

Job	Truss	Truss Type	Qty	Ply	
3553741	A1	Common	4	1	I59063495 Job Reference (optional)

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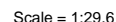


Plate Offsets (X,Y)-- [3:0-3-8,Edge]												
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d			<b>PLATES</b>	<b>GRIP</b>		
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.63	Vert(LL)	0.14	5-11	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.56	Vert(CT)	-0.16	5-11	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	-0.02	1	n/a	n/a		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MS								
BCDL	15.0										Weight: 53 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-7-0 oc purlins. Rigid ceiling directly applied or 10-0-0 oc bracing.
BOT CHORD	2x4 SP No.2	BOT CHORD	
WEBS	2x4 SP No.3		
WEDGE			
Left: 2x4 SP No.2 , Right: 2x4 SP No.2			

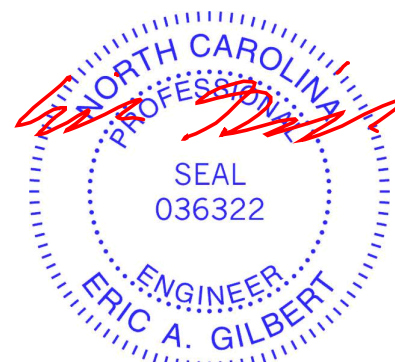
**REACTIONS.** (size) 3=0-3-0, 1=Mechanical  
 Max Horz 1=-192(LC 14)  
 Max Uplift 3=-284(LC 17), 1=-238(LC 16)  
 Max Grav 3=670(LC 2), 1=608(LC 2)

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

TOP CHORD	1-2=-846/382, 2-3=-847/383
BOT CHORD	1-5=-150/617, 3-5=-150/617
WEBS	2-5=-18/376

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDEL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-0-0 to 3-0-0, Exterior(2) 3-0-0 to 6-9-14, Corner(3) 6-9-14 to 9-9-14, Exterior(2) 9-9-14 to 14-6-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) \* 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.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 284 lb uplift at joint 3 and 238 lb uplift at joint 1.



June 20, 2023



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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
A Mitek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	A1E	Common Supported Gable	2	1	I59063496

Job Reference (optional)

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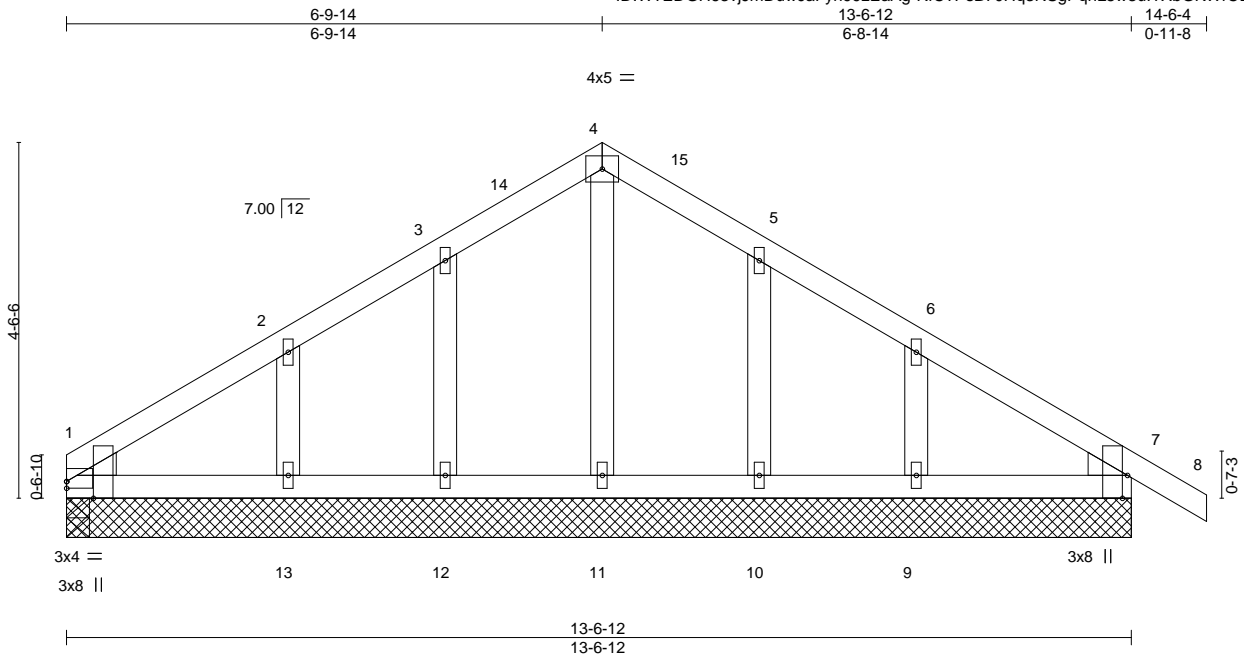


Plate Offsets (X,Y)-- [1:0-2-9,Edge], [1:0-0-0,0-1-1], [7:0-3-8,Edge]									
<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.00	7-9	>999
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.07	Vert(CT)	-0.00	7-9	>999
TCDL	10.0	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	7	n/a
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-S					
BCDL	15.0								
								<b>PLATES</b>	<b>GRIP</b>
								MT20	244/190
								Weight: 66 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

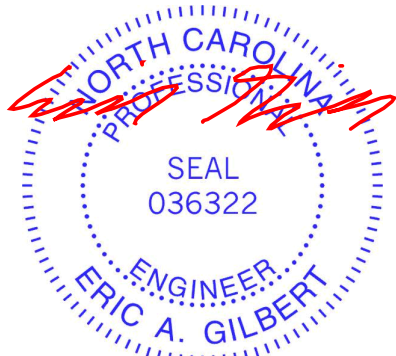
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** All bearings 13-6-12.  
(lb) - Max Horz 1=-195(LC 12)  
Max Uplift All uplift 100 lb or less at joint(s) 7, 1 except 12=-124(LC 16), 13=-216(LC 16), 10=-127(LC 17), 9=-197(LC 17)  
Max Grav All reactions 250 lb or less at joint(s) 7, 11, 12, 10, 1, 1 except 13=303(LC 30), 9=284(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**WEBS** 2-13=-266/235, 6-9=-271/218

#### NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 6-9-14, Corner(3) 6-9-14 to 9-9-14, Exterior(2) 9-9-14 to 14-6-4 zone;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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
- 8) Gable studs spaced at 2-0-0 oc.
- 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 10) \* 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.
- 11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 1 except (jt=lb) 12=124, 13=216, 10=127, 9=197.



June 20,2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

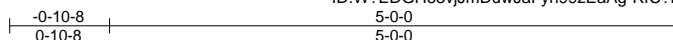
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	B1	Jack-Open	4	1	I59063497

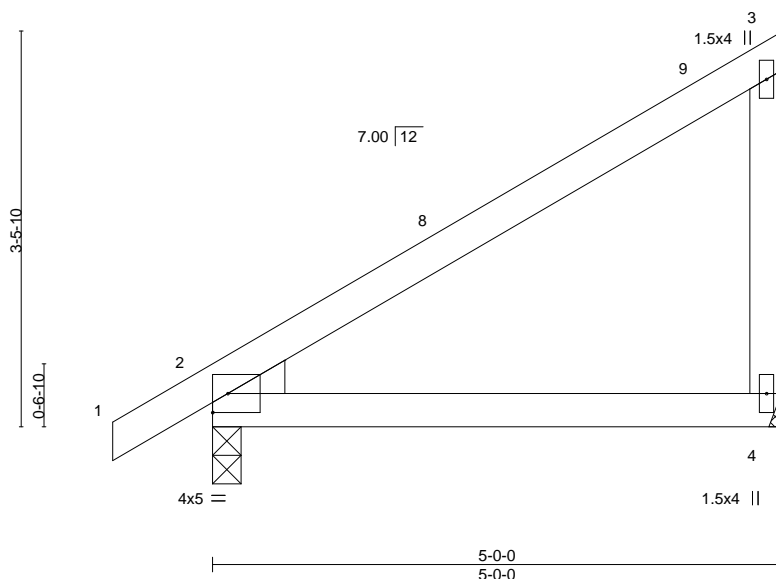
Job Reference (optional)

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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	2-0-0	TC 0.44	Vert(LL)	0.07	4-7	>842	MT20	244/190
Snow (Pf/Pg) 7.7/10.0	Plate Grip DOL 1.15	BC 0.39	Vert(CT)	-0.09	4-7	>645		
TCDL 10.0	Lumber DOL 1.15	WB 0.05	Horz(CT)	0.01	2	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-MP						
BCDL 15.0	Code IRC2015/TPI2014						Weight: 23 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.2

#### BRACING-

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

#### REACTIONS.

(size) 2=0-3-0, 4=Mechanical  
Max Horz 2=227(LC 16)  
Max Uplift 2=-89(LC 16), 4=-173(LC 16)  
Max Grav 2=280(LC 30), 4=253(LC 30)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 4-10-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2 except (jt=lb) 4=173.



June 20,2023

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**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

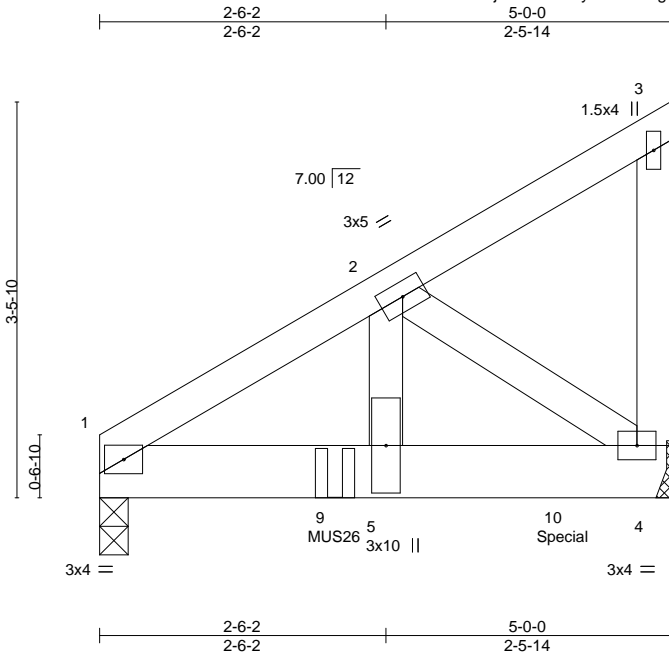
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I59063498
3553741	B1G	Jack-Open Girder	2	1		

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**LUMBER-**

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 SP No.2
WEBS	2x4 SP No.3

**BRACING-**

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

**REACTIONS.** (size) 1=0-3-0, 4=Mechanical  
Max Horz 1=197(LC 12)  
Max Uplift 1=-90(LC 12), 4=-246(LC 12)  
Max Grav 1=603(LC 2), 4=877(LC 2)

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

TOP CHORD 1-2=-814/87  
BOT CHORD 1-5=-215/685, 4-5=-215/685  
WEBS 2-4=-832/261, 2-5=-57/721

**NOTES-**

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TC DL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TC LL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 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.
- 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) 1 except (jt=lb) 4=246.
- 8) Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent at 2-0-12 from the left end to connect truss(es) to back face of bottom chord.
- 9) Fill all nail holes where hanger is in contact with lumber.
- 10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 520 lb down and 66 lb up at 2-0-12, and 523 lb down and 64 lb up at 4-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- 11) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S) Standard

- 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-35, 4-6=-30  
Concentrated Loads (lb)  
Vert: 9=-438(B) 10=-440(B)



June 20.2023



**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 3f, 9f, 10f, 11f, 12f, 13f, 14f, 15f, 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

**ENGINEERING BY**  
**TRENCO**  
A MITek Affiliat

818 Soundside Road  
Edenton, NC 27932

Job 3553741	Truss C1	Truss Type COMMON	Qty 3	Ply 1	159063499
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Job Reference (optional)

8.630 s Feb 9 2023 MiTek Industries, Inc. Tue Jun 20 15:25:13 2023 Page 1  
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0-10-8 4-7-3 10-2-3 13-6-6 18-0-0 22-5-10 25-9-13 31-4-13 36-0-0 36-10-8  
0-10-8 4-7-3 5-7-0 3-4-3 4-5-10 4-5-10 3-4-3 5-7-0 4-7-3 0-10-8

5x6 =

Scale = 1:69.5

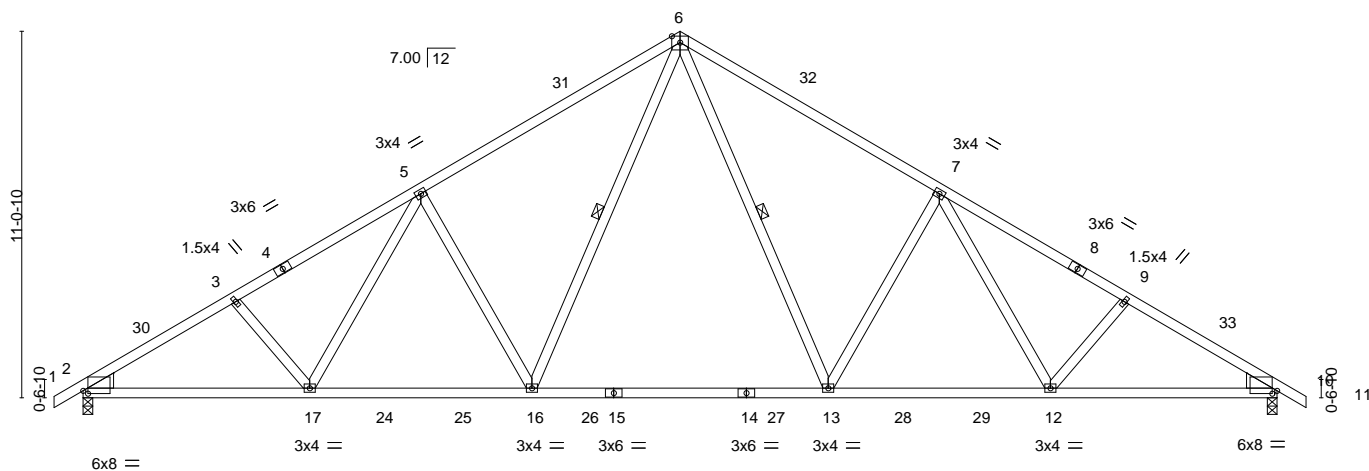


Plate Offsets (X,Y)--	[2:0-1-12,0-1-1], [10:0-1-12,0-1-1]
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<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.26	13-16	>999	240	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.54	13-16	>794	180	
TCDL	10.0	Rep Stress Incr	YES	WB	0.81	Horz(CT)	0.10	10	n/a	n/a	
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-MS							
BCDL	15.0										

Weight: 207 lb FT = 20%

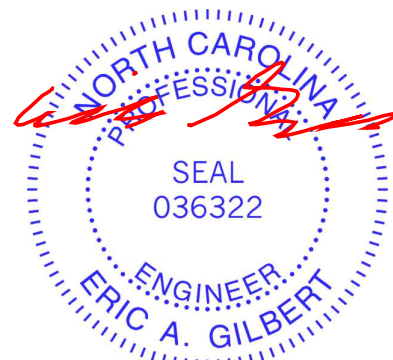
**LUMBER-**  
TOP CHORD 2x4 SP 2400F 2.0E \*Except\*  
1-4,8-11: 2x4 SP No.2  
BOT CHORD 2x4 SP No.1 \*Except\*  
14-15: 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x6 SP No.2 , Right: 2x6 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-11-1 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-6 oc bracing.  
WEBS 1 Row at midpt 6-16, 6-13

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=489(LC 15)  
Max Uplift 2=-676(LC 16), 10=-676(LC 17)  
Max Grav 2=1783(LC 30), 10=1783(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3063/1044, 3-5=-2972/1034, 5-6=-2569/969, 6-7=-2569/969, 7-9=-2972/1034,  
9-10=-3063/1045  
BOT CHORD 2-17=-1087/2699, 16-17=-832/2373, 13-16=-342/1603, 12-13=-543/2154, 10-12=-758/2553  
WEBS 3-17=-303/288, 5-17=-154/436, 5-16=-848/628, 6-16=-495/1113, 6-13=-495/1113,  
7-13=-847/628, 7-12=-155/436, 9-12=-303/288

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - 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 = 15.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 676 lb uplift at joint 2 and 676 lb uplift at joint 10.



June 20,2023

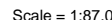
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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/TPI1 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  
**TRENCO**  
A MiTek Affiliate  
818 Soundside Road  
Edenton, NC 27932



Job Reference (optional)

ID:W?EDGH63vi.lmDiiw.laFyh99zEaAq-BfC?PsB70Hq3NSqPqn|8w3u|TXbGKWrcDoiZ.l4z.lC?f



**LUMBER-**

TOP CHORD	2x4 SP No.2
BOT CHORD	2x6 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.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 12-33
JOINTS	1 Brace at Jt(s): 43, 45, 47, 49, 51, 53

## REACTIONS.

All bearings 36-0-0.

(lb) - Max Horz 2=485(LC 11)

Max Uplift All uplift 100 lb or less at joint(s) 2, 39, 27, 22, 33, 40, 41, 26, 25 except 35=385(LC 12), 31=386(LC 13), 34=271(LC 12), 36=131(LC 12), 38=164(LC 12), 42=175(LC 12), 32=261(LC 13), 30=129(LC 13), 28=166(LC 13), 24=169(LC 13)

Max Grav All reactions 250 lb or less at joint(s) 2, 39, 27, 22, 33, 36, 37, 38, 40, 41, 42, 30, 29, 28, 26, 25, 24 except 35=1150(LC 2), 31=1157(LC 2), 34=437(LC 30), 32=441(LC 31)

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

TOP CHORD 2-3=-308/254, 9-10=-153/260, 10-11=-127/309, 11-12=-97/359, 12-13=-88/341,  
13-14=-47/252

BOT CHORD 2-42=-262/344, 41-42=-262/344, 40-41=-262/344, 39-40=-262/344, 38-39=-223/387,  
37-38=-223/387, 36-37=-223/387, 35-36=-223/387, 34-35=-193/441, 33-34=-193/441,  
32-33=-193/438, 31-32=-193/438, 30-31=-138/332, 29-30=-138/332, 28-29=-138/332,  
27-28=-138/332

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDD=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; 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/TP1.
- 4) TCDL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) \* 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.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 39, 27, 22, 33, 40, 41, 26, 25 except (jt=lb) 35=385, 31=386, 34=271, 36=131, 38=164, 42=175, 32=261, 30=129, 28=166, 24=169.

Continued on page 2



June 20.2023



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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	C1SE	GABLE	1	1	I59063500
Job Reference (optional)					

- NOTES-**
- 13) Use Simpson Strong-Tie MUS26 (6-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 8-7-0 oc max. starting at 13-8-8 from the left end to 22-3-8 to connect truss(es) to front face of bottom chord.
  - 14) Fill all nail holes where hanger is in contact with lumber.
  - 15) "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.
  - 16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 833 lb down and 155 lb up at 13-8-8, 169 lb down and 82 lb up at 15-0-0, 169 lb down and 82 lb up at 17-0-0, 169 lb down and 82 lb up at 19-0-0, and 169 lb down and 82 lb up at 21-0-0, and 833 lb down and 155 lb up at 22-3-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
  - 17) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 2-22=-30, 1-12=-35, 12-23=-35

Concentrated Loads (lb)

Vert: 35=-702(F) 31=-702(F) 55=-148(F) 56=-148(F) 57=-148(F) 58=-148(F)

Job	Truss	Truss Type	Qty	Ply	
3553741	C2	COMMON	9	1	I59063501

Job Reference (optional)

8.630 s Nov 19 2022 MiTek Industries, Inc. Tue Jun 20 14:11:07 2023 Page 1

ID:W?EDGH63vjJmDuwJaFyh99zEaAg-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-10-8 4-7-3 10-2-3 13-6-6 18-0-0 22-5-10 25-9-13 31-4-13 36-0-0 36-10-8  
0-10-8 4-7-3 5-7-0 3-4-3 4-5-10 4-5-10 3-4-3 5-7-0 4-7-3 0-10-8

5x6 =

Scale = 1:74.6

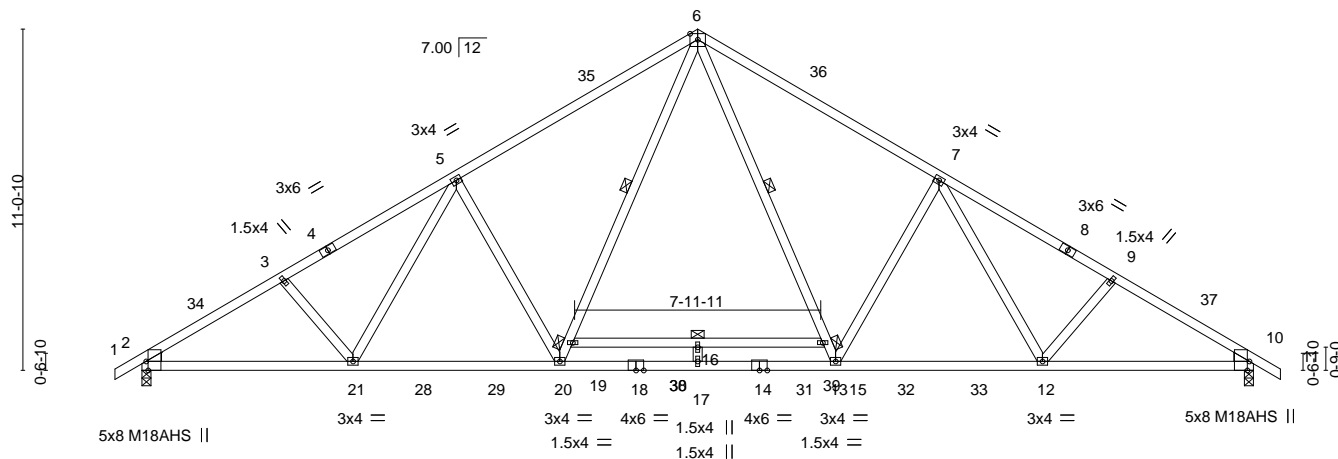


Plate Offsets (X,Y)-- [2:0-3-8,Edge], [10:0-3-8,Edge]

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 0.58	Vert(LL)	-0.29	16	>999	240	MT20	244/190
Snow (Pf/Pg) 7.7/10.0	Lumber DOL	1.15	BC 0.73	Vert(CT)	-0.64	16	>678	180	M18AHS	186/179
TCDL 10.0	Rep Stress Incr	YES	WB 0.79	Horz(CT)	0.09	10	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-MS							
BCDL 15.0									Weight: 218 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x4 SP 2400F 2.0E \*Except\*  
1-4,8-11: 2x4 SP No.2  
BOT CHORD 2x4 SP 2400F 2.0E \*Except\*  
15-19: 2x4 SP No.2  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-11-9 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 8-4-1 oc bracing. Except:  
6-0-0 oc bracing: 15-19  
WEBS 1 Row at midpt 6-19, 6-15

**REACTIONS.** (size) 2=0-3-8, 10=0-3-8  
Max Horz 2=-489(LC 14)  
Max Uplift 2=-626(LC 16), 10=-626(LC 17)  
Max Grav 2=1974(LC 30), 10=1974(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3287/953, 3-5=-3202/944, 5-6=-2821/868, 6-7=-2821/868, 7-9=-3202/944,  
9-10=-3287/954  
BOT CHORD 2-21=-1007/2995, 20-21=-748/2693, 17-20=-280/1950, 13-17=-280/1950,  
12-13=-459/2365, 10-12=-677/2749  
WEBS 3-21=-299/283, 5-21=-167/410, 5-20=-834/635, 19-20=-470/1167, 6-19=-440/1322,  
6-15=-440/1323, 13-15=-469/1166, 7-13=-834/635, 7-12=-167/410, 9-12=-299/284

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- All plates are MT20 plates 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 = 15.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=626, 10=626.



June 20,2023

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ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

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818 Soundside Road  
Edenton, NC 27932



Job 3553741	Truss C3	Truss Type Roof Special	Qty 8	Ply 1	159063502
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Job Reference (optional)  
8.630 s Feb 9 2023 MiTek Industries, Inc. Tue Jun 20 15:27:05 2023 Page 1  
ID:W?EDGH63vjJmDuwJaFyh99zEaAg-?SK\_gpOKqnGKjxtrJQDxWILNNTlafmPxht7iGz4Lha

0-10-8 6-0-5 11-6-4 18-0-0 22-9-0 29-3-11 36-0-0 36-10-8  
0-10-8 6-0-5 5-5-15 6-5-12 4-9-0 6-6-11 6-8-5 0-10-8

5x6 =

Scale = 1:70.0

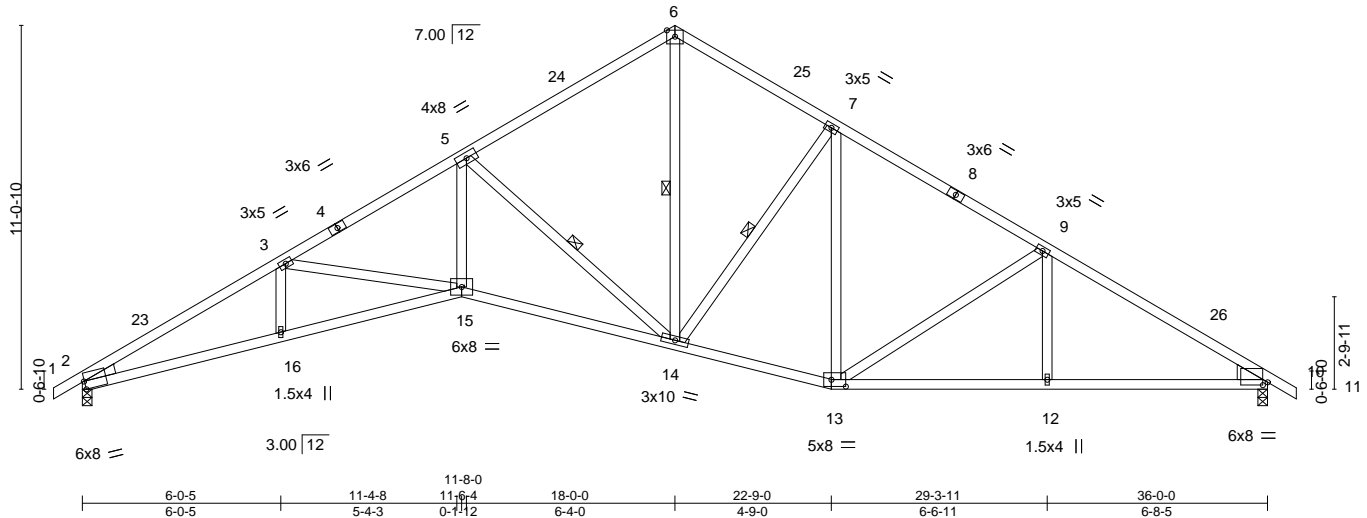


Plate Offsets (X,Y)-- [2:0-0-4,Edge], [10:0-1-12,0-1-1], [13:0-5-4,0-2-8]

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 0.87	Vert(LL)	0.36	15	>999	240	MT20	244/190
Snow (Pf/Pg) 7.7/10.0	Lumber DOL	1.15	BC 0.96	Vert(CT)	-0.58	14-15	>745	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.97	Horz(CT)	0.32	10	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-MS							
BCDL 15.0									Weight: 206 lb	FT = 20%

#### LUMBER-

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2 \*Except\*  
2-15: 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.2 , Right: 2x6 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied.  
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
WEBS 1 Row at midpt 6-14, 7-14, 5-14

#### REACTIONS.

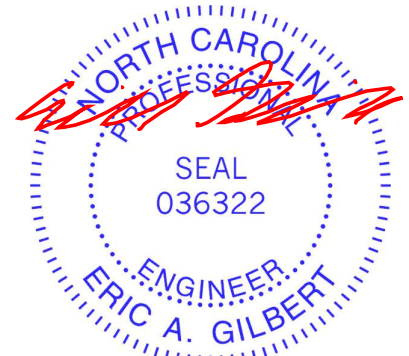
(size) 2=0-3-8, 10=0-3-8  
Max Horz 2=-489(LC 14)  
Max Uplift 2=-676(LC 16), 10=-676(LC 17)  
Max Grav 2=1672(LC 2), 10=1672(LC 2)

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

TOP CHORD 2-3=-4729/1720, 3-5=-4216/1486, 5-6=-2311/854, 6-7=-2329/873, 7-9=-2501/885,  
9-10=-3021/996  
BOT CHORD 2-16=-1679/4067, 15-16=-1687/4097, 14-15=-1274/3507, 13-14=-464/1917,  
12-13=-679/2492, 10-12=-679/2492  
WEBS 5-15=-720/2127, 6-14=-607/1924, 7-14=-567/513, 9-13=-774/456, 9-12=0/332,  
5-14=-2506/1147, 3-15=-589/407

#### NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 0-10-8 to 2-1-8, Interior(1) 2-1-8 to 18-0-0, Exterior(2) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-10-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 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) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 676 lb uplift at joint 2 and 676 lb uplift at joint 10.



June 20,2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

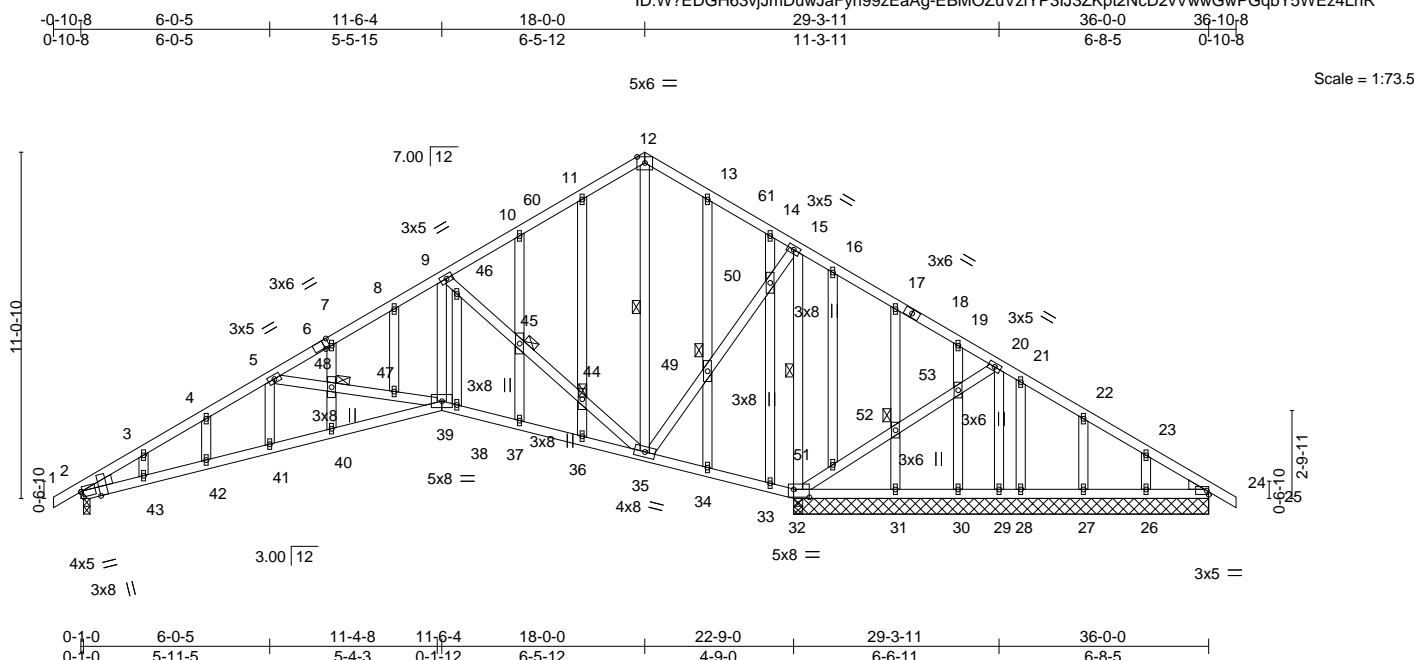
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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/TPI1 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  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)	I59063503
3553741	C4SE	GABLE	1	1		

8.630 s Feb 9 2023 MiTek Industries, Inc. Tue Jun 20 15:27:14 2023 Page  
ID:W?EDGH63vjJmDuwJaFvh99?EaAq-EBMOZuVziYP3Jl37Kpr2NcD2yVwwGwPGqbY5WEz4LhR

[illegible]

**LUMBER-**

TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3 \*Except\*  
9-39: 2x4 SP No.2  
OTHERS 2x4 SP No.3  
WEDGE  
Left: 2x4 SP No.2 . Right: 2x4 SP No.2

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 4-2-7 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 5-1-9 oc bracing.
WEBS	1 Row at midpt 12-35, 15-32
JOINTS	1 Brace at Jt(s): 44, 45, 48, 49, 52

### REACTIONS.

**ONS.** All bearings 13-3-0 except (jt=length) 2=0-2-8.  
(lb) - Max Horz 2=-489(LC 14)  
Max Uplift All uplift 100 lb or less at joint(s) 30, 28, 24 except 32=-972(LC 16),  
24=-171(LC 14), 29=-437(LC 30), 31=-169(LC 17), 27=-142(LC 17), 26=-165(LC  
17), 2=-332(LC 16)  
Max Grav All reactions 250 lb or less at joint(s) 24, 30, 28, 27 except 32=2361(LC  
30), 32=1612(LC 1), 29=264(LC 16), 31=281(LC 31), 26=259(LC 31), 2=800(LC 2)

**FORCES.**

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

**TOP CHORD**  
2-3=1760/646, 3-4=1783/770, 4-5=1798/764, 5-7=932/300, 7-8=953/371,  
8-9=948/400, 9-10=203/287, 10-11=159/331, 11-12=134/372, 12-13=141/349,  
13-14=113/279, 15-16=286/1098, 16-17=318/1103, 17-19=386/1097, 19-20=408/1039,  
20-21=114/495, 21-22=123/440, 22-23=180/431, 23-24=239/512

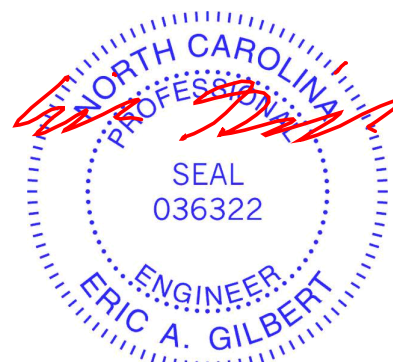
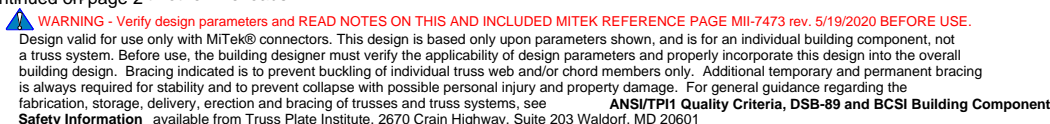
**BOT CHORD**  
2-43=789/1713, 42-43=807/1739, 41-42=825/1767, 40-41=790/1727, 39-40=816/1760,  
38-39=298/987, 37-38=307/1000, 36-37=302/983, 35-36=295/953, 34-35=1122/564,  
33-34=1145/571, 32-33=1212/591, 31-32=450/235, 30-31=450/235, 29-30=450/235,  
28-29=450/235, 27-28=450/235, 26-27=450/235, 24-26=450/235

**WEBS**  
5-41=119/268, 12-35=408/72, 35-49=482/1409, 49-50=487/1444, 15-50=459/1342,  
9-46=1234/670, 45-46=1277/678, 44-45=1302/699, 35-44=1334/717, 15-32=1485/562,  
32-51=781/375, 51-52=742/354, 52-53=781/374, 20-53=758/362, 20-29=250/519,  
5-48=906/539, 47-48=910/538, 39-47=915/544, 9-39=394/942, 31-52=312/2223

**NOTES-**

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-0-0, Interior(1) 2-0-0 to 18-0-0, Exterior(2) 18-0-0 to 21-0-0, Interior(1) 21-0-0 to 36-10-8 zone; 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) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs

non-concurrent with other live loads.



June 20.2023



818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	C4SE	GABLE	1	1	I59063503
Job Reference (optional)					

8.630 s Feb 9 2023 MiTek Industries, Inc. Tue Jun 20 15:27:14 2023 Page 2  
ID:W?EDGH63vjJmDuwJaFyh99zEaAg-EBMOZuVziYP3IJ3ZKpt2NcD2vVwwGwPGqbY5WEz4LhR

- NOTES-**
- 7) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 8) Gable studs spaced at 2-0-0 oc.
  - 9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 10) \* 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.
  - 11) Bearing at joint(s) 2 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 12) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
  - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 30, 28 except (jt=lb) 32=972, 24=171, 29=437, 31=169, 27=142, 26=165, 2=332, 24=171.

**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/TPI1 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  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	C5	Hip	1	1	I59063504

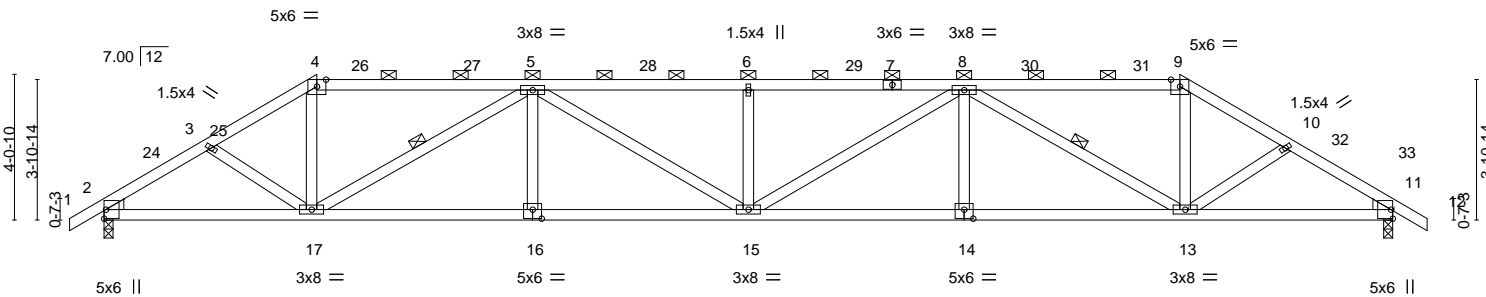
Job Reference (optional)

8.630 s Nov 19 2022 MiTek Industries, Inc. Tue Jun 20 14:11:12 2023 Page 1

ID:W?EDGH63vjJmDwJaFyh99zEaAg-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i

-0-11-8	2-11-13	5-11-0	11-11-0	17-11-0	23-11-0	29-11-0	32-10-3	35-10-0	36-9-8
0-11-8	2-11-13	2-11-3	6-0-0	6-0-0	6-0-0	6-0-0	2-11-3	2-11-13	0-11-8

Scale: 3/16"=1'



	5-11-0	11-11-0	17-11-0	23-11-0	29-11-0	35-10-0
	5-11-0	6-0-0	6-0-0	6-0-0	6-0-0	5-11-0

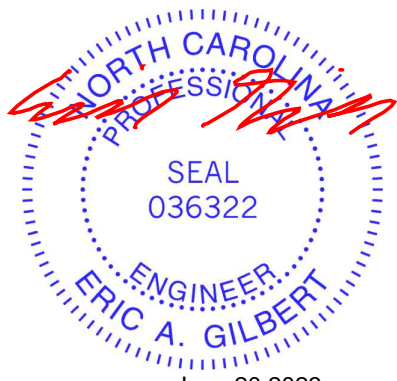
Plate Offsets (X,Y)-- [14:0-3-0,0-3-0], [16:0-3-0,0-3-0]									
<b>LOADING</b> (psf)		<b>SPACING</b>	2-0-0	<b>CSI</b>		<b>DEFL.</b>	in (loc)	l/defl	L/d
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	0.42 15	>999	240
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15	BC	0.99	Vert(CT)	-0.61 15-16	>710	180
TCDL	10.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.16 11	n/a	n/a
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MS					
BCDL	15.0								
								<b>PLATES</b>	<b>GRIP</b>
								MT20	244/190
								Weight: 189 lb	FT = 20%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 2-11-4 oc purlins, except
BOT CHORD	2x4 SP No.1 *Except* 14-16: 2x4 SP No.2		2-0-0 oc purlins (2-5-1 max.): 4-9.
WEBS	2x4 SP No.3	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEDGE		WEBS	1 Row at midpt 5-17, 8-13
Left: 2x4 SP No.2 , Right: 2x4 SP No.2			

<b>REACTIONS.</b>	(size) 2=0-3-0, 11=0-3-0
	Max Horz 2=-175(LC 14)
	Max Uplift 2=-623(LC 13), 11=-623(LC 12)
	Max Grav 2=1670(LC 2), 11=1670(LC 2)

<b>FORCES.</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2562/1108, 3-4=-2530/1102, 4-5=-2166/1002, 5-6=-4047/1819, 6-8=-4047/1819, 8-9=-2166/1002, 9-10=-2530/1102, 10-11=-2562/1108
BOT CHORD	2-17=-958/2113, 16-17=-1665/3614, 15-16=-1665/3614, 14-15=-1567/3614, 13-14=-1567/3614, 11-13=-840/2113
WEBS	4-17=-307/936, 5-17=-1718/922, 5-16=0/312, 5-15=-305/542, 6-15=-348/330, 8-15=-306/542, 8-14=0/312, 8-13=-1718/922, 9-13=-306/936

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-11-8 to 2-0-8, Interior(1) 2-0-8 to 5-11-0, Exterior(2) 5-11-0 to 10-1-15, Interior(1) 10-1-15 to 29-11-0, Exterior(2) 29-11-0 to 34-1-15, Interior(1) 34-1-15 to 36-9-8 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=12.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
  - 4) Unbalanced snow loads have been considered for this design.
  - 5) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
  - 6) Provide adequate drainage to prevent water ponding.
  - 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 8) \* 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.
  - 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=623, 11=623.
  - 10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



June 20,2023

Job	Truss	Truss Type	Qty	Ply	
3553741	C6G	HIP GIRDER	1	2	I59063505

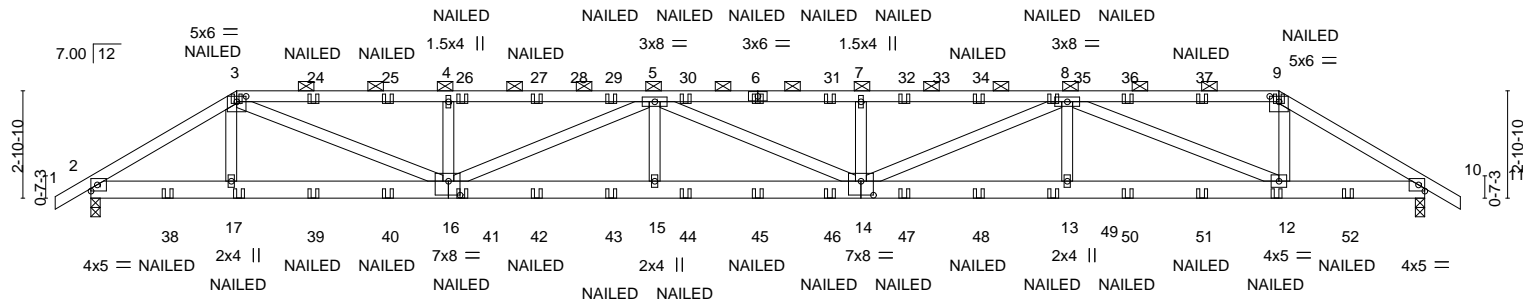
Job Reference (optional)

8.630 s Nov 19 2022 MiTek Industries, Inc. Tue Jun 20 14:11:16 2023 Page 1

ID:W?EDGH63vjJmDuwJaFyh99zEaAg-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-11-8	3-11-0	9-7-4	15-1-12	20-8-4	26-2-12	31-11-0	35-10-0	36-9-8
0-11-8	3-11-0	5-8-4	5-6-8	5-6-8	5-6-8	5-8-4	3-11-0	0-11-8

Scale = 1:61.9



3-11-0	9-7-4	15-1-12	20-8-4	26-2-12	31-11-0	35-10-0
3-11-0	5-8-4	5-6-8	5-6-8	5-6-8	5-8-4	3-11-0

Plate Offsets (X,Y)-- [3:0-3-0,0-1-12], [9:0-3-0,0-1-12], [14:0-4-0,0-4-8], [16:0-3-12,0-4-8]

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 0.80	Vert(LL)	0.48 14-15	>892	240	MT20	244/190
Snow (Pf/Pg) 12.7/10.0	Lumber DOL	1.15	BC 0.85	Vert(CT)	-0.69 14-15	>621	180		
TCDL 10.0	Rep Stress Incr	NO	WB 0.73	Horz(CT)	0.10 10	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-MS						
BCDL 15.0								Weight: 409 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
BOT CHORD 2x6 SP No.2	2-0-0 oc purlins (3-10-14 max.): 3-9.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 8-8-13 oc bracing.

**REACTIONS.** (size) 2=0-3-0, 10=0-3-0  
Max Horz 2=127(LC 10)  
Max Uplift 2=892(LC 9), 10=892(LC 8)  
Max Grav 2=2339(LC 2), 10=2339(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3805/1516, 3-4=-6404/2725, 4-5=-6404/2725, 5-7=-7908/3353, 7-8=-7908/3353,  
8-9=-3109/1299, 9-10=-3778/1503  
BOT CHORD 2-17=-1341/3224, 16-17=-1347/3214, 15-16=-3389/7982, 14-15=-3389/7982,  
13-14=-2675/6459, 12-13=-2675/6459, 10-12=-1221/3201  
WEBS 3-17=0/266, 3-16=-1583/3511, 4-16=-470/440, 5-16=-1744/782, 5-15=0/397,  
7-14=-421/391, 8-14=-716/1603, 8-13=0/411, 8-12=-3670/1657, 9-12=-502/1576

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"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 0-9-0 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=150mph Vasd=119mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCCL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=12.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=50-0-0 Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=892, 10=892.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

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ANSI/TPI 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  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	C6G	HIP GIRDER	1	2	I59063505
Job Reference (optional)					

**NOTES-**

14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 58 lb down and 67 lb up at 3-11-0, 55 lb down and 65 lb up at 5-11-12, 55 lb down and 65 lb up at 7-11-12, 55 lb down and 65 lb up at 9-11-12, 55 lb down and 65 lb up at 11-11-12, 55 lb down and 65 lb up at 13-11-12, 55 lb down and 65 lb up at 15-11-12, 55 lb down and 65 lb up at 17-11-0, 55 lb down and 65 lb up at 19-10-4, 55 lb down and 65 lb up at 21-10-4, 55 lb down and 65 lb up at 23-10-4, 55 lb down and 65 lb up at 25-10-4, 55 lb down and 65 lb up at 27-10-4, and 55 lb down and 65 lb up at 29-10-4, and 58 lb down and 67 lb up at 31-11-0 on top chord, and 153 lb down and 47 lb up at 2-0-12, 32 lb down at 3-11-12, 32 lb down at 5-11-12, 32 lb down at 7-11-12, 32 lb down at 9-11-12, 32 lb down at 11-11-12, 32 lb down at 13-11-12, 32 lb down at 15-11-12, 32 lb down at 17-11-0, 32 lb down at 19-10-4, 32 lb down at 21-10-4, 32 lb down at 23-10-4, 32 lb down at 25-10-4, 32 lb down at 27-10-4, 32 lb down at 29-10-4, and 32 lb down at 31-10-4, and 153 lb down and 47 lb up at 33-9-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-3=-35, 3-9=-45, 9-11=-35, 18-21=-30

Concentrated Loads (lb)

Vert: 6=-26(B) 9=-30(B) 17=-28(B) 3=-30(B) 12=-28(B) 24=-26(B) 25=-26(B) 26=-26(B) 27=-26(B) 29=-26(B) 30=-26(B) 31=-26(B) 32=-26(B) 34=-26(B) 35=-26(B) 36=-26(B) 37=-26(B) 38=-153(B) 39=-28(B) 40=-28(B) 41=-28(B) 42=-28(B) 43=-28(B) 44=-28(B) 45=-28(B) 46=-28(B) 47=-28(B) 48=-28(B) 49=-28(B) 50=-28(B) 51=-28(B) 52=-153(B)

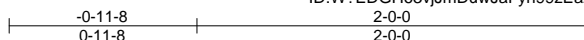


Job	Truss	Truss Type	Qty	Ply	
3553741	J1	Jack-Open	2	1	I59063506

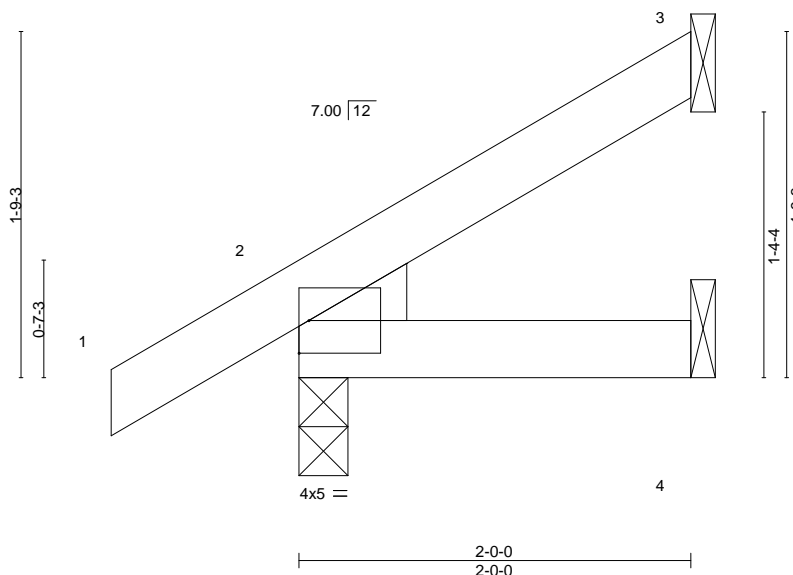
Job Reference (optional)

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ID:W?EDGH63vjJmDuwJaFyh99zEaAg-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:11.8



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 0.09	Vert(LL)	0.00	7	>999	240	MT20	244/190
Snow (Pf/Pg) 7.7/10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.00	7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Code IRC2015/TPI2014		Matrix-MP						Weight: 9 lb	FT = 20%
BCDL 15.0										

#### LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-0-0 oc purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-0, 4=Mechanical

Max Horz 2=114(LC 16)

Max Uplift 3=60(LC 16), 2=66(LC 16), 4=9(LC 16)

Max Grav 3=58(LC 30), 2=161(LC 30), 4=42(LC 7)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3, 2, 4.



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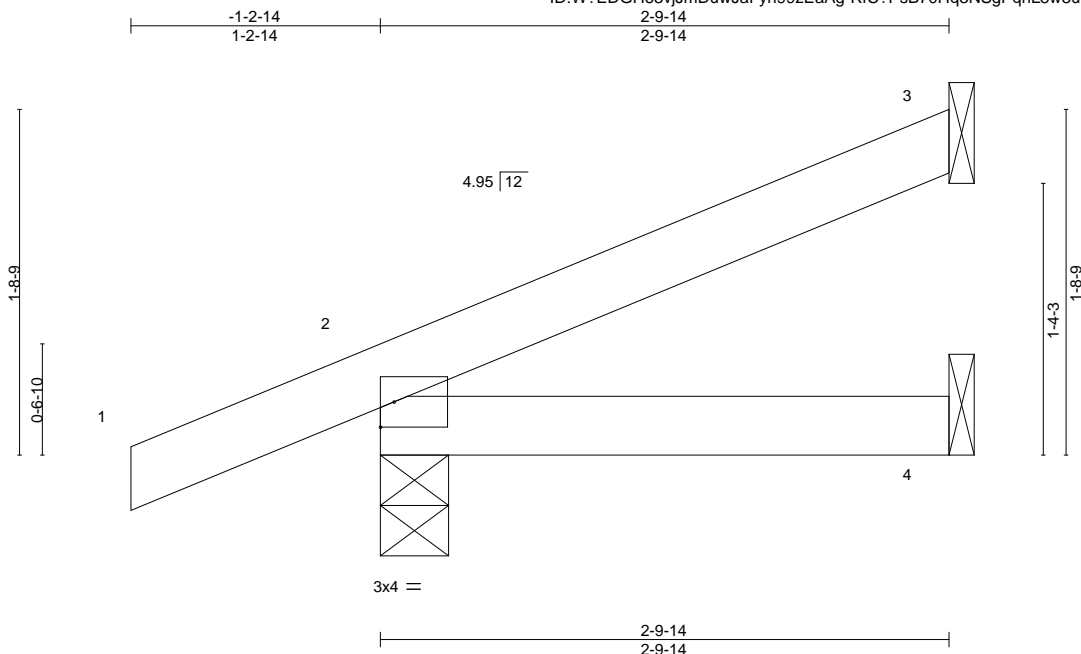
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job 3553741	Truss J2	Truss Type Jack-Open	Qty 2	Ply 1	Job Reference (optional) I59063507
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ID:W?EDGH63vjMduwJaFyh99zEaAg-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



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 0.26	Vert(LL)	-0.00	4-7	>999	240	MT20	244/190
Snow (Pf/Pg) 7.7/10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	-0.01	4-7	>999	180		
TCDL 10.0	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a	n/a		
BCLL 0.0 *	Code	IRC2015/TPI2014	Matrix-MP						Weight: 11 lb	FT = 20%
BCDL 15.0										

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

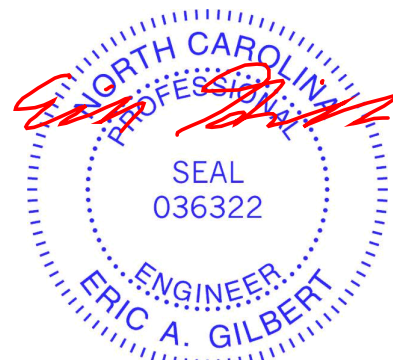
**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 2-9-14 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 3=Mechanical, 2=0-4-1, 4=Mechanical  
Max Horz 2=109(LC 16)  
Max Uplift 3=77(LC 16), 2=-115(LC 12)  
Max Grav 3=68(LC 2), 2=215(LC 2), 4=61(LC 7)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 3 except (jt=lb) 2=115.



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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	
3553741	J3G	Half Hip Girder	2	1	I59063508

Job Reference (optional)

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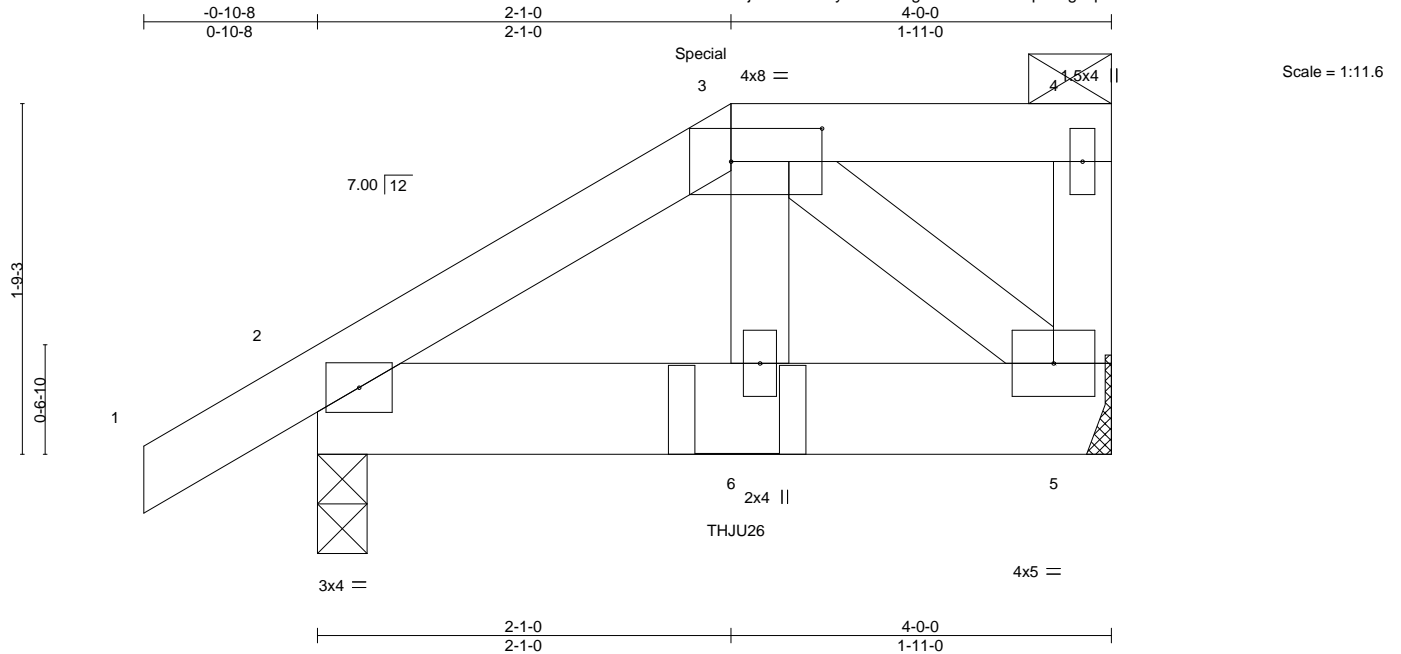


Plate Offsets (X,Y)-- [3:0-5-8,0-2-0]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL (roof)	20.0	Plate Grip DOL	2-0-0	TC	0.07	in (loc)	I/defl	MT20	GRIP
Snow (Pf/Pg)	12.7/10.0	Lumber DOL	1.15	BC	0.04	0.00 9	>999		244/190
TCDL	10.0	Rep Stress Incr	NO	WB	0.04	-0.00 9	>999		
BCLL	0.0 *	Code IRC2015/TPI2014		Matrix-MP		0.00 5	n/a		
BCDL	15.0								
								Weight: 23 lb FT = 20%	

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-4.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

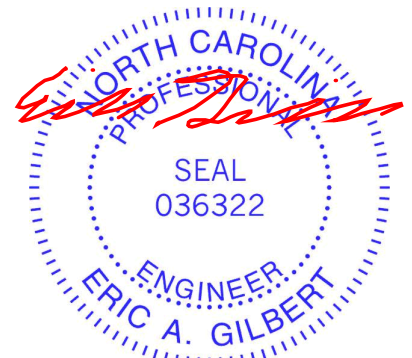
**REACTIONS.** (size) 2=0-3-0, 5=Mechanical  
Max Horz 2=116(LC 12)  
Max Uplift 2=112(LC 12), 5=86(LC 9)  
Max Grav 2=235(LC 2), 5=171(LC 2)

**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=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=12.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10, Lu=50-0-0; Min. flat roof snow load governs. Rain surcharge applied to all exposed surfaces with slopes less than 0.500/12 in accordance with IBC 1608.3.4.
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- Provide adequate drainage to prevent water ponding.
- 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.
- 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) 5 except (jt=lb) 2=112.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Use Simpson Strong-Tie THJU26 (SGL & SGL SHORT LC 1-PLY) or equivalent at 2-1-6 from the left end to connect truss(es) to front 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) 19 lb down and 67 lb up at 2-1-0 on top chord, and 6 lb down and 7 lb up at 2-1-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard



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Continued on page 2

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ENGINEERING BY  
**TRENCO**  
A MiTek Affiliate

818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	I59063508
3553741	J3G	Half Hip Girder	2	1	
Job Reference (optional)					

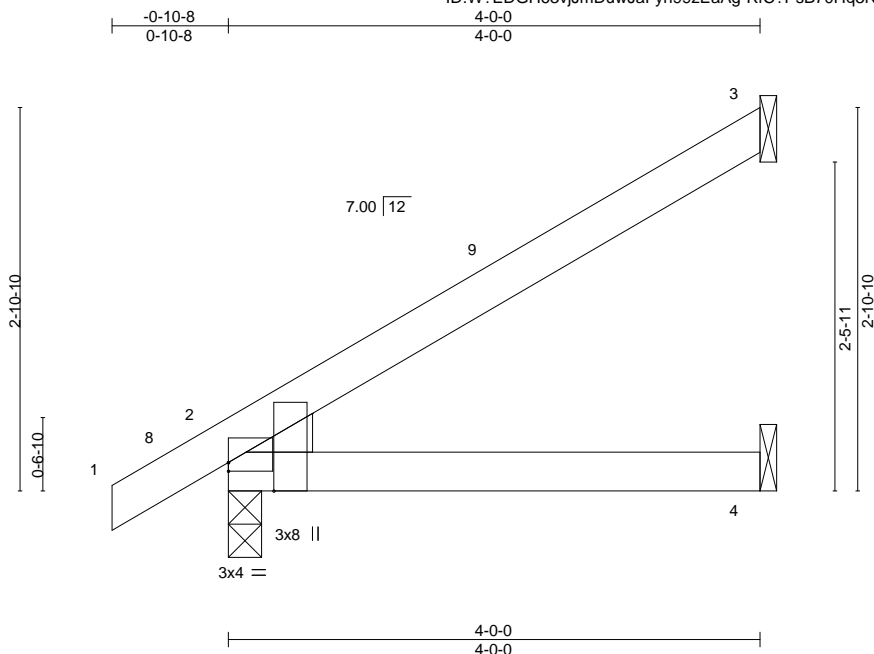
**LOAD CASE(S)** Standard  
1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (plf)  
Vert: 1-3=-35, 3-4=-45, 5-7=-30  
Concentrated Loads (lb)  
Vert: 6=-4(F)

Job	Truss	Truss Type	Qty	Ply	
3553741	J4	Jack-Open	15	1	I59063509

Job Reference (optional)

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Scale = 1:17.3

Plate Offsets (X,Y)-- [2:0-0-0,0-0-13], [2:0-2-9,Edge]

<b>LOADING</b> (psf)		<b>SPACING-</b>	2-0-0	<b>CSI.</b>		<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	0.03	4-7	>999	240	MT20	244/190
Snow (Pf/Pg)	7.7/10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.04	4-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.01	3	n/a	n/a		
BCLL	0.0 *	Code	IRC2015/TPI2014	Matrix-MP							Weight: 15 lb	FT = 20%
BCDL	15.0											

#### LUMBER-

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

WEDGE

Left: 2x4 SP No.2

#### BRACING-

TOP CHORD

Structural wood sheathing directly applied or 4-0-0 oc purlins.

BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS.

(size) 3=Mechanical, 2=0-3-0, 4=Mechanical

Max Horz 2=190(LC 16)

Max Uplift 3=-127(LC 16), 2=-80(LC 16), 4=-13(LC 16)

Max Grav 3=128(LC 30), 2=239(LC 30), 4=89(LC 7)

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

#### NOTES-

- 1) Wind: ASCE 7-10; Vult=150mph Vasd=119mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) -0-10-8 to 2-1-8, Interior(1) 2-1-8 to 3-11-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pr=20.0 psf (roof live load: Lumber DOL=1.15 Plate DOL=1.15); Pg=10.0 psf (ground snow); Pf=7.7 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 7.7 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) \* 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.
- 7) Refer to girder(s) for truss to truss connections.
- 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4 except (jt=lb) 3=127.



June 20,2023

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