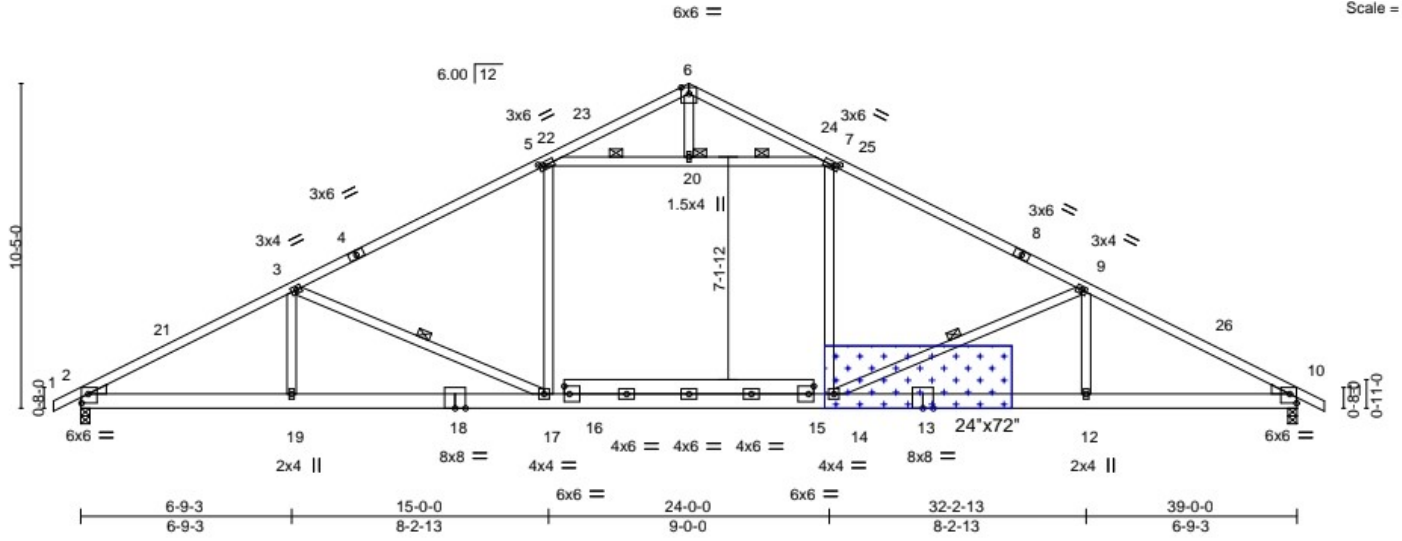
Scale = 1:73.9




ATTACH 1/2" PLYWOOD OR OSB GUSSET (15/32" RATED SHEATHING 32/16 EXP 1)
TO EACH FACE OF TRUSS WITH (0.131" X 2.5" MIN.) NAILS PER THE FOLLOWING NAIL SCHEDULE:
2 X 3'S - 2 ROWS, 2 X 4'S - 3 ROWS, 2 X 6'S AND LARGER - 4 ROWS: SPACED @ 4" O.C.
NAILS TO BE DRIVEN FROM BOTH FACES. STAGGER SPACING FROM FRONT TO BACK FACE
FOR A NET 2" O.C. SPACING IN EACH COVERED TRUSS MEMBER. USE 2" MEMBER END DISTANCE.

Plate Offsets (X,Y)-- [2:0-2-9,0-3-8], [5:0-2-0,0-1-8], [7:0-2-0,0-1-8], [10:0-2-9,0-3-8]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL (roof) | 20.0 | Plate Grip DOL | 1.15 | TC | 0.85 | Vert(LL) | -0.45 | 17-19 | >999 | 240 | MT20 | 197/144 |
| Snow (Pf/Pg) | 11.6/15.0 | Lumber DOL | 1.15 | BC | 0.86 | Vert(CT) | -0.58 | 17-19 | >795 | 180 | | |
| TCDL | 10.0 | Rep Stress Incr | YES | WB | 0.44 | Horz(CT) | 0.09 | 10 | n/a | n/a | | |
| BCLL | 0.0 * | Code | IRC2018/TPI2014 | Matrix-S | | Attic | -0.33 | 14-17 | 324 | 360 | Weight: 254 lb | FT = 20% |
| BCDL | 10.0 | | | | | | | | | | | |

**LUMBER-**
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2
BOT CHORD 2x6 SP No.2 *Except*
13-18: 2x6 SP DSS
WEBS 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

**BRACING-**
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 9-14, 3-17, 5-20, 7-20
JOINTS 1 Brace at Jt(s): 20

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8
Max Horz 2=145(LC 16)
Max Uplift 2=-74(LC 16), 10=-74(LC 17)
Max Grav 2=1723(LC 3), 10=1723(LC 3)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3120/125, 3-5=-2616/120, 5-6=-357/49, 6-7=-357/49, 7-9=-2616/120, 9-10=-3120/126
BOT CHORD 2-19=-178/2672, 17-19=-178/2672, 14-17=0/2272, 12-14=-34/2670, 10-12=-34/2670
WEBS 9-14=-769/239, 3-17=-769/238, 5-20=-2054/142, 7-20=-2054/142, 3-19=0/322, 9-12=0/322, 5-17=0/688, 7-14=0/688

**NOTES-**
1) Repair Condition: Missing or damaged plate(s) on one side(s) of truss at joint(s) 14. Repair Condition: Missing or damaged plate(s) on both side(s) of truss at joint(s) 13.
2) N/A
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-10-8 to 3-0-5, Interior(1) 3-0-5 to 19-6-0, Exterior(2R) 19-6-0 to 23-4-13, Interior(1) 23-4-13 to 39-10-8 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
5) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pg=15.0 psf; Pf=11.6 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Partially Exp.; Ce=1.0; Cs=1.00; Ct=1.10
6) Unbalanced snow loads have been considered for this design.
7) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 11.6 psf on overhangs non-concurrent with other live loads.
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) Ceiling dead load (5.0 psf) on member(s). 5-20, 7-20
11) Bottom chord live load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-17

Continued on page 2

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

September 13,2022



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



| Job | Truss | Truss Type | Qty | Ply | 114 BIRCHWOOD GROVE - ROOF | I54135131 |
|---|---|---|---|---|---|---|
| 29556-29556A | A1AR | ROOF TRUSS | 5 | 1 | Job Reference (optional) | |



**NOTES-**