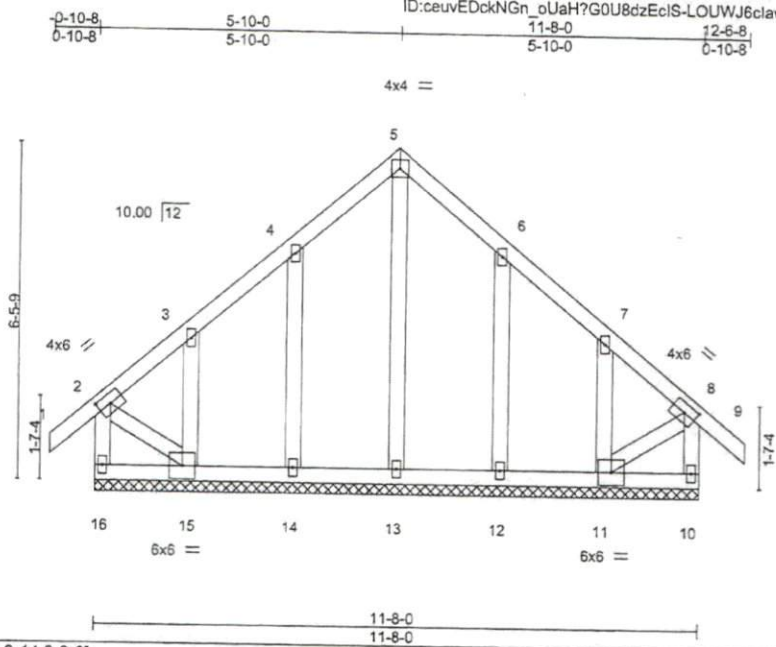
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPH Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss CE	Truss Type Common Supported Gable	Qty 1	Ply 1	2307-JRT-DAKOTA II	I41377996
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MITek Industries, Inc. Wed May 20 13:02:14 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEcIS-LOUWJ6clawNwoMFI?rZ8nXgqHAfqCqz7yYTcdzEbjN



Scale = 1:42.7

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.04	Vert(CT)	-0.00	9	n/r		
BCLL 0.0	Rep Stress Incr	YES	WB 0.08	Horz(CT)	0.00	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S						
								Weight: 82 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 11-8-0.
 (lb) - Max Horz 16=188(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=-159(LC 12), 11=-154(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable requires continuous bottom chord bearing.
 - 6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 7) Gable studs spaced at 2-0-0 oc.
 - 8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job 2000367-2000367A	Truss CGR	Truss Type Common Girder	Qty 1	Ply 2	2307-JRT -DAKOTA II Job Reference (optional)	I41377997
-------------------------	--------------	-----------------------------	----------	----------	-------------------------------------------------	-----------

84 Components (Dunn), Dunn, NC - 28334.

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:16 2020 Page 2
 ID:ceuvEDckNGn_oJaH?G0U8dzEclS-HmchKodY6Xdd2gO57GccsyI?8zB9gdkybG1ZhWzEbjL

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
- Uniform Loads (plf)
 - Vert: 1-2=-60, 2-3=-60, 4-6=-20
- Concentrated Loads (lb)
 - Vert: 5=-997(B) 7=-997(B) 8=-997(B) 9=-997(B) 10=-997(B)

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

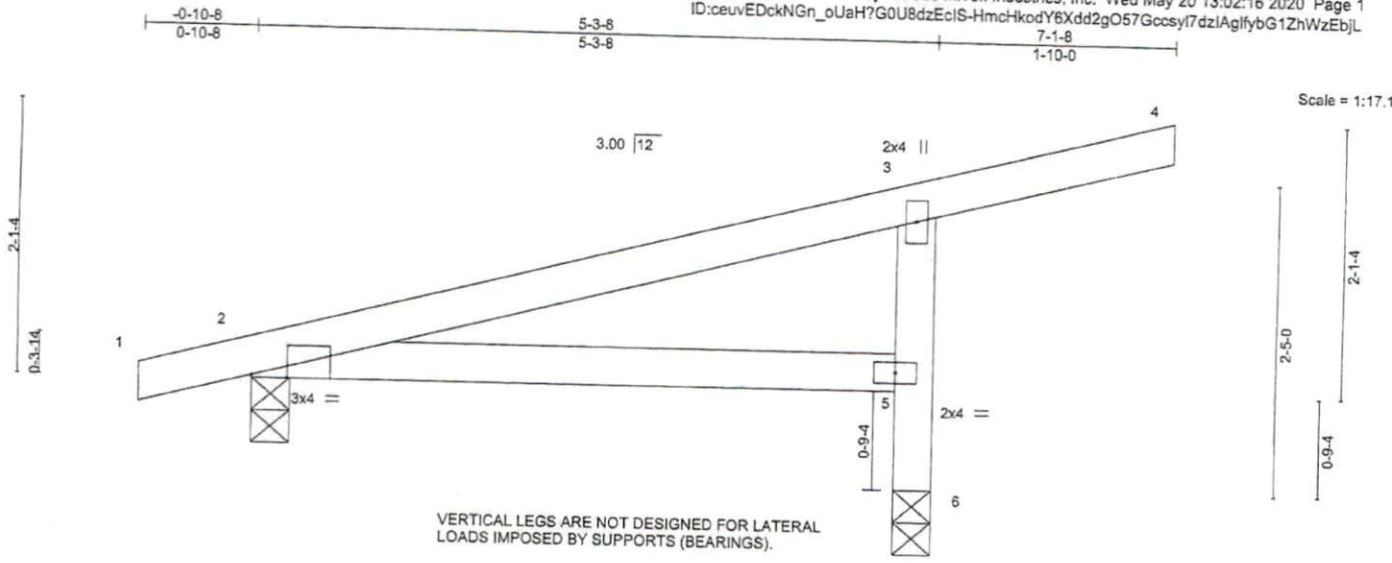
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss M1	Truss Type Monopitch	Qty 9	Ply 1	2307- JRT-DAKOTA II	141377998
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MITek Industries, Inc. Wed May 20 13:02:16 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-HmclHkodY6Xdd2gO57GccsyI7dzlAglfybG1ZhWzEbjL



LOADING (psf)		SPACING-		CSL		DEFL.		PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.03	5-9	>999	240	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.06	5-9	>999	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a	
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							
										Weight: 23 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=92(LC 11)
 Max Uplift 2=-58(LC 8), 6=-96(LC 12)
 Max Grav 2=240(LC 1), 6=343(LC 1)

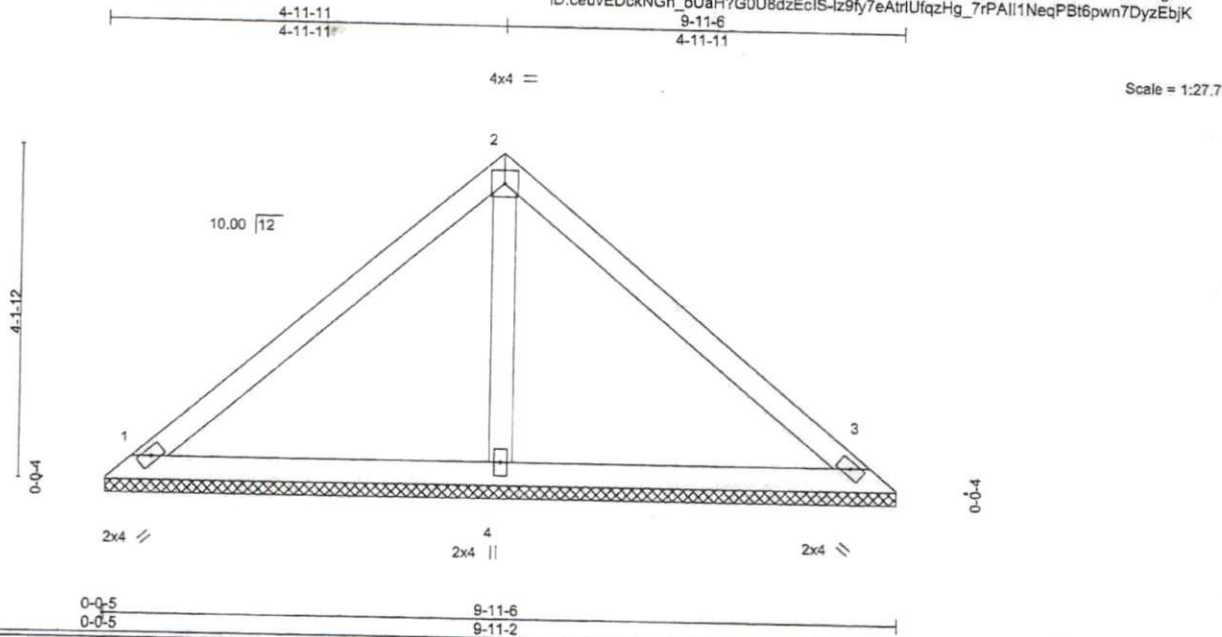
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 5-6=-343/231, 3-5=-283/242

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



Job 2000367-2000367A	Truss V1	Truss Type Valley	Qty 1	Ply 1	2307- JRT-DAKOTA II	I41377999
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:17 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-lz9fy7eAtrIUqzHg_7rPAI11NeqPBt6pwn7DyzEbjK



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.30	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.21	Vert(LL) n/a - n/a 999		
BCDL 0.0 *	Lumber DOL 1.15	WB 0.07	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 38 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. (size) 1=9-10-13, 3=9-10-13, 4=9-10-13
 Max Horz 1=-94(LC 8)
 Max Uplift 1=-32(LC 13), 3=-43(LC 13), 4=-7(LC 12)
 Max Grav 1=194(LC 1), 3=194(LC 1), 4=344(LC 1)

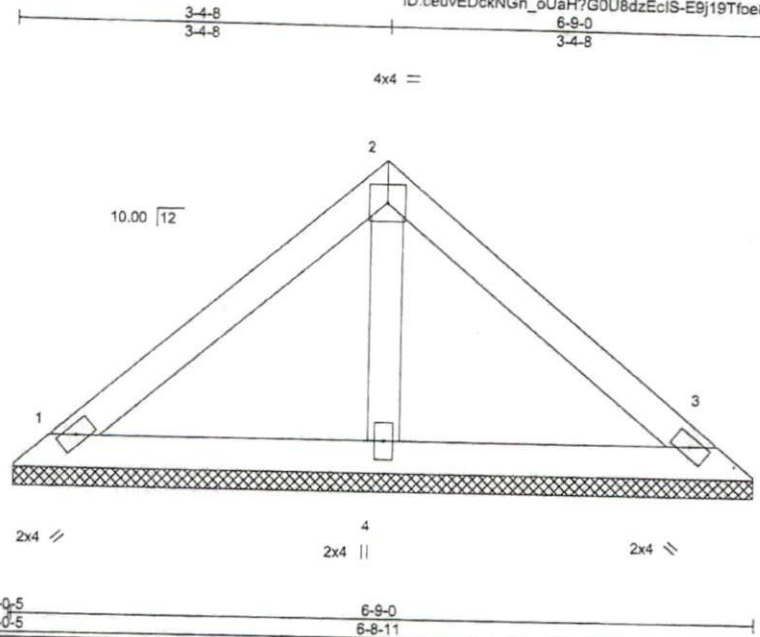
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job 2000367-2000367A	Truss V2	Truss Type Valley	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41378000
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:18 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-E9j19Tfoe8tLH_YUEhe4yNqVsn0y8fjF2aWgmPzEbjJ



Scale = 1:20.0

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.16	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.09	Vert(LL) n/a - n/a 999		
BCLL 0.0	Lumber DOL 1.15	WB 0.03	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 25 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
OTHERS 2x4 SP No.3	

REACTIONS. (size) 1=6-8-6, 3=6-8-6, 4=6-8-6
 Max Horz 1=-61(LC 8)
 Max Uplift 1=-29(LC 13), 3=-36(LC 13)
 Max Grav 1=136(LC 1), 3=136(LC 1), 4=203(LC 1)

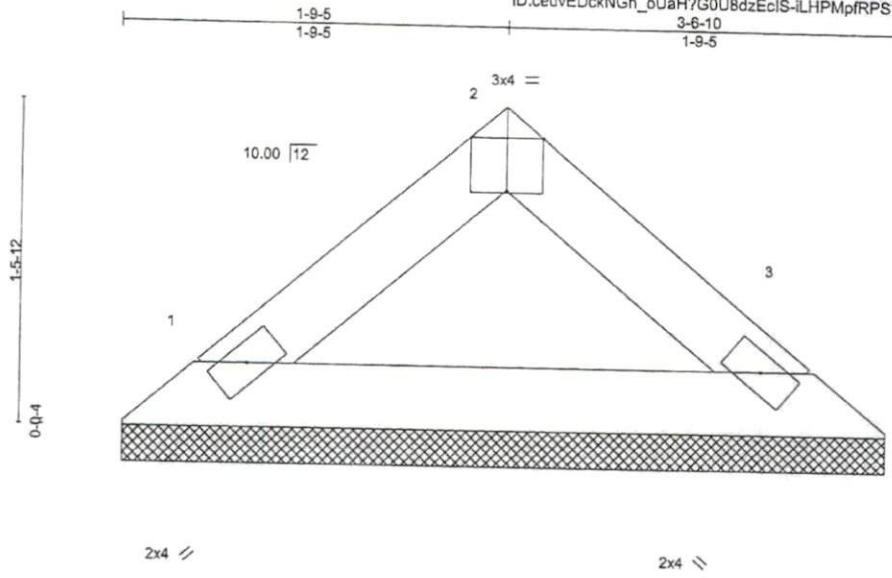
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job 2000367-2000367A	Truss V3	Truss Type Valley	Qty 1	Ply 1	2307- JRT-DAKOTA II	I41378001
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:19 2020 Page 1
 ID:ceuvEDckNGn_oUaH?G0U8dzEclS-iLHPMpfRPS?Cv77goP9JUbnhIBLDt6POHEGDlrEbjl



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						
								Weight: 11 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-6-0, 3=3-6-0
 Max Horz 1=-28(LC 8)
 Max Uplift 1=-10(LC 12), 3=-10(LC 13)
 Max Grav 1=110(LC 1), 3=110(LC 1)

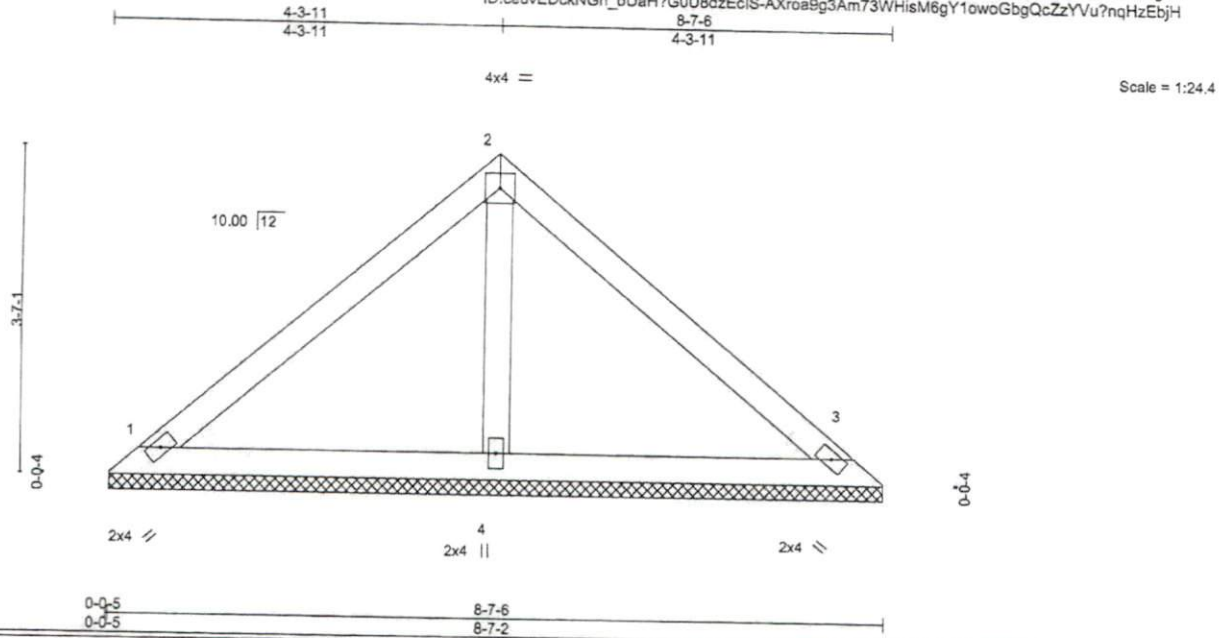
FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Gable requires continuous bottom chord bearing.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job 2000367-2000367A	Truss V4	Truss Type Valley	Qty 1	Ply 1	2307- JRT -DAKOTA II	41378002
84 Components (Dunn), Dunn, NC - 28334,		Job Reference (optional)				

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:20 2020 Page 1
 ID:ceuvEDckNgn_oJaH?G0U8dzEclS-AXroa9g3Am73WHisM6gY1owoGbgQcZzYVv?nqHzEbjH



LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.30	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-P					Weight: 32 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=8-6-13, 3=8-6-13, 4=8-6-13
 Max Horz 1=-80(LC 8)
 Max Uplift 1=-37(LC 13), 3=-47(LC 13)
 Max Grav 1=179(LC 1), 3=179(LC 1), 4=266(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Gable requires continuous bottom chord bearing.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

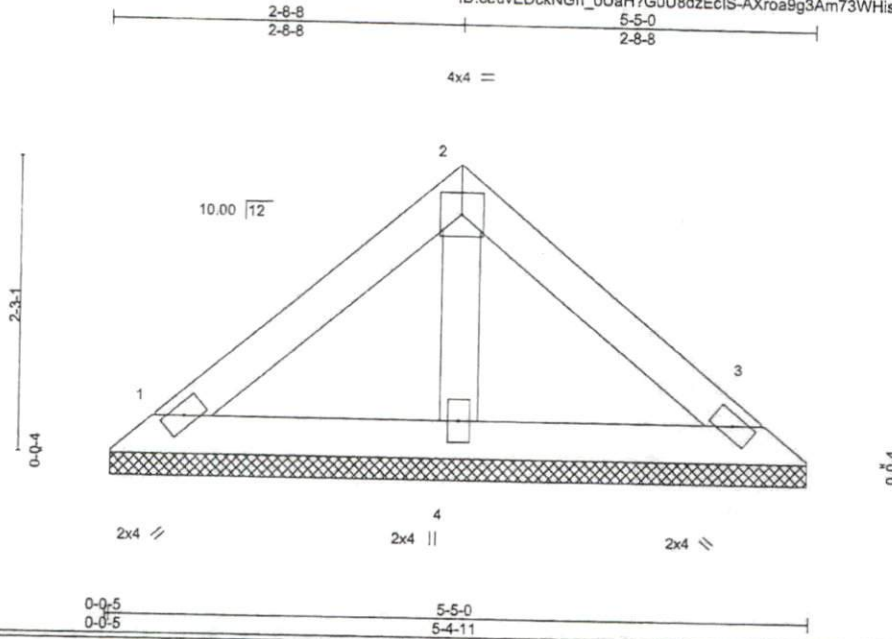
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss V5	Truss Type Valley	Qty 1	Ply 1	2307-JRT-DAKOTA II	141378003
-------------------------	-------------	----------------------	----------	----------	--------------------	-----------

84 Components (Dunn), Dunn, NC - 28334,

Job Reference (optional)

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:20 2020 Page 1
ID:ceuvEDckNGn_oUaH?G0U8dzEclS-AXroa9g3Am73WHisM6gY1owrRbi_cZLYVu?ncHzEbjH



Scale = 1:17.1

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.05	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 19 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

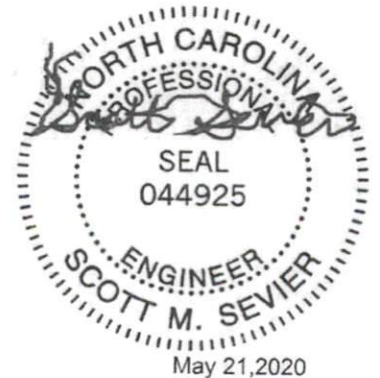
BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-5-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-4-6, 3=5-4-6, 4=5-4-6
 Max Horz 1=48(LC 8)
 Max Uplift 1=22(LC 13), 3=28(LC 13)
 Max Grav 1=106(LC 1), 3=106(LC 1), 4=157(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Gable requires continuous bottom chord bearing.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-1473 rev. 10/03/2015 BEFORE USE.

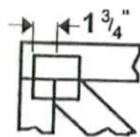
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate

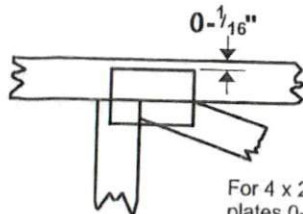
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



This symbol indicates the required direction of slots in connector plates.

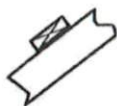
* Plate location details available in MiTek 20/20 software or upon request.

PLATE SIZE

4 x 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

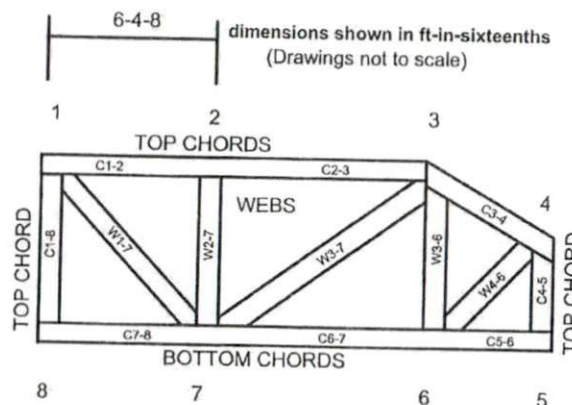


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

- ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
 DSB-89: Design Standard for Bracing.
 BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
 ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MiTek® All Rights Reserved



MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

- Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
- Cut members to bear tightly against each other.
- Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
- Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
- Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Top chords must be sheathed or purlins provided at spacing indicated on design.
- Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
- Connections not shown are the responsibility of others.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
- Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.