



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

LUMBER-	BRACING-
TOP CHORD 2x4 SP No.2 or 2x4 SPF No.2	TOP CHORD Structural wood sheathing directly applied.
BOT CHORD 2x6 SP No.2 *Except* 13-18: 2x6 SP DSS	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	WEBS 1 Row at midpt 9-14, 3-17, 5-20, 7-20
WEDGE Left: 2x4 SP No.3, Right: 2x4 SP No.3	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
- Continuum dead load (40.0 psf) and additional bottom chord dead load (0.0 psf) applied only to room. 14-17



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WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 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/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
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Job	Truss	Truss Type	Qty	Ply	114 BIRCHWOOD GROVE - ROOF	154135131
29556-29556A	A1AR	ROOF TRUSS	5	1	Job Reference (optional)	