MiTek USA, Inc.
7777 Greenback Lane
Suite 109
Citrus Heights, CA, 95610
Telephone 916/676-1900
Fax 916/676-1909

Re: LC_CL885D24
Plan 885D 4' Front Garage Ext 30#

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Builders FirstSource - Colorado Springs.

Pages or sheets covered by this seal: R52082825 thru R52082836

My license renewal date for the state of Colorado is October 31, 2019.

October 23,2017

Hernandez, Marcos

IMPORTANT NOTE: Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D1	Scissor	6	1	R52082825

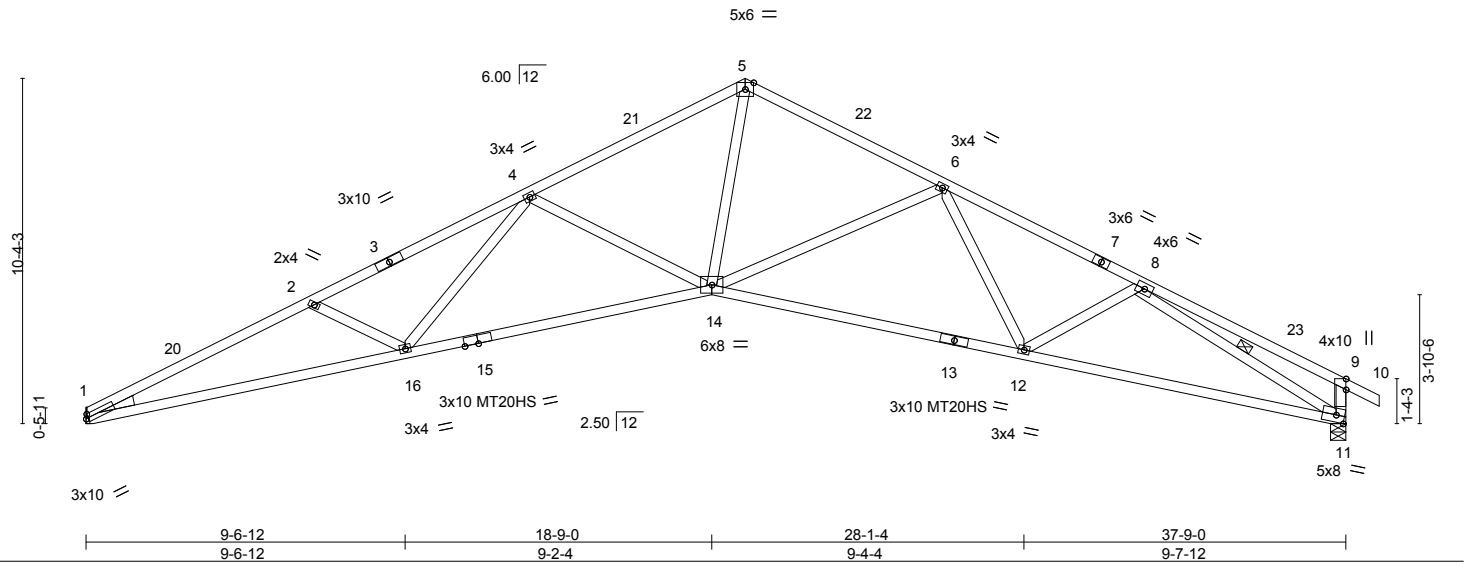
Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:31 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-FqKjYpMJ8K1P8dhRN1YZuhh5TL1iXEtDFDZ9T1yQZlw

6-10-0	13-3-8	19-9-0	25-7-13	31-6-11	37-9-0	38-9-0
6-10-0	6-5-8	6-5-8	5-10-13	5-10-13	6-2-5	1-0-0

Scale = 1:69.0



9-6-12	18-9-0	28-1-4	37-9-0
9-6-12	9-2-4	9-4-4	9-7-12

Plate Offsets (X,Y)-- [1:0-0-15,0-1-8], [9:0-3-15,0-0-0], [11:0-3-1,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.54	14-16	>832	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.85	Vert(TL)	-1.08	14-16	>419	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horz(TL)	0.55	11	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 153 lb	FT = 0%

LUMBER-

TOP CHORD 2x4 SPF 1650F 1.5E *Except* 7-10: 2x4 SPF No.2
BOT CHORD 2x4 DF 2400F 2.0E *Except* 14-15: 2x4 SPF 1650F 1.5E, 13-14: 2x4 SPF No.2
WEBS 2x4 SPF No.2
WEDGE
Left: 2x4 SP No.3

BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-2-0 oc bracing.
WEBS 1 Row at midpt 8-11

REACTIONS. (lb/size) 11=1779/0-5-8, 1=1691/Mechanical
Max Horz 1=266(LC 8)
Max Uplift 11=-369(LC 9), 1=-318(LC 9)

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

TOP CHORD 1-20=-5002/1083, 2-20=-4873/1106, 2-3=-4535/970, 3-4=-4436/987, 4-21=-3255/725, 5-21=-3134/737, 5-22=-2734/678, 6-22=-2841/666, 6-7=-3392/783, 7-8=-3488/761, 8-23=-287/173, 9-23=-393/151, 9-11=-452/259
BOT CHORD 1-16=-938/4460, 15-16=-683/3679, 14-15=-673/3701, 13-14=-511/3075, 12-13=-522/3050, 11-12=-610/3018
WEBS 2-16=-465/252, 4-16=-104/635, 4-14=-943/343, 5-14=-442/2237, 6-14=-717/261, 6-12=-9/271, 8-11=-3270/660

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 19-9-0, Exterior(2) 19-9-0 to 22-9-0 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 MT20 plates unless otherwise indicated.
4) Plates checked for a plus or minus 5 degree rotation about its center.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Refer to girder(s) for truss to truss connections.
7) Bearing at joint(s) 11 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 369 lb uplift at joint 11 and 318 lb uplift at joint 1.
9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D1E	GABLE	1	1	R52082826
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:33 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-BDSTzVOZgyH7OxrqVSa1z6mcG8uB?JEWiX2GYwyQZlu

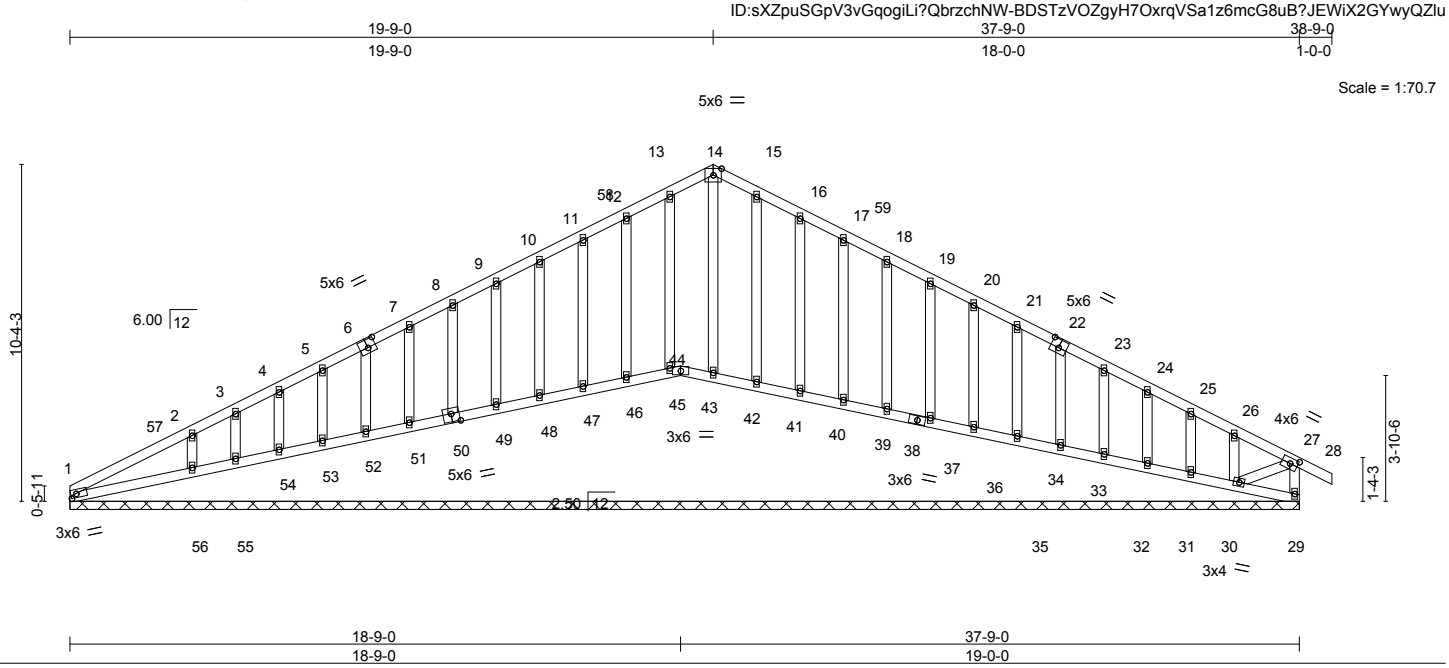


Plate Offsets (X,Y)-- [1:0-2-0,0-1-8], [6:0-3-0,0-3-0], [22:0-3-0,0-3-0], [27:0-2-15,0-2-0], [50:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.01	28	n/r	120	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.14	Vert(TL)	-0.01	28	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.17	Horz(TL)	0.01	29	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix)							Weight: 198 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

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, Except: 6-0-0 oc bracing: 55-56,44-45,37-39,29-30.

REACTIONS. All bearings 37-9-0.

(lb) - Max Horz 1=269(LC 8)

Max Uplift All uplift 100 lb or less at joint(s) 1, 44, 29, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30 except 56=-111(LC 9)

Max Grav All reactions 250 lb or less at joint(s) 1, 44, 29, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30 except 56=363(LC 13)

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

TOP CHORD	9-10=-106/255, 10-11=-97/293, 11-58=-88/325, 12-58=-84/330, 12-13=-80/373, 13-14=-68/397, 14-15=-60/388, 15-16=-53/347, 16-59=-39/305, 17-59=-43/300, 17-18=-35/267
WEBS	2-56=-269/278

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Corner(3) 0-0-0 to 3-0-0, Exterior(2) 3-0-0 to 19-9-0, Corner(3) 19-9-0 to 22-9-0 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) Plates checked for a plus or minus 5 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 44, 29, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30 except (jt=lb) 56=111.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 44, 43, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 42, 41, 40, 39, 37, 36, 35, 34, 33, 32, 31, 30.
11) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

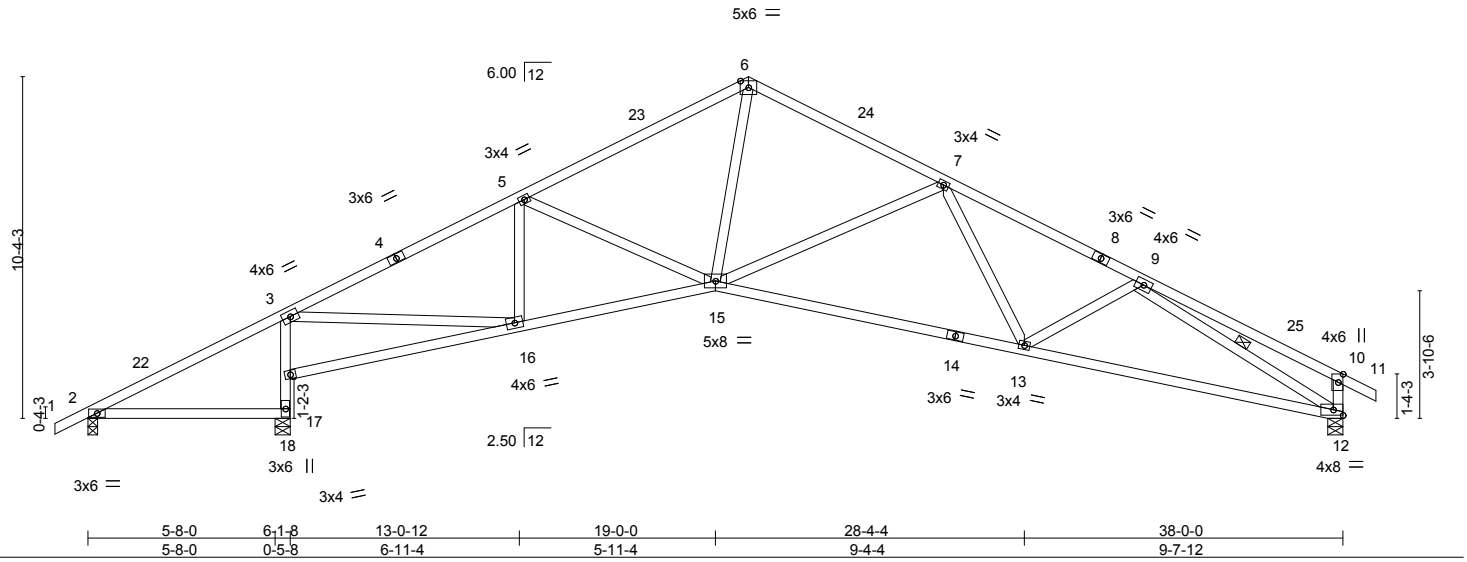
Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D1X	Roof Special	1	1	R52082827
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:34 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-fP?rBrPBRFPz?5Q0395GVKJcZY3gkcofxBnp4MyQZlt

1-0-0	6-1-8	13-0-12	20-0-0	25-10-13	31-9-11	38-0-0	39-0-0
1-0-0	6-1-8	6-11-4	6-11-4	5-10-13	5-10-13	6-2-5	1-0-0

Scale = 1:69.8



5-8-0	6-1-8	13-0-12	19-0-0	28-4-4	38-0-0
5-8-0	0-5-8	6-11-4	5-11-4	9-4-4	9-7-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.23	13-15	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.83	Vert(TL)	-0.58	13-15	>663	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(TL)	0.23	12	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 153 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 3-11-2 oc bracing.
WEBS	1 Row at midpt 9-12

REACTIONS. (lb/size) 2=242/0-3-8, 18=1830/0-5-8, 12=1496/0-5-8
Max Horz 2=279(LC 8)
Max Uplift 2=-144(LC 9), 18=-572(LC 9), 12=-537(LC 9)
Max Grav 2=285(LC 13), 18=1830(LC 1), 12=1496(LC 1)

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

TOP CHORD	2-22=-210/281, 3-22=-193/309, 3-4=-2275/830, 4-5=-2061/845, 5-23=-2203/827, 6-23=-2071/839, 6-24=-1837/785, 7-24=-1943/773, 7-8=-2632/1040, 8-9=-2729/1018, 9-25=-258/243, 10-25=-362/226, 10-12=-434/330
BOT CHORD	17-18=-1791/669, 3-17=-1682/675, 16-17=-255/105, 15-16=-544/1981, 14-15=-641/2332, 13-14=-652/2306, 12-13=-827/2429
WEBS	3-16=-620/2171, 5-16=-484/233, 5-15=-286/218, 6-15=-447/1327, 7-15=-762/427, 7-13=-40/333, 9-12=-2600/888

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; partially; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 20-0-0, Exterior(2) 20-0-0 to 23-0-0 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) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Bearing at joint(s) 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=144, 18=572, 12=537.
7) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D1Y	Roof Special	1	1	R52082828

Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:35 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-8bZDOBQpCZXqdF?CctcV2XroryQkT32p9rXNcoyQZls

-1-0-0	6-1-8	13-0-12	20-0-0	25-10-3	31-8-5	37-6-8	40-0-0	41-0-0
1-0-0	6-1-8	6-11-4	6-11-4	5-10-3	5-10-3	5-10-3	2-5-8	1-0-0

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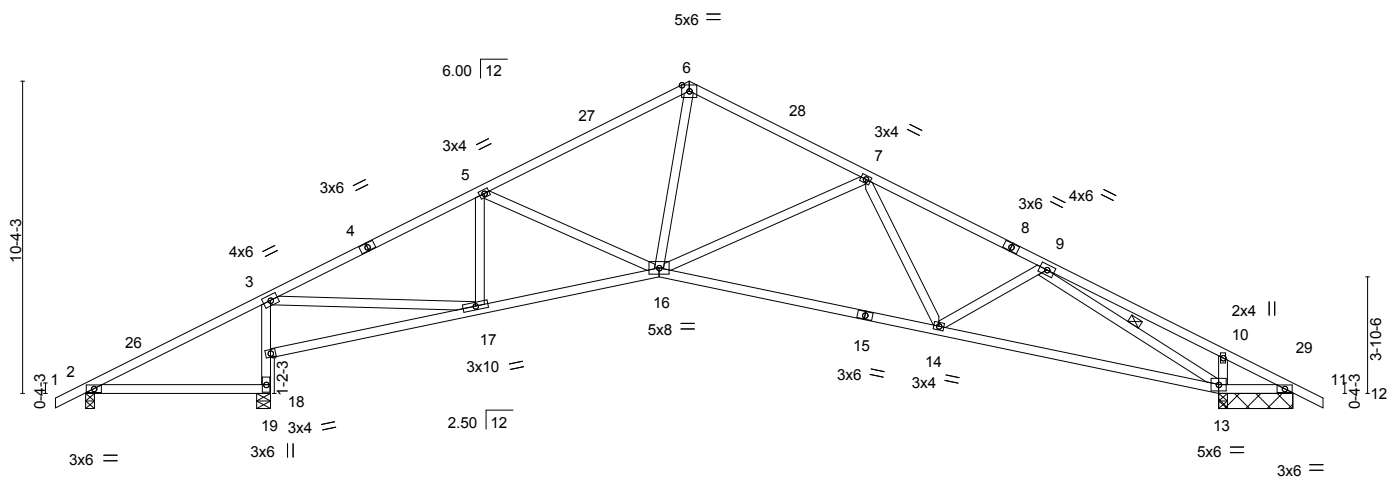


5-8-0	6-1-8	13-0-12	19-0-0	28-3-4	37-6-8	40-0-0
5-8-0	0-5-8	6-11-4	5-11-4	9-3-4	9-3-4	2-5-8

LOADING (psf)		**SPACING-** 2-0-0		**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	30.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.22	14-16	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.78	Vert(TL)	-0.55	14-16	>685	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(TL)	0.21	13	n/a	n/a		
BCDL	7.5	Code IRC2009/TPI2007		(Matrix-M)							Weight: 158 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied or 4-0-3 oc bracing.
WEBS	1 Row at midpt 9-13

REACTIONS. All bearings 2-5-8 except (jt=length) 2=0-3-8, 19=0-5-8.
(lb) - Max Horz 2=252(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) except 2=-146(LC 9), 19=-556(LC 9), 13=-651(LC 9), 11=-151(LC 1), 11=-151(LC 1)
Max Grav All reactions 250 lb or less at joint(s) 11 except 2=288(LC 13), 19=1785(LC 1), 13=1868(LC 1), 13=1868(LC 1)

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

TOP CHORD	2-26=-187/279, 3-26=-170/295, 3-4=-2210/803, 4-5=-1996/818, 5-27=-2112/791, 6-27=-1979/804, 6-28=-1759/735, 7-28=-1864/723, 7-8=-2399/932, 8-9=-2494/910, 9-10=-92/539, 10-29=-191/487, 11-29=-198/477
BOT CHORD	18-19=-1746/628, 3-18=-1641/635, 16-17=-462/1921, 15-16=-544/2168, 14-15=-554/2143, 13-14=-654/2103, 11-13=-345/205
WEBS	3-17=-535/2093, 5-17=-463/210, 5-16=-300/238, 6-16=-408/1253, 7-16=-683/385, 7-14=-2/259, 9-13=-3009/1050, 10-13=-436/297

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; partially; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 20-0-0, Exterior(2) 20-0-0 to 23-0-0 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) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 146 lb uplift at joint 2, 556 lb uplift at joint 19 , 651 lb uplift at joint 13, 151 lb uplift at joint 11 and 151 lb uplift at joint 11.
6) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

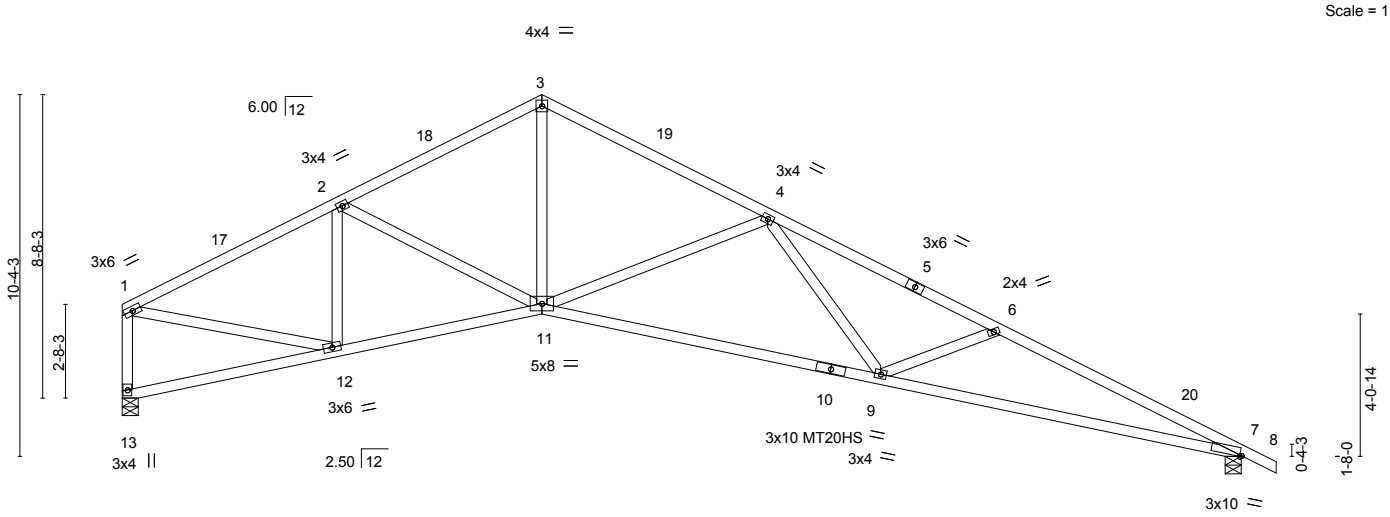
Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D2	Scissor	10	1	R52082829
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:35 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-8bZDOBQpCZXqdF?CctcV2XrozyPxT1jp9rXNcoyQZIs

6-1-12	12-0-0	18-5-8	24-11-0	32-0-0	33-0-0
6-1-12	5-10-4	6-5-8	6-5-8	7-1-0	1-0-0

Scale = 1:65.9



6-1-12	12-0-0	21-8-4	32-0-0
6-1-12	5-10-4	9-8-4	10-3-12

Plate Offsets (X,Y)-- [7:0-0-9,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.79	Vert(LL)	-0.36	9-11	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.89	Vert(TL)	-0.80	9-11	>478	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(TL)	0.32	7	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 125 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2 *Except* 7-10: 2x4 SPF 1650F 1.5E
WEBS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 8-4-8 oc bracing.

REACTIONS. (lb/size) 13=1431/0-5-8, 7=1511/0-5-8
Max Horz 13=-281(LC 7)
Max Uplift 13=-266(LC 9), 7=-317(LC 9)

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

TOP CHORD	1-17=-1994/412, 2-17=-1893/426, 2-18=-2134/464, 3-18=-2026/486, 3-19=-2026/478, 4-19=-2146/466, 4-5=-3517/753, 5-6=-3621/736, 6-20=-4076/903, 7-20=-4185/880, 1-13=-1396/350
BOT CHORD	12-13=-210/269, 11-12=-150/1750, 10-11=-424/2852, 9-10=-434/2825, 7-9=-724/3738
WEBS	2-12=-605/188, 2-11=-141/306, 3-11=-233/1401, 4-11=-1066/372, 4-9=-83/667, 6-9=-550/270, 1-12=-311/1689

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 12-0-0, Exterior(2) 12-0-0 to 15-0-0 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 MT20 plates unless otherwise indicated.
4) Plates checked for a plus or minus 5 degree rotation about its center.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 13, 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 266 lb uplift at joint 13 and 317 lb uplift at joint 7.
8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D2E	GABLE	1	1	R52082830

Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:37 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-4_h_ptR4kAoYsY8bkHfz7yxl5lGwx7S6d90ThhyQZIq

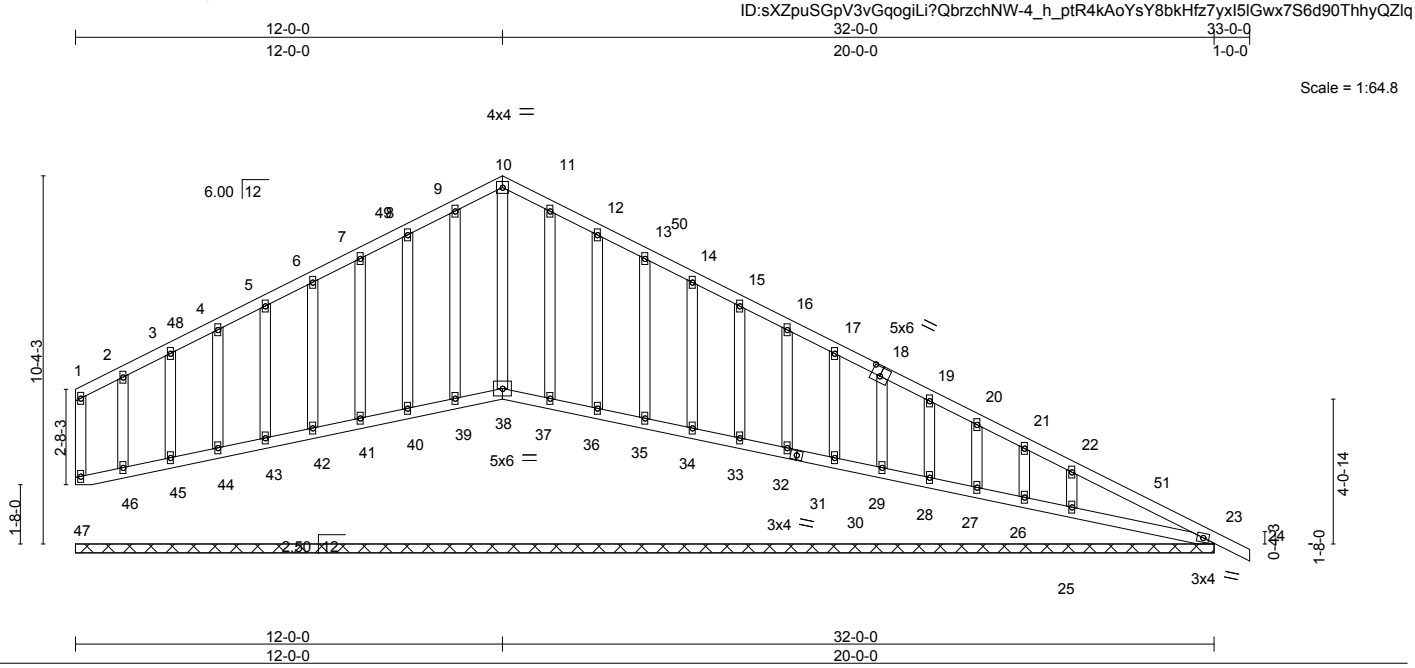


Plate Offsets (X,Y)-- [18:0-3-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	0.01	24	n/r	120	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.09	Vert(TL)	0.01	24	n/r	120		
BCLL	0.0	Rep Stress Incr	YES	WB	0.16	Horz(TL)	0.01	23	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix)							Weight: 170 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

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, Except: 6-0-0 oc bracing: 30-32,25-26.

REACTIONS. All bearings 32-0-0.

(lb) - Max Horz 47=-280(LC 7)

Max Uplift All uplift 100 lb or less at joint(s) 47, 39, 40, 41, 42, 43, 44, 45, 46, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25, 23

Max Grav All reactions 250 lb or less at joint(s) 47, 38, 39, 40, 41, 42, 43, 44, 45, 46, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 23 except 25=367(LC 14)

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

TOP CHORD	6-7=-76/258, 7-49=-85/291, 8-49=-80/296, 8-9=-95/354, 9-10=-100/403, 10-11=-108/413, 11-12=-122/388, 12-50=-125/345, 13-50=-129/341, 13-14=-139/308, 14-15=-148/270
BOT CHORD	46-47=-201/259, 45-46=-195/256, 44-45=-197/257, 43-44=-197/257, 42-43=-197/257, 41-42=-197/257, 40-41=-197/257, 39-40=-197/257, 38-39=-197/256, 37-38=-197/256, 36-37=-197/257, 35-36=-197/257, 34-35=-197/257, 33-34=-197/257, 32-33=-197/257, 31-32=-194/257, 30-31=-197/256, 29-30=-197/257, 28-29=-197/257, 27-28=-197/257, 26-27=-196/257, 25-26=-200/257, 23-25=-197/256
WEBS	10-38=-257/72, 22-25=-279/228

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Corner(3) 0-1-12 to 3-1-12, Exterior(2) 3-1-12 to 12-0-0, Corner(3) 12-0-0 to 15-0-0 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) Plates checked for a plus or minus 5 degree rotation about its center.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Bearing at joint(s) 38, 37, 36, 35, 34, 33, 32 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 47, 39, 40, 41, 42, 43, 44, 45, 46, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25, 23.

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Continued on page 2

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Citrus Heights, CA 95610

NOTES-

11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 47, 38, 39, 40, 41, 42, 43, 44, 45, 46, 37, 36, 35, 34, 33, 32, 30, 29, 28, 27, 26, 25.

12) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

MiTek

7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D2X	Roof Special	1	1	R52082831
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:38 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-YAFM1DSiVUwPUijnI?ACgATHT9PvgOVFspl1D7yQZlp

1-0-0	6-1-8	13-0-12	20-0-0	26-5-8	32-11-0	40-0-0	41-0-0
1-0-0	6-1-8	6-11-4	6-11-4	6-5-8	6-5-8	7-1-0	1-0-0

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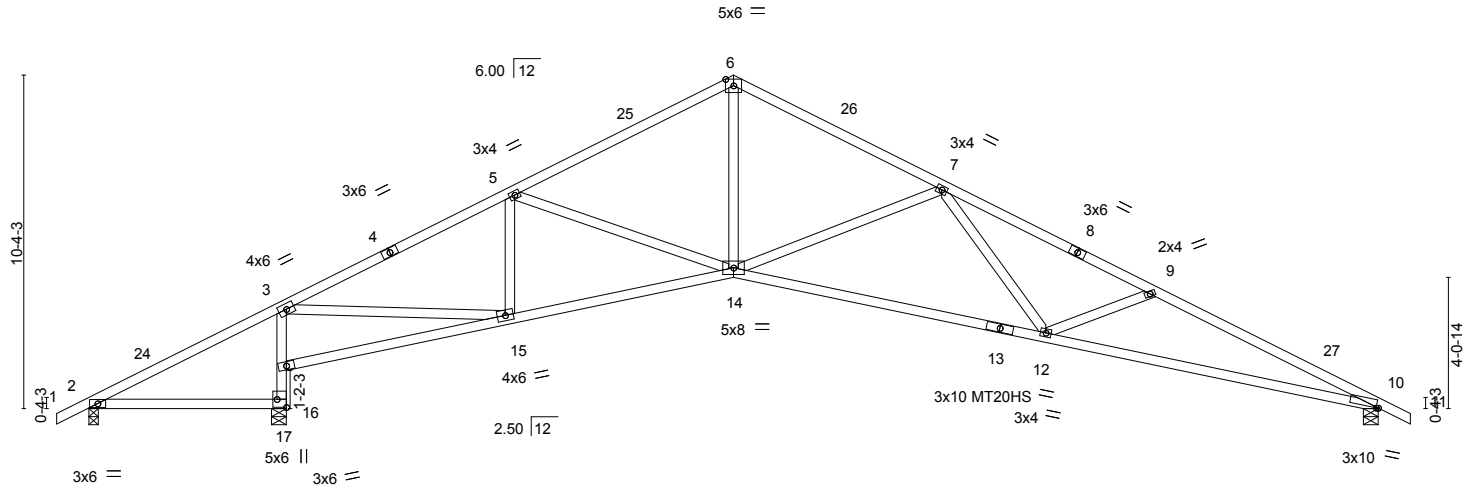

5-8-0	6-1-8	13-0-12	20-0-0	29-8-4	40-0-0
5-8-0	0-5-8	6-11-4	6-11-4	9-8-4	10-3-12

Plate Offsets (X,Y)-- [10:0-0-13,0-0-2], [17:Edge,0-3-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.90	Vert(LL)	-0.41	12-14	>985	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.94	Vert(TL)	-0.91	12-14	>449	180	MT20HS	148/108
BCLL	0.0	Rep Stress Incr	YES	WB	0.94	Horz(TL)	0.33	10	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 148 lb	FT = 0%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2 *Except*
10-13: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.

REACTIONS. (lb/size) 2=172/0-3-8, 17=2006/0-5-8, 10=1572/0-5-8
Max Horz 2=252(LC 8)
Max Uplift 2=-120(LC 9), 17=-632(LC 9), 10=-560(LC 9)
Max Grav 2=251(LC 13), 17=2006(LC 1), 10=1572(LC 1)

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

TOP CHORD 2-24=-121/331, 3-24=-104/465, 3-4=-2370/862, 4-5=-2156/877, 5-25=-2386/884, 6-25=-2254/897, 6-26=-2259/892, 7-26=-2377/880, 7-8=-3734/1387, 8-9=-3839/1370, 9-27=-4290/1619, 10-27=-4400/1597

BOT CHORD 2-17=-315/117, 16-17=-1974/713, 3-16=-1819/701, 15-16=-472/183, 14-15=-517/2068, 13-14=-880/3054, 12-13=-891/3027, 10-12=-1357/3934

WEBS 3-15=-671/2467, 5-15=-558/253, 5-14=-270/279, 6-14=-504/1565, 7-14=-1063/574, 7-12=-185/662, 9-12=-547/397

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=5ft; Cat. II; Exp C; partially; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 20-0-0, Exterior(2) 20-0-0 to 23-0-0 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 MT20 plates unless otherwise indicated.
4) Plates checked for a plus or minus 5 degree rotation about its center.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Bearing at joint(s) 10 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=120, 17=632, 10=560.
8) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D3	GABLE	11	1	R52082832
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:38 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-YAFM1DSiVUwPUijnI?ACgATRw9UGgZZFspl1D7yQZlp

-1-0-0 5-3-4 10-0-0 14-8-12 20-0-0 21-0-0

1-0-0 5-3-4 4-8-12 4-8-12 5-3-4 1-0-0

Scale = 1:36.3

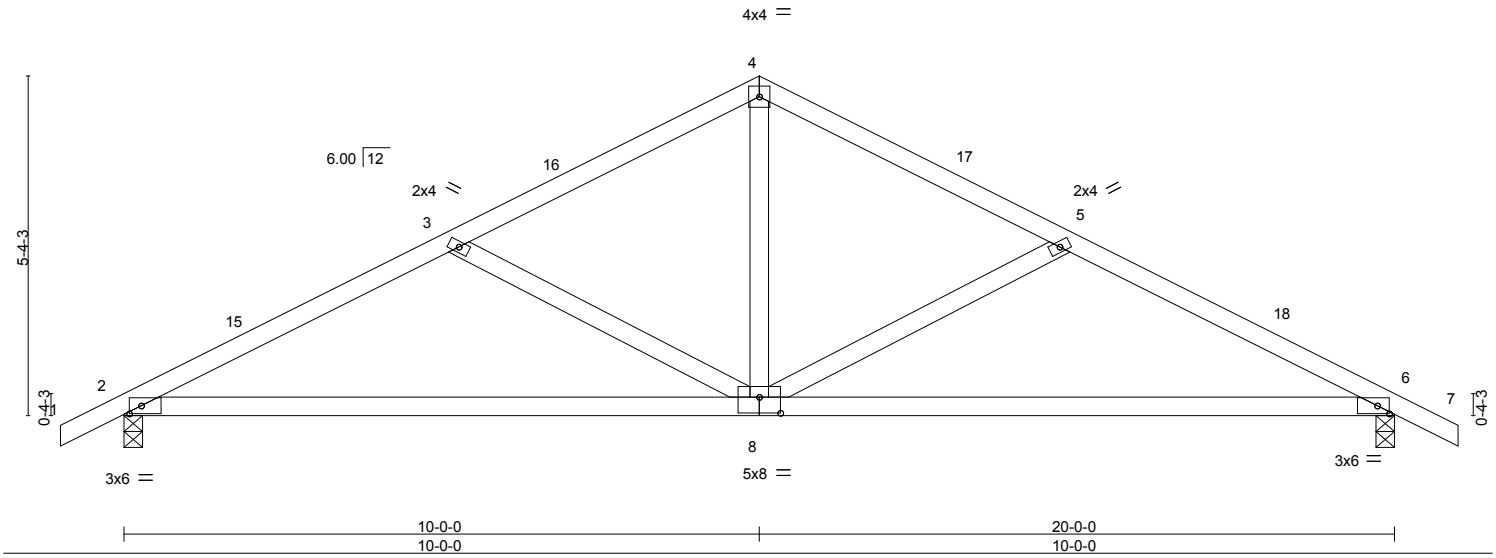

Plate Offsets (X,Y)-- [2:0-2-4,0-1-8], [6:0-2-4,0-1-8], [8:0-4-0,0-3-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.12	8-11	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.60	Vert(TL)	-0.28	8-11	>857	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(TL)	0.04	6	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 69 lb	FT = 0%

LUMBER-

TOP CHORD 2x4 SPF No.2
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 4-8-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=975/0-3-8, 6=975/0-3-8
Max Horz 2=-132(LC 7)
Max Uplift 2=-213(LC 9), 6=-213(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-15=-1463/387, 3-15=-1391/404, 3-16=-1068/298, 4-16=-980/310, 4-17=-980/311, 5-17=-1068/298, 5-18=-1391/404, 6-18=-1463/387
BOT CHORD 2-8=-270/1244, 6-8=-288/1244
WEBS 4-8=-107/535, 5-8=-436/220, 3-8=-436/221

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0 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) Plates checked for a plus or minus 5 degree rotation about its center.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=213, 6=213.
6) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D3E	GABLE	1	1	R52082833
					Job Reference (optional)

Builders First Source, Colorado Springs, CO, 80939 — 7.640 s Aug 16 2017 MiTek Industries, Inc. Mon Oct 23 07:47:39 2017 Page 1

ID:sXZpuSGpV3vGqogiLi?QbrzchNW-0NpkEYTKGo2G6sI_rihRCN0cgZqVP0pP4TValZyQZlo

-1-0-0 | 5-3-4 | 10-0-0 | 14-8-12 | 20-0-0 | 21-0-0

1-0-0 | 5-3-4 | 4-8-12 | 4-8-12 | 5-3-4 | 1-0-0

Scale = 1:36.3

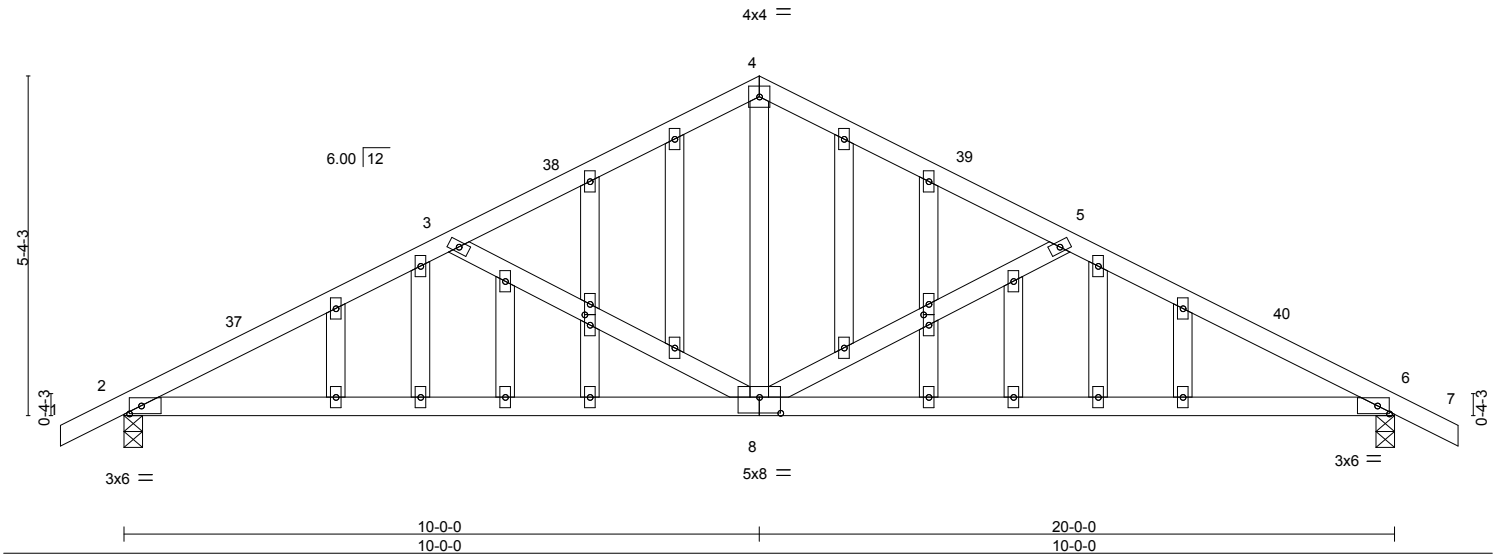

Plate Offsets (X,Y)-- [2:0-2-4,0-1-8], [6:0-2-4,0-1-8], [8:0-4-0,0-3-0], [11:0-1-15,0-1-0], [24:0-1-15,0-1-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.30	Vert(LL)	-0.12	8-36	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.60	Vert(TL)	-0.28	8-36	>857	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(TL)	0.04	6	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 96 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-8-15 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=975/0-3-8, 6=975/0-3-8
Max Horz 2=-132(LC 7)
Max Uplift 2=-213(LC 9), 6=-213(LC 9)

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

TOP CHORD	2-37=-1463/387, 3-37=-1391/404, 3-38=-1068/298, 4-38=-980/310, 4-39=-980/311, 5-39=-1068/298, 5-40=-1391/404, 6-40=-1463/387
BOT CHORD	2-8=-270/1244, 6-8=-288/1244
WEBS	4-8=-107/535, 5-8=-436/220, 3-8=-436/221

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) -1-0-0 to 2-0-0, Interior(1) 2-0-0 to 10-0-0, Exterior(2) 10-0-0 to 13-0-0 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) Plates checked for a plus or minus 5 degree rotation about its center.
6) Gable studs spaced at 1-4-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=213, 6=213.
9) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

MiTek
7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	D4GE	GABLE	1	2	R52082834

Job Reference (optional)

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ID:sXZpuSGpV3vGqogiLi?QbrzchNW-0NpkEYTKGo2G6sI_rihRCN0fQZw4P03P4TValZyQZlo

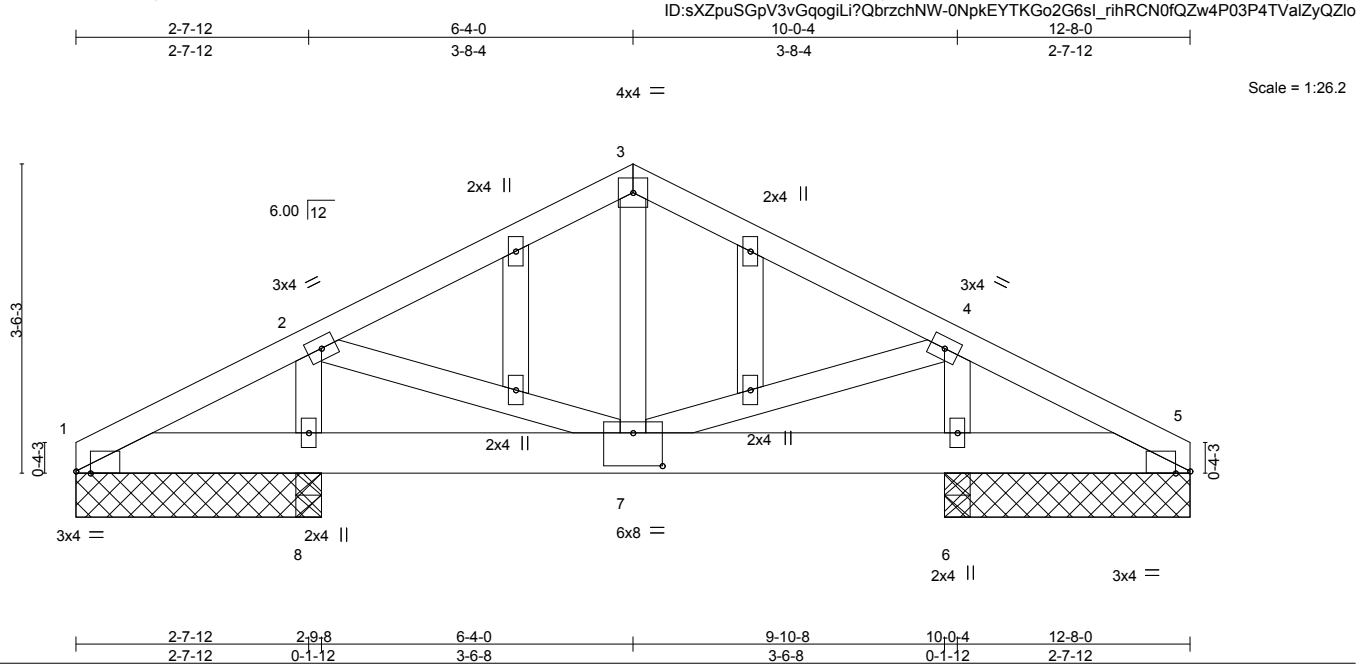

Plate Offsets (X,Y)-- [1:0-2-0,Edge], [5:0-2-0,Edge], [7:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.02	6-7	>999	240	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.24	Vert(TL)	-0.03	6-7	>999	180		
BCLL	0.0	Rep Stress Incr	NO	WB	0.21	Horz(TL)	0.00	5	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix-M)							Weight: 113 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x6 SPF 2100F 1.8E
WEBS	2x4 SPF No.2
OTHERS	2x4 SPF 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 2-9-8.

(lb) - Max Horz 1=-76(LC 5)

Max Uplift All uplift 100 lb or less at joint(s) except 1=-135(LC 7), 5=-135(LC 7), 6=-855(LC 7), 8=-855(LC 7)

Max Grav All reactions 250 lb or less at joint(s) except 1=734(LC 1), 5=734(LC 1), 6=4532(LC 1), 6=4532(LC 1), 8=4532(LC 1), 8=4532(LC 1)

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

TOP CHORD 2-3=-1984/391, 3-4=-1984/391

WEBS 3-7=-273/1515, 4-7=-289/1744, 4-6=-1698/360, 2-7=-289/1744, 2-8=-1698/360

NOTES-

1) 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 0-6-0 oc.
   Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) Plates checked for a plus or minus 5 degree rotation about its center.
7) Gable studs spaced at 1-4-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 1, 135 lb uplift at joint 5, 855 lb uplift at joint 6 and 855 lb uplift at joint 8.
10) Girder carries tie-in span(s): 37-9-0 from 0-0-0 to 12-8-0
11) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-75, 3-5=-75, 1-5=-757(F=-742)

October 23,2017

MiTek

7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	DVS1	Valley	1	1	R52082835
					Job Reference (optional)

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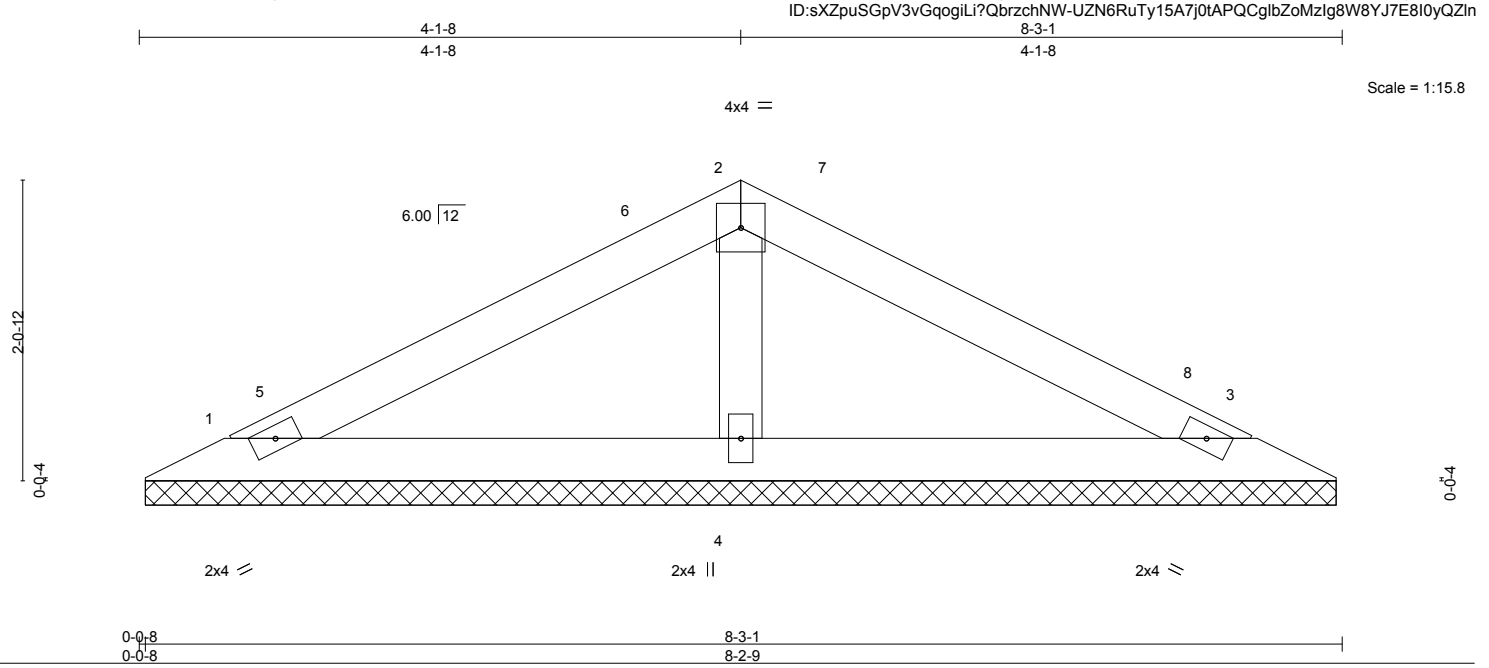

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	3	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix)							Weight: 20 lb	FT = 0%

LUMBER-

TOP CHORD	2x4 SPF No.2
BOT CHORD	2x4 SPF No.2
OTHERS	2x4 SPF 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. (lb/size) 1=163/8-2-1, 3=163/8-2-1, 4=303/8-2-1
Max Horz 1=-42(LC 7)
Max Uplift 1=-44(LC 9), 3=-44(LC 9), 4=-31(LC 9)

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 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) and C-C Exterior(2) 0-7-9 to 3-7-9, Interior(1) 3-7-9 to 4-1-8, Exterior(2) 4-1-8 to 7-1-8 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
3) Plates checked for a plus or minus 5 degree rotation about its center.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 44 lb uplift at joint 1, 44 lb uplift at joint 3 and 31 lb uplift at joint 4.
7) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

October 23,2017

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7777 Greenback Lane
Suite 109
Citrus Heights, CA 95610

Job	Truss	Truss Type	Qty	Ply	Plan 885D 4' Front Garage Ext 30#
LC_CL885D24	DVS2	Valley	1	1	R52082836
					Job Reference (optional)

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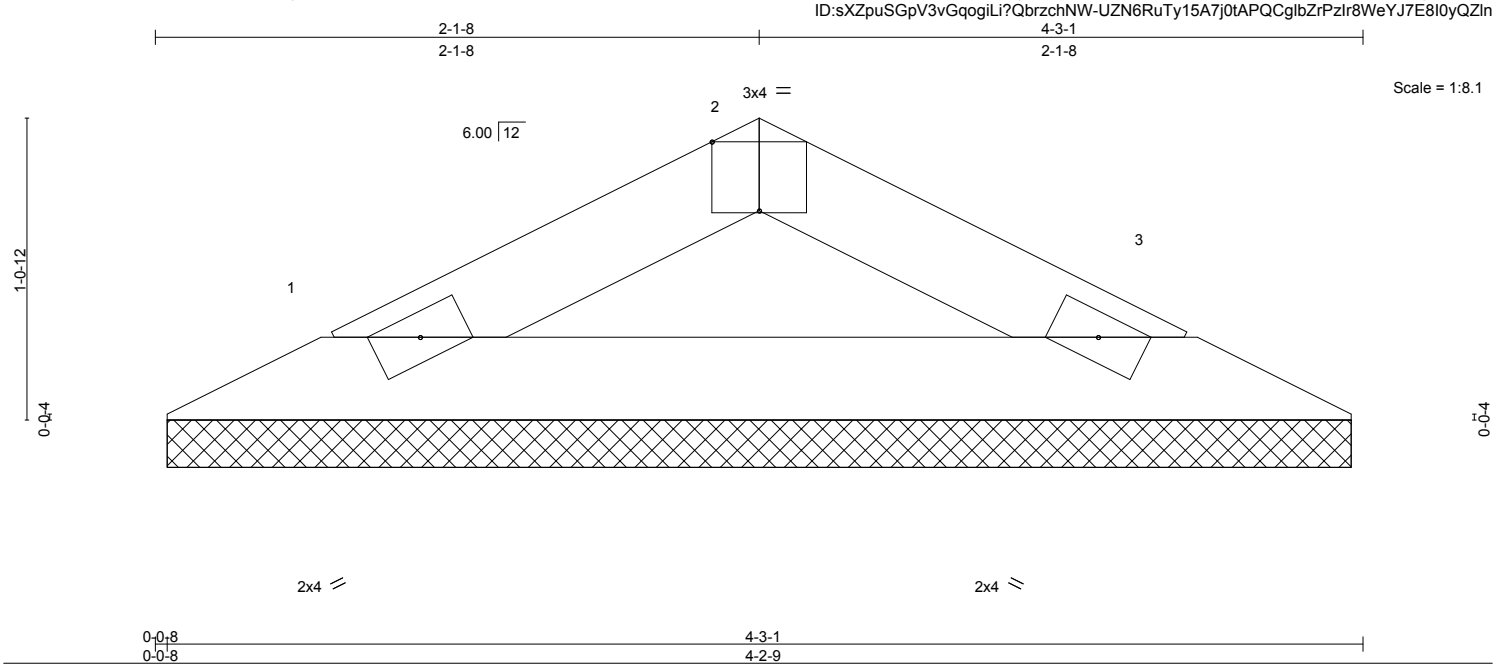

Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	30.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	7.5	Lumber DOL	1.15	BC	0.08	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL	7.5	Code	IRC2009/TPI2007	(Matrix)							Weight: 9 lb	FT = 0%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=135/4-2-1, 3=135/4-2-1
Max Horz 1=18(LC 8)
Max Uplift 1=-25(LC 9), 3=-25(LC 9)

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 7-05; 100mph; TCDL=4.5psf; BCDL=4.5psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (all heights) 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) Plates checked for a plus or minus 5 degree rotation about its center.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 25 lb uplift at joint 1 and 25 lb uplift at joint 3.
7) "Semi-rigid pitchbreaks with fixed heels" Member end fixity model was used in the analysis and design of this truss.

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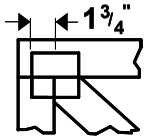
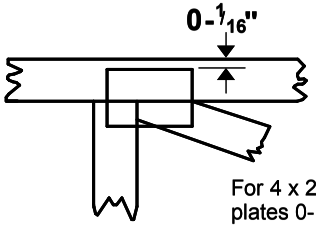
Symbols

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.

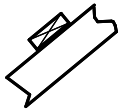
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

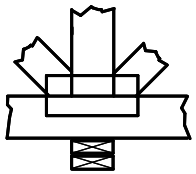
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

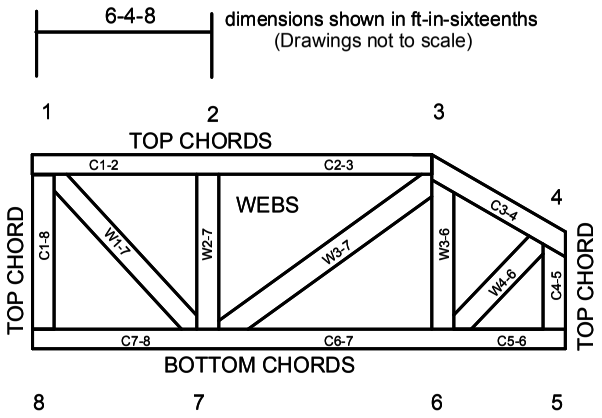


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. 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.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. 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.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.