

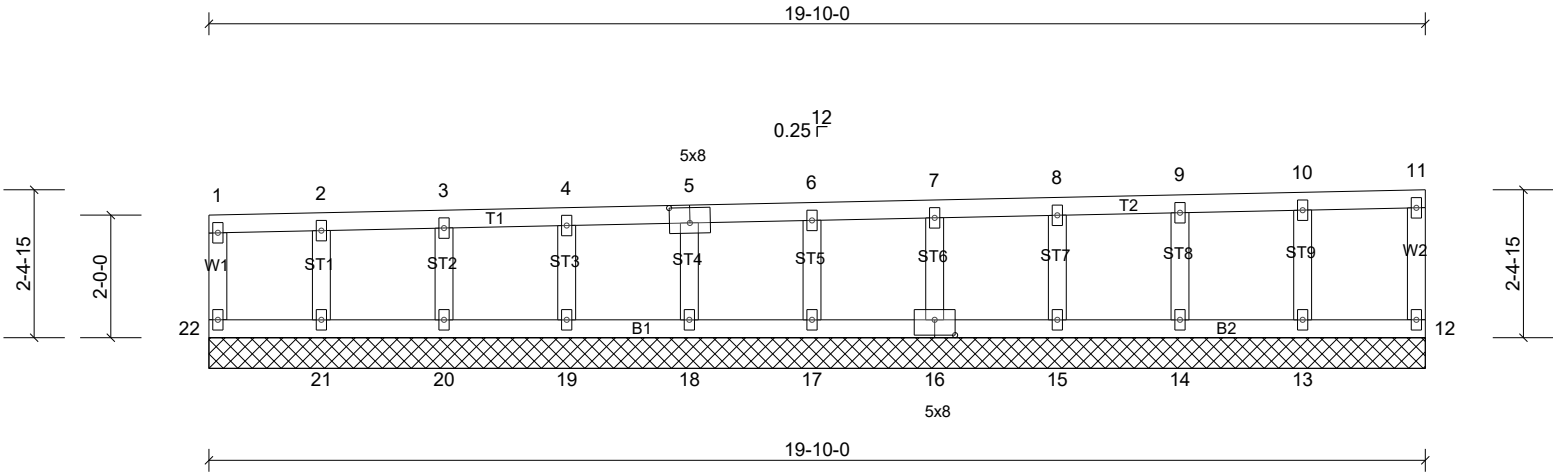
Job 2860207	Truss GE01	Truss Type Monopitch Supported Gable	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	---------------	---	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:WU33EJFvrio2tDYrad8YGvyg3z_-8N4lIyaKFb9jeGnLuTj8H_4eVU0QECWzgh6blWyg3TZ



Scale = 1:37.7

Plate Offsets (X, Y): [5:0-4-0,0-3-0], [16:0-4-0,0-3-0]

Loading	(psf)	Spacing	2-0-0	CSI	0.06	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-R							Weight: 66 lb	FT = 10%

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.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint (s) 22, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21.
- This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

REACTIONS All bearings 19-10-0.
(lb) - Max Horiz 22=62 (LC 5)
Max Uplift All uplift 100 (lb) or less at joint(s) 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22
Max Grav All reactions 250 (lb) or less at joint (s) 12, 14, 15, 16, 17, 18, 19, 20, 21, 22 except 13=251 (LC 1)

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

- NOTES**
- Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - Provide adequate drainage to prevent water ponding.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - Gable studs spaced at 2-0-0 oc.

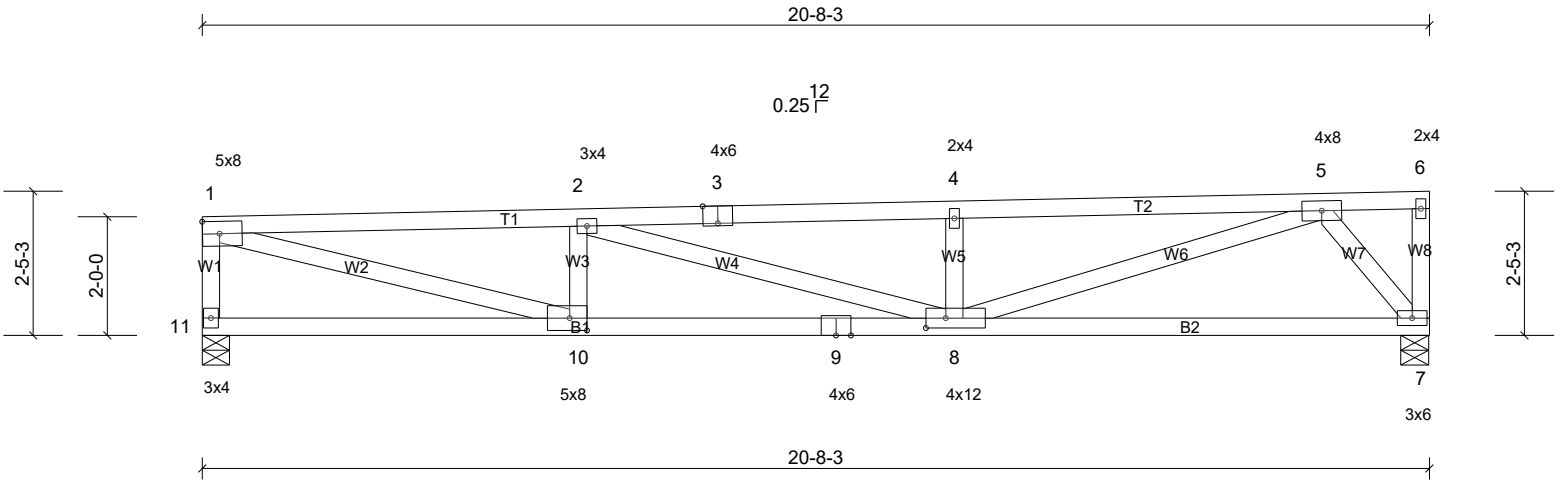
Job 2860207	Truss T01	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:9R8SvMM61HbPd?SponKRpWyg4_7-cZdgVHby0uHaGQMXRAENpCdcHu9?zUf7vLs9Hzyg3TY



Scale = 1:39

Plate Offsets (X, Y): [3:0-3-0,Edge], [8:0-4-0,0-2-0], [10:0-3-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.19	8-10	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.84	Vert(TL)	-0.51	7-8	>484	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horiz(TL)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 79 lb	FT = 10%

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

7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 7=1223/0-5-10, (min. 0-1-15),
 11=1223/0-5-8, (min. 0-1-15)
 Max Horiz 11=40 (LC 6)
 Max Uplift 7=-72 (LC 6), 11=-70 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-11=-1151/102, 1-2=-3052/186,
 2-3=-3194/168, 3-4=-3188/170,
 4-5=-3194/174
 BOT CHORD 9-10=-196/3045, 8-9=-196/3045, 7-8=-98/981
 WEBS 2-10=-701/122, 1-10=-178/3018,
 4-8=-625/120, 5-8=-82/2329, 5-7=-1577/157

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 4) Provide adequate drainage to prevent water ponding.
 - 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 70 lb uplift at joint 11 and 72 lb uplift at joint 7.

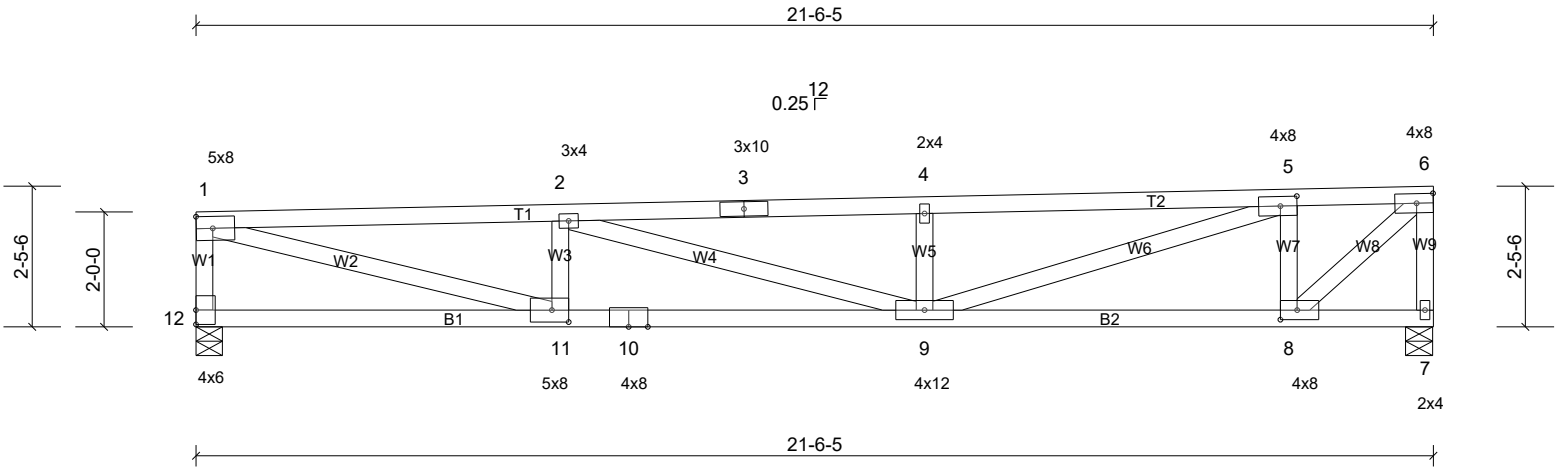
Job 2860207	Truss T02	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:RAvYztCWP5dujPiZkK79TUyg4?c-cZdgvHby0uHaGQMXRAENpCdbLu83zT27vLs9Hzyg3TY



Scale = 1:40.3

Plate Offsets (X, Y): [5:0-3-7,0-2-0], [6:0-3-7,0-2-0], [8:0-3-8,0-2-0], [11:0-3-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL)	-0.22	9-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.90	Vert(TL)	-0.58	9-11	>442	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horiz(TL)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 83 lb	FT = 10%

LUMBER

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 73 lb uplift at joint 12 and 75 lb uplift at joint 7.
- 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING

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

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 7=1274/0-5-10, (min. 0-2-0),
 12=1274/0-5-8, (min. 0-2-0)
 Max Horiz 12=40 (LC 6)
 Max Uplift 7=-75 (LC 6), 12=-73 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-12=-1204/104, 1-2=-3226/191,
 2-3=-3493/201, 3-4=-3487/203,
 4-5=-3494/207, 5-6=-1434/84
 BOT CHORD 10-11=-202/3220, 9-10=-202/3220,
 8-9=-84/1429
 WEBS 2-11=-736/130, 1-11=-183/3198,
 4-9=-637/121, 2-9=-15/277, 5-8=-1182/140,
 5-9=-132/2168, 6-8=-114/1930, 6-7=-1275/77

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

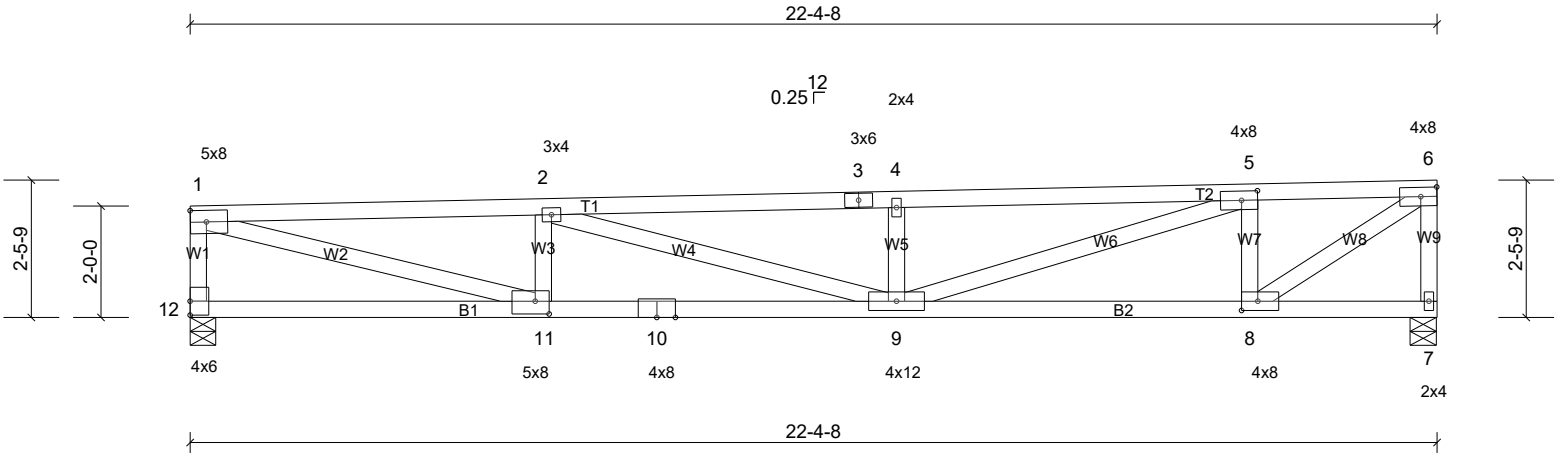
Job 2860207	Truss T03	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:BdHsNMUuXF3PB61Dk241qyg40Y-cZdgVHby0uHaGQMXRAENpCdaYu8RzTG7vLs9Hzyg3TY



Scale = 1:41.5

Plate Offsets (X, Y): [5:0-3-7,0-2-0], [6:0-3-7,0-2-0], [8:0-3-8,0-2-0], [11:0-3-0,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.25	9-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.94	Vert(TL)	-0.64	9-11	>413	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.83	Horiz(TL)	0.07	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 86 lb	FT = 10%

LUMBER

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

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 75 lb uplift at joint 12 and 78 lb uplift at joint 7.
- 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 2-2-0 oc bracing: 9-11.

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 7=1325/0-5-10, (min. 0-2-1),
 12=1325/0-5-8, (min. 0-2-1)
 Max Horiz 12=41 (LC 6)
 Max Uplift 7=-78 (LC 6), 12=-75 (LC 4)

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

TOP CHORD 1-12=-1254/107, 1-2=-3395/201,
 2-3=-3815/220, 3-4=-3803/221,
 4-5=-3815/225, 5-6=-1883/111
 BOT CHORD 10-11=-213/3388, 9-10=-213/3388,
 8-9=-111/1877
 WEBS 2-11=-783/133, 1-11=-192/3371,
 4-9=-638/121, 2-9=-24/436, 5-8=-1153/140,
 5-9=-124/2033, 6-8=-134/2265, 6-7=-1308/88

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

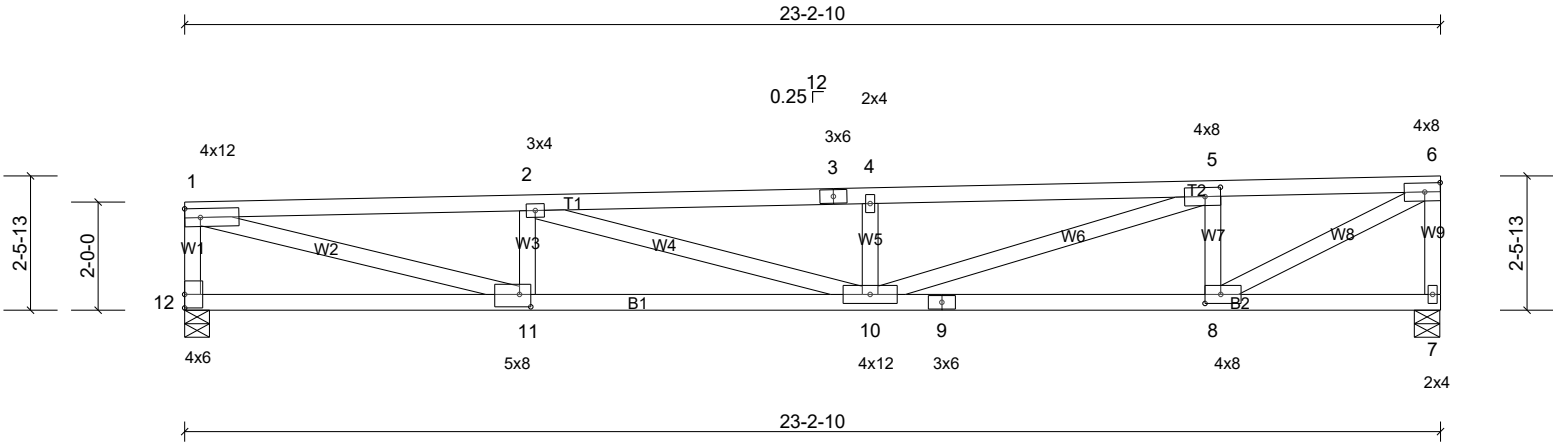
Job 2860207	Truss T04	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID: XESdb?Win4_lwu?fxXcKoyyg41o-cZdgVHby0uHaGQMXRAENpCdbLu7yzSd7vLs9Hzyg3TY



Scale = 1:42.8

Plate Offsets (X, Y): [5:0-3-7,0-2-0], [6:0-3-7,0-2-0], [8:0-3-8,0-2-0], [11:0-2-8,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.95	Vert(LL) -0.26	10-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.97	Vert(TL) -0.67	10-11	>412	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.87	Horiz(TL) 0.08	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S						Weight: 89 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* T1:2x4 SPF 2100F 1.8E
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 10-0-0 oc bracing. Except:
2-2-0 oc bracing: 10-11.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 78 lb uplift at joint 12 and 81 lb uplift at joint 7.
- This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

REACTIONS (lb/size) 7=1376/0-5-10, (min. 0-2-3),
12=1376/0-5-8, (min. 0-2-3)
Max Horiz 12=41 (LC 6)
Max Uplift 7=-81 (LC 6), 12=-78 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-1305/110, 1-2=-3561/211,
2-3=-4132/238, 3-4=-4120/239,
4-5=-4132/243, 5-6=-2342/138
BOT CHORD 10-11=-223/3555, 9-10=-138/2336,
8-9=-138/2336
WEBS 2-11=-829/136, 1-11=-203/3543,
4-10=-633/120, 2-10=-32/593,
5-8=-1142/144, 5-10=-115/1885,
6-8=-157/2653, 6-7=-1346/97

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - Provide adequate drainage to prevent water ponding.

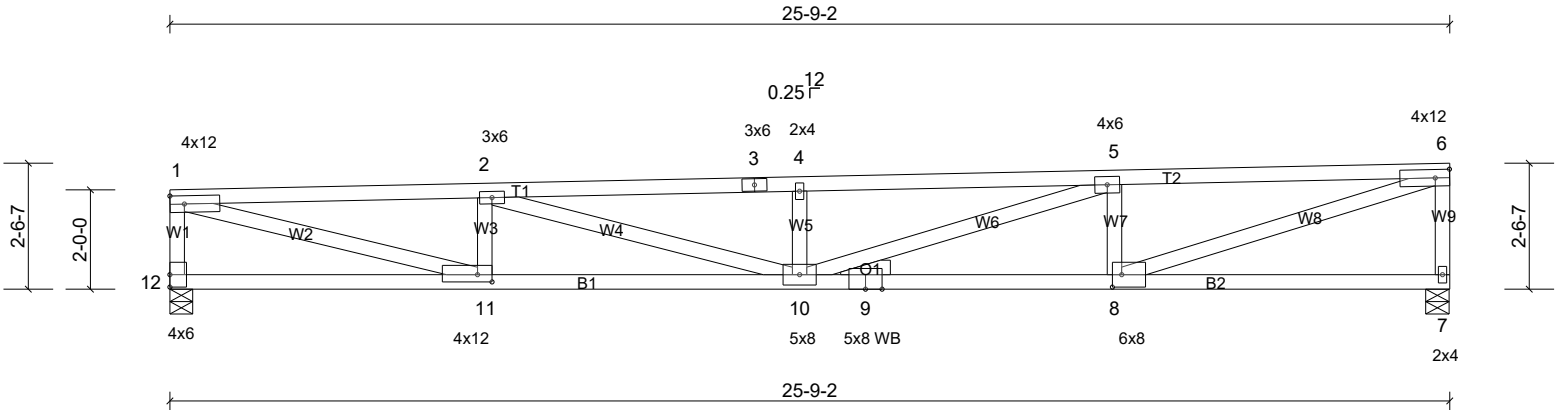
Job 2860207	Truss T07	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:mH8jR2BqC2uiQRn3?VKTEyg48s-cZdgVHby0uHaGQMXRAENpCddgu7UzQb7vLs9Hzyg3TY



Scale = 1:46.6

Plate Offsets (X, Y): [6:0-3-7,0-2-1], [8:0-2-4,0-3-0], [11:0-3-8,0-1-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.34	10	>896	240	MT20 197/144
TCDL	20.0	Lumber DOL	1.15	BC	1.00	Vert(TL)	-0.86	10-11	>357	180	
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horiz(TL)	0.09	7	n/a	n/a	
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 98 lb FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except* B1:2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2
OTHERS 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 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 8-10.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 87 lb uplift at joint 12 and 90 lb uplift at joint 7.
- This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

REACTIONS (lb/size) 7=1528/0-5-10, (min. 0-2-6), 12=1528/0-5-8, (min. 0-2-6)
Max Horiz 12=43 (LC 6)
Max Uplift 7=-90 (LC 6), 12=-87 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-12=-1453/117, 1-2=-4070/240, 2-3=-5076/293, 3-4=-5064/294, 4-5=-5075/298, 5-6=-3775/221
BOT CHORD 10-11=-254/4063, 9-10=-222/3766, 8-9=-222/3766
WEBS 2-11=-973/146, 1-11=-232/4062, 4-10=-600/112, 2-10=-58/1046, 5-8=-1137/164, 5-10=-85/1372, 6-7=-1470/121, 6-8=-235/3977

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - Provide adequate drainage to prevent water ponding.

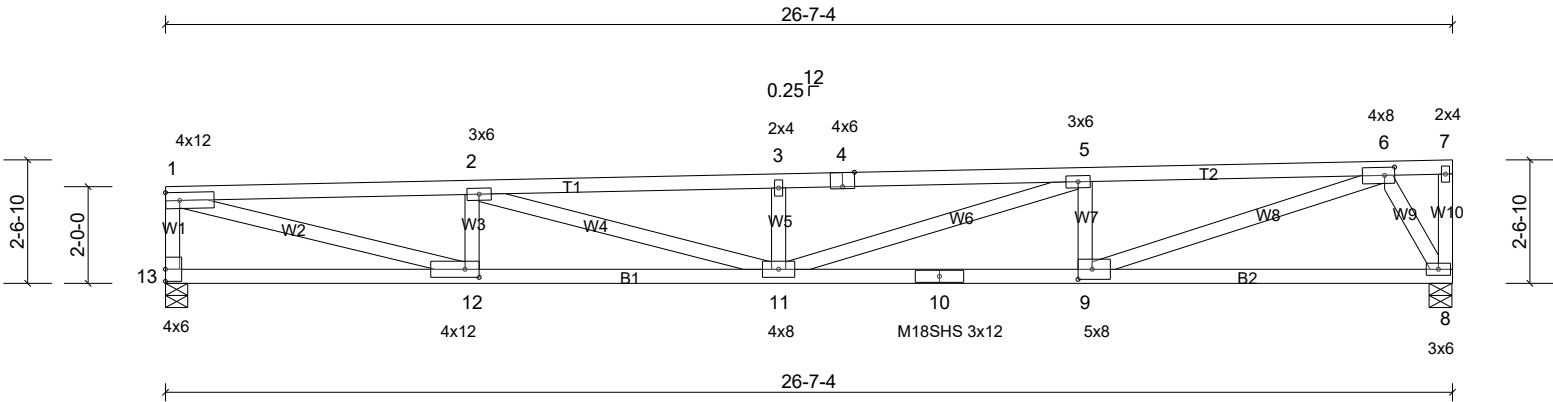
Job 2860207	Truss T08	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:XBSC?lvDzJCDQ_FjYGpHfpyg4AK-cZdgVHby0uHaGQMXRAENpCdgeuEgzS67vLs9Hzyg3TY



Scale = 1:47.8

Plate Offsets (X, Y): [4:0-3-0,Edge], [6:0-2-8,0-2-0], [9:0-3-8,0-2-8], [12:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.35	11	>907	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.54	Vert(TL)	-0.88	11-12	>361	180	M18SHS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.84	Horiz(TL)	0.10	8	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 101 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* W2:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 8=1579/0-5-10, (min. 0-2-8), 13=1579/0-5-8, (min. 0-2-8)
Max Horiz 13=44 (LC 6)
Max Uplift 8=-93 (LC 6), 13=-90 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-13=-1507/120, 1-2=-4248/250, 2-3=-5401/316, 3-4=-5400/319, 4-5=-5394/320, 5-6=-4186/233
BOT CHORD 11-12=-264/4241, 10-11=-235/4178, 9-10=-235/4178, 8-9=-87/949
WEBS 2-12=-1016/149, 1-12=-241/4255, 3-11=-624/117, 2-11=-71/1199, 5-9=-1007/150, 5-11=-96/1280, 6-9=-157/3433, 6-8=-1934/178

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 90mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) All plates are MT20 plates unless otherwise indicated.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 90 lb uplift at joint 13 and 93 lb uplift at joint 8.
- 8) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

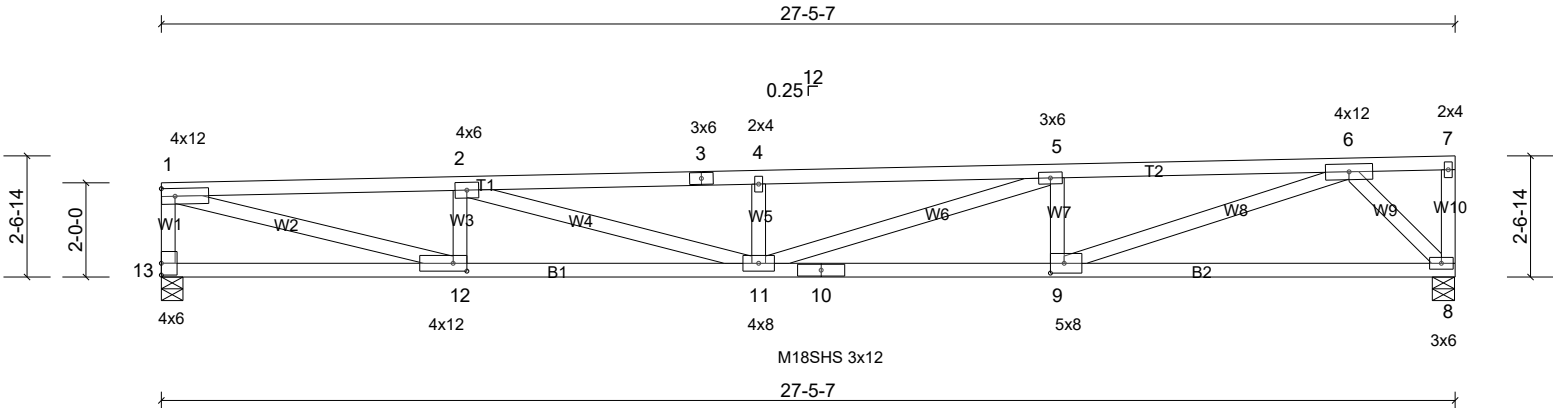
Job 2860207	Truss T09	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID: oZa9DlkJM0WmqJV7?Sb4Msyg4D8-cZdgVHby0uHaGQMxRAENpCdf1uEDzTQ7vLs9Hzyg3TY



Scale = 1:49.1

Plate Offsets (X, Y): [9:0-3-8,0-2-8], [12:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.65	Vert(LL)	-0.38	11	>855	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.57	Vert(TL)	-0.95	11-12	>342	180	M18SHS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horiz(TL)	0.11	8	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 104 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* W2:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-6-11 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 8=1630/0-5-10, (min. 0-2-9),
13=1630/0-5-8, (min. 0-2-9)
Max Horiz 13=44 (LC 6)
Max Uplift 8=-95 (LC 6), 13=-93 (LC 4)

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

TOP CHORD 1-13=-1558/123, 1-2=-4418/259,
2-3=-5717/335, 3-4=-5705/336,
4-5=-5717/340, 5-6=-4651/254

BOT CHORD 11-12=-274/4411, 10-11=-256/4644,
9-10=-256/4644, 8-9=-129/1489

WEBS 2-12=-1062/152, 1-12=-251/4430,
4-11=-623/117, 2-11=-82/1352, 5-9=-965/151,
5-11=-95/1123, 6-9=-135/3354,
6-8=-2172/189

NOTES

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 4) Provide adequate drainage to prevent water ponding.
- 5) All plates are MT20 plates unless otherwise indicated.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 93 lb uplift at joint 13 and 95 lb uplift at joint 8.
- 8) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

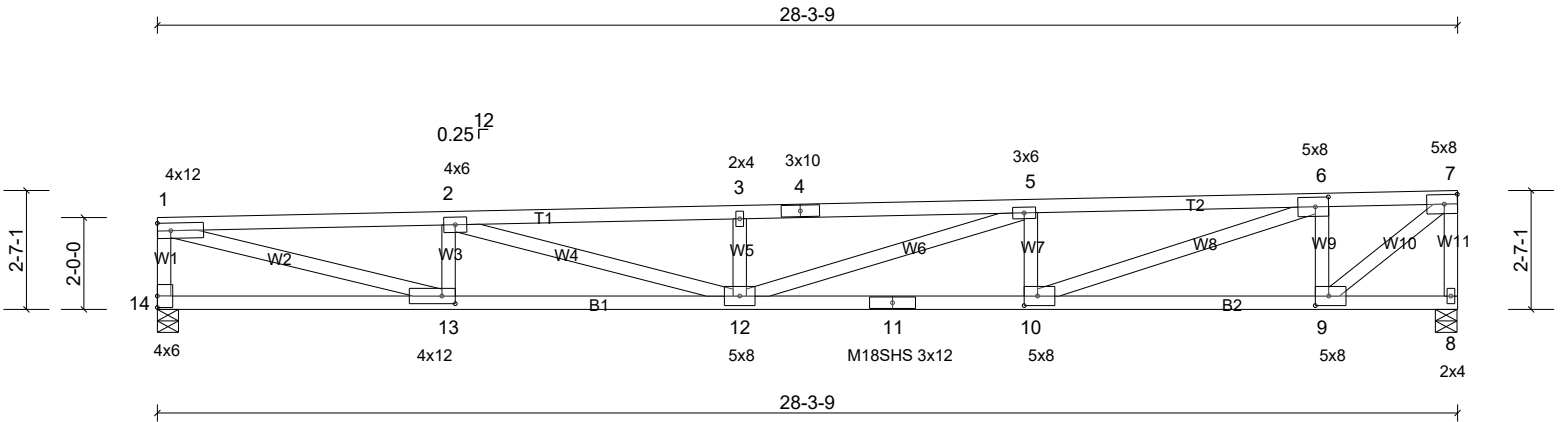
Job 2860207	Truss T10	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:8RGL?DzoBfaimA0pkyJJayg4E7-cZdgVHby0uHaGQMXRAENpCdfPuDQzTt7vLs9Hzyg3TY



Scale = 1:50.4

Plate Offsets (X, Y): [6:0-3-7,0-2-8], [7:0-3-7,0-2-8], [9:0-3-8,0-2-8], [10:0-3-8,0-2-8], [13:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.69	Vert(LL)	-0.42	10-12	>795	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.62	Vert(TL)	-1.07	10-12	>316	180	M18SHS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horiz(TL)	0.12	8	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 109 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* W2:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-5-1 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 14 and 98 lb uplift at joint 8.
- 8) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

REACTIONS (lb/size) 8=1680/0-5-10, (min. 0-2-10),
14=1680/0-5-8, (min. 0-2-10)
Max Horiz 14=45 (LC 6)
Max Uplift 8=-98 (LC 6), 14=-96 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-1607/126, 1-2=-4585/270,
2-3=-6045/350, 3-4=-6045/353,
4-5=-6038/354, 5-6=-5076/296,
6-7=-2048/119
BOT CHORD 12-13=-285/4578, 11-12=-299/5068,
10-11=-299/5068, 9-10=-120/2043
WEBS 2-13=-1112/153, 6-9=-1550/161,
1-13=-262/4602, 3-12=-619/117,
2-12=-85/1519, 5-10=-947/143,
5-12=-66/1021, 6-10=-190/3208,
7-8=-1675/105, 7-9=-155/2640

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) All plates are MT20 plates unless otherwise indicated.

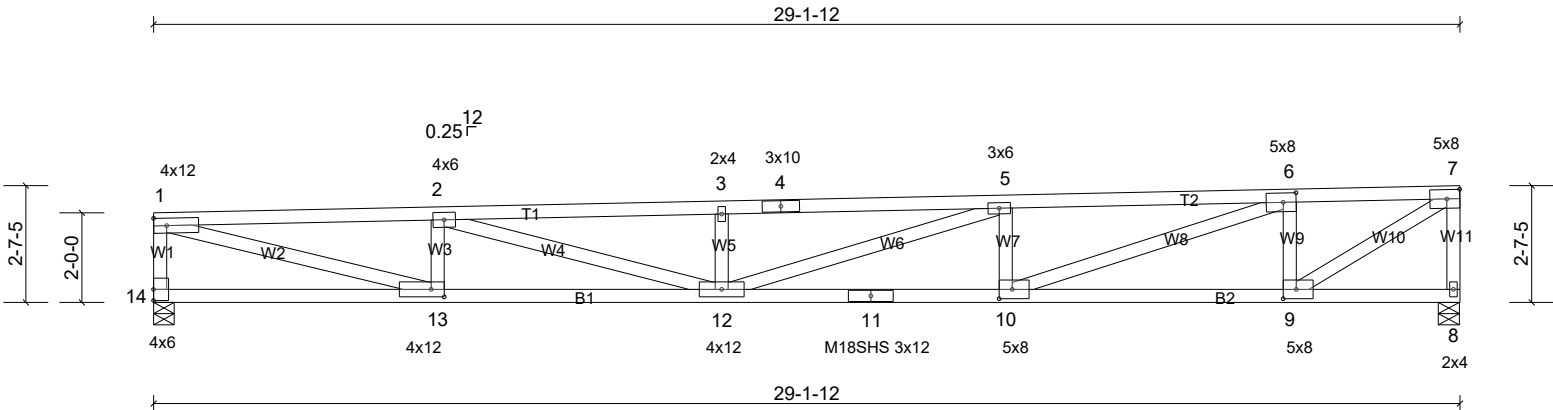
Job 2860207	Truss T11	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:Fbw7ub5d8XVw7agAbcgQOYyg4FF-cZdgVHby0uHaGQMXRAENpCdecuCozUM7vLs9Hzyg3TY



Scale = 1:51.6

Plate Offsets (X, Y): [6:0-3-7,0-2-8], [7:0-3-7,0-2-8], [9:0-3-8,0-2-8], [10:0-3-8,0-2-8], [13:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.74	Vert(LL)	-0.46	10-12	>746	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.66	Vert(TL)	-1.17	10-12	>295	180	M18SHS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.76	Horiz(TL)	0.13	8	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 111 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* W2:2x4 SPF 2100F 1.8E

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 98 lb uplift at joint 14 and 101 lb uplift at joint 8.
- 8) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

REACTIONS (lb/size) 8=1731/0-5-10, (min. 0-2-11),
14=1731/0-5-8, (min. 0-2-11)
Max Horiz 14=45 (LC 6)
Max Uplift 8=-101 (LC 6), 14=-98 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-1658/129, 1-2=-4755/280,
2-3=-6365/369, 3-4=-6365/371,
4-5=-6359/373, 5-6=-5529/322,
6-7=-2617/152
BOT CHORD 12-13=-296/4748, 11-12=-326/5521,
10-11=-326/5521, 9-10=-153/2611
WEBS 2-13=-1159/155, 6-9=-1533/163,
1-13=-272/4776, 3-12=-620/117,
2-12=-94/1676, 5-10=-905/140,
5-12=-58/882, 6-10=-183/3085,
7-9=-181/3091, 7-8=-1709/114

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 4) Provide adequate drainage to prevent water ponding.
 - 5) All plates are MT20 plates unless otherwise indicated.

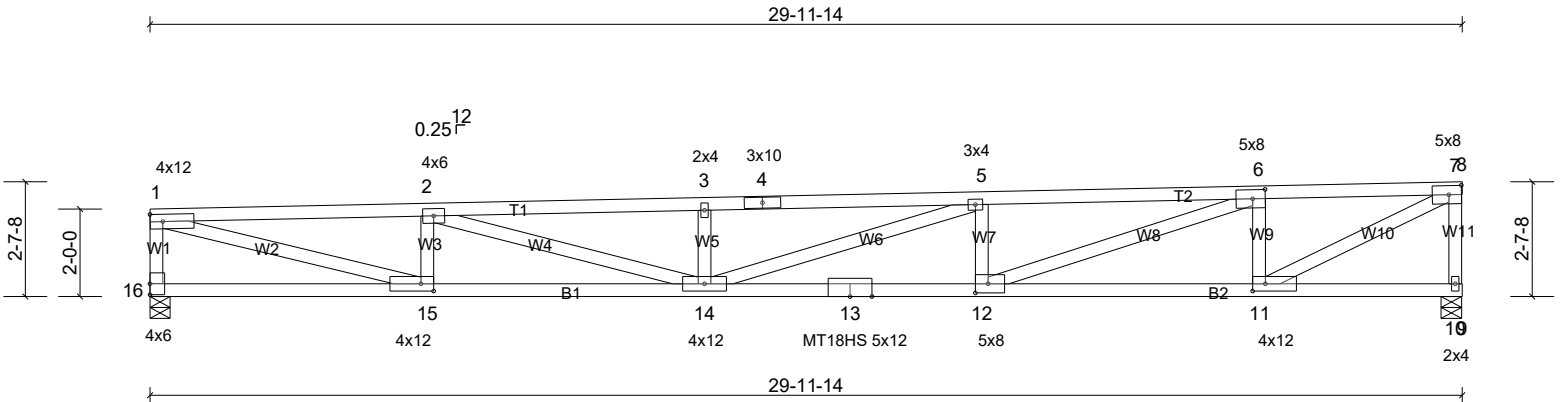
Job 2860207	Truss T12	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:2107TW6mm8rBSN8f_Ajylpyg4Hp-cZdgVHbyOuHaGQMXRAENpCddguB1zSU7vLs9Hzyg3TY



Scale = 1:52.9

Plate Offsets (X, Y): [6:0-3-7,0-2-8], [7:0-3-7,0-2-8], [11:0-3-8,0-2-0], [12:0-3-8,0-2-8], [15:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.51	12-14	>697	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.71	Vert(TL)	-1.29	12-14	>276	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.88	Horiz(TL)	0.14	10	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 114 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* W2:2x4 SPF 2100F 1.8E

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 101 lb uplift at joint 16 and 104 lb uplift at joint 10.
7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 10=1791/0-5-10, (min. 0-2-13), 16=1781/0-5-8, (min. 0-2-13)
Max Horiz 16=46 (LC 6)
Max Uplift 10=-104 (LC 6), 16=-101 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1707/132, 1-2=-4921/289, 2-3=-6681/387, 3-4=-6681/389, 4-5=-6674/391, 5-6=-5972/348, 6-7=-3186/185
BOT CHORD 14-15=-306/4914, 13-14=-352/5964, 12-13=-352/5964, 11-12=-186/3179
WEBS 2-15=-1204/158, 6-11=-1528/168, 1-15=-282/4946, 3-14=-621/117, 2-14=-103/1832, 5-12=-860/136, 5-14=-50/747, 6-12=-176/2953, 7-10=-1753/125, 7-11=-210/3582

- NOTES**
1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
3) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

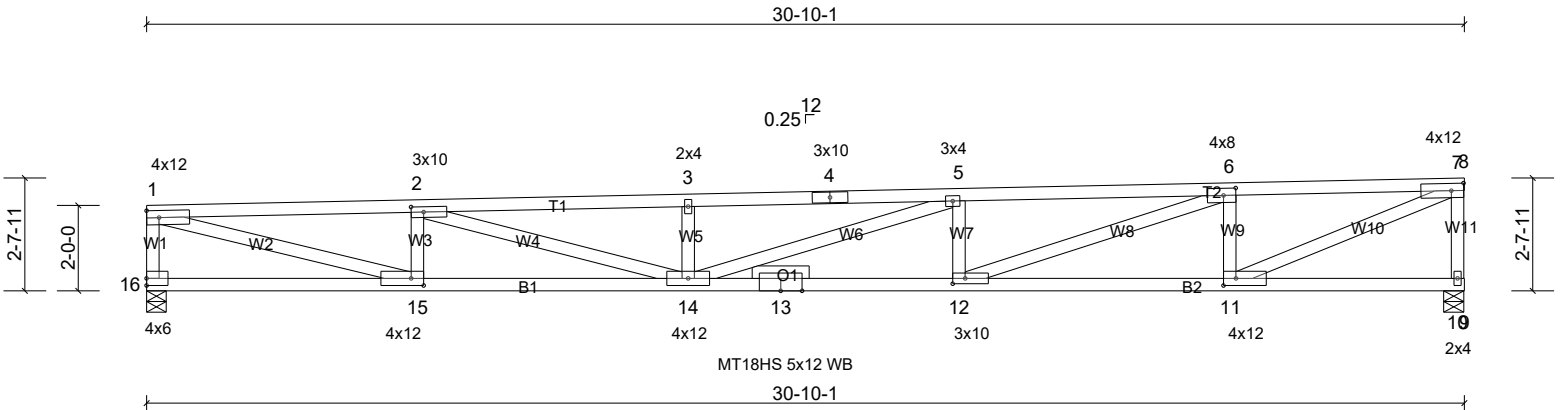
Job 2860207	Truss T13	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:W8ToPclKYZPiw4WnZb0FXgyg4Is-cZdgVHby0uHaGQMXRAENpCdcHuBFzVS7vLs9Hzyg3TY



Scale = 1:54.2

Plate Offsets (X, Y): [2:0-3-8,0-1-8], [6:0-3-7,0-2-0], [7:0-3-7,0-2-1], [11:0-3-8,0-2-0], [12:0-3-8,0-1-8], [15:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.89	Vert(LL)	-0.56	12-14	>657	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.76	Vert(TL)	-1.41	12-14	>259	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.69	Horiz(TL)	0.16	10	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 118 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except* W2,W10:2x4 SPF 2100F 1.8E
OTHERS 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 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

- 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 104 lb uplift at joint 16 and 107 lb uplift at joint 10.
- 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

REACTIONS (lb/size) 10=1842/0-5-10, (min. 0-2-14), 16=1832/0-5-8, (min. 0-2-14)
Max Horiz 16=46 (LC 6)
Max Uplift 10=-107 (LC 6), 16=-104 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-1757/135, 1-2=-5090/299, 2-3=-7003/405, 3-4=-7003/408, 4-5=-6996/409, 5-6=-6418/373, 6-7=-3778/220
BOT CHORD 14-15=-316/5083, 13-14=-378/6410, 12-13=-378/6410, 11-12=-221/3770
WEBS 2-15=-1251/161, 6-11=-1528/175, 1-15=-291/5120, 3-14=-624/118, 2-14=-112/1991, 5-12=-811/132, 5-14=-42/616, 6-12=-167/2799, 7-10=-1794/133, 7-11=-241/4120

- NOTES**
- 1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.

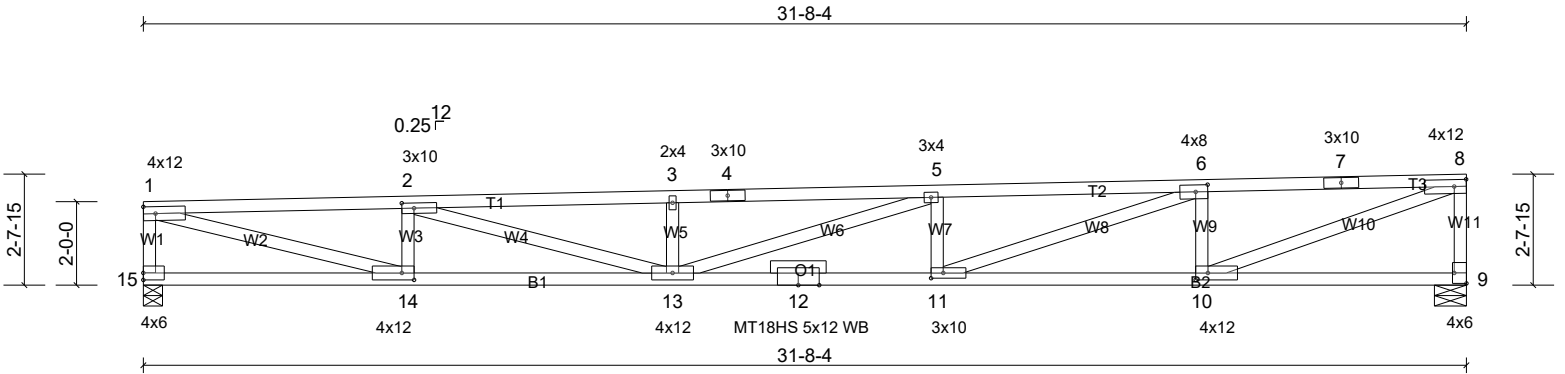
Job 2860207	Truss T14	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:lxgiK6lz9BrlS6baSlJtDLyG5av-cZdgVHby0uHaGQMXRAENpCda0uAczV47vLs9Hzyg3TY



Scale = 1:55.4

Plate Offsets (X, Y): [2:0-3-8,0-1-8], [6:0-3-7,0-2-0], [8:0-3-7,0-2-0], [9:Edge,0-3-8], [10:0-3-8,0-2-0], [11:0-3-8,0-1-8], [14:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.97	Vert(LL)	-0.62	11-13	>613	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.80	Vert(TL)	-1.56	11-13	>241	180	MT18HS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horiz(TL)	0.17	9	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 121 lb	FT = 10%

LUMBER
 TOP CHORD 2x4 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF 2100F 1.8E
 WEBS 2x4 SPF No.2 *Except* W2,W10:2x4 SPF 2100F 1.8E
 OTHERS 2x4 SPF No.2

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 9=1884/0-9-3, (min. 0-2-15),
 15=1884/0-5-8, (min. 0-2-15)
 Max Horiz 15=69 (LC 5)
 Max Uplift 9=-108 (LC 6), 15=-109 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-15=-1809/139, 1-2=-5262/314,
 2-3=-7329/433, 3-4=-7328/435,
 4-5=-7322/437, 5-6=-6876/412,
 6-7=-4361/269, 7-8=-4354/269,
 8-9=-1817/140
 BOT CHORD 13-14=-294/5255, 12-13=-381/6869,
 11-12=-381/6869, 10-11=-234/4353
 WEBS 1-14=-306/5296, 8-10=-264/4567,
 2-14=-1298/164, 2-13=-125/2151,
 3-13=-625/118, 5-13=-30/476, 5-11=-764/127,
 6-11=-156/2668, 6-10=-1505/176

- NOTES**
- 1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) All plates are MT20 plates unless otherwise indicated.

- 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 109 lb uplift at joint 15 and 108 lb uplift at joint 9.
- 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

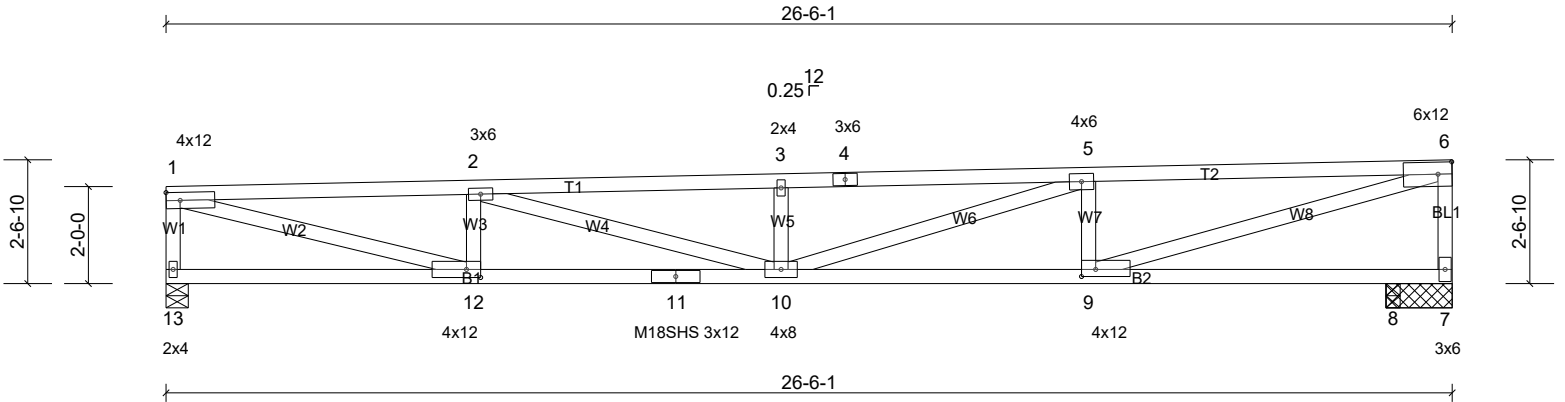
Job 2860207	Truss T15	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:j1z3fOEmD5SnYQ4MB340wVyg3wQ-cZdgVHby0uHaGQMXRAENpCdbBuEMzQb7vLs9Hzyg3TY



Scale = 1:47.7

Plate Offsets (X, Y): [6:0-3-7,0-3-0], [9:0-3-8,0-1-12], [12:0-3-8,0-2-0]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.96	Vert(LL)	-0.37	9-10	>824	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.56	Vert(TL)	-0.92	9-10	>327	180	M18SHS	197/144
BCLL	0.0	Rep Stress Incr	YES	WB	1.00	Horiz(TL)	0.08	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S								
											Weight: 100 lb	FT = 10%

LUMBER

TOP CHORD 2x4 SPF 2100F 1.8E
 BOT CHORD 2x4 SPF 2100F 1.8E
 WEBS 2x4 SPF No.2 *Except* W2:2x4 SPF 2100F 1.8E
 OTHERS 2x4 SPF No.2

- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 137 lb uplift at joint 7 and 92 lb uplift at joint 13.
- 7) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING

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

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 7=1054/1-4-6, (min. 0-1-10),
 8=541/0-3-8, (min. 0-1-8),
 13=1551/0-5-8, (min. 0-2-7)
 Max Horiz 13=38 (LC 5)
 Max Uplift 7=-137 (LC 6), 13=-92 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-4183/254, 2-3=-5218/325,
 3-4=-5216/328, 4-5=-5205/329,
 5-6=-3929/278, 6-7=-1447/133
 BOT CHORD 11-12=-233/4178, 10-11=-233/4178,
 9-10=-244/3920
 WEBS 1-13=-1492/121, 2-12=-1028/156,
 1-12=-261/4335, 3-10=-581/110,
 2-10=-69/1074, 5-9=-1147/159,
 5-10=-59/1359, 6-9=-258/4056

NOTES

- 1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 3) Provide adequate drainage to prevent water ponding.
- 4) All plates are MT20 plates unless otherwise indicated.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

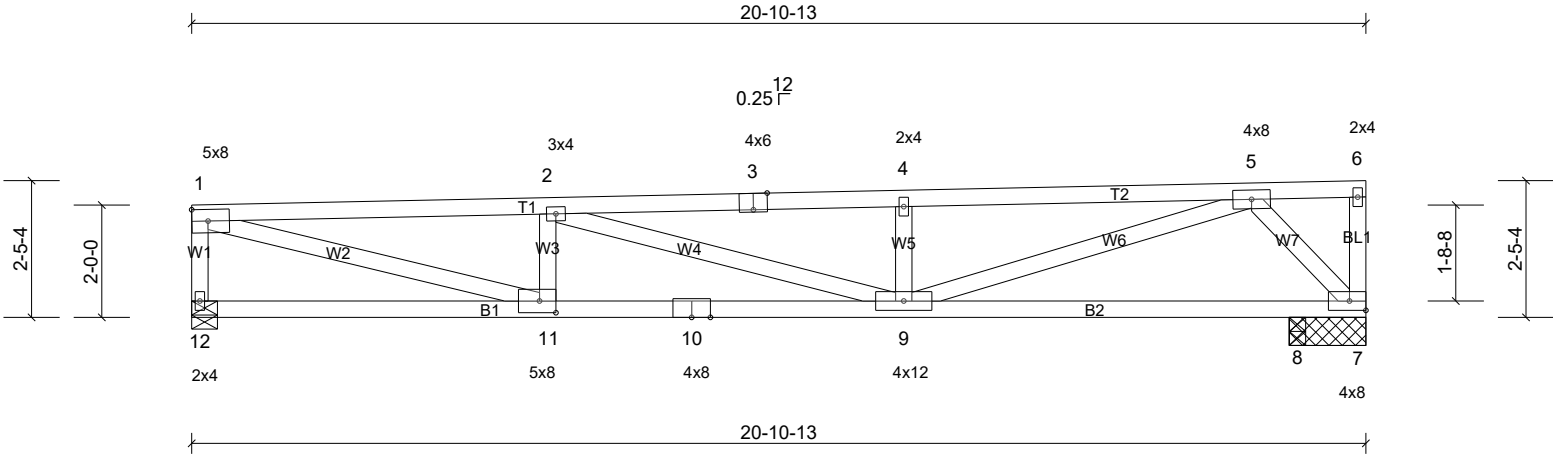
Job 2860207	Truss T16	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:5F53Wslf?Jn77YZXwSK0uZyg3t9-cZdgVHby0uHaGQMXRAENpCdgBu9gzT27vLs9Hzyg3TY



Scale = 1:41.2

Plate Offsets (X, Y): [3:0-3-0,Edge], [11:0-3-8,0-2-8]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.64	Vert(LL)	-0.19	9-11	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.86	Vert(TL)	-0.49	9-11	>476	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.78	Horiz(TL)	0.06	7	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 79 lb	FT = 10%

LUMBER
TOP CHORD 2x4 SPF No.2 *Except* T1:2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2
WEBS 2x4 SPF No.2
OTHERS 2x4 SPF No.2

- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 7 and 75 lb uplift at joint 12.
- 6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-6-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

LOAD CASE(S) Standard

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 7=875/1-4-6, (min. 0-1-8),
8=382/0-3-8, (min. 0-1-8),
12=1217/0-5-8, (min. 0-1-15)
Max Horiz 12=34 (LC 5)
Max Uplift 7=-142 (LC 6), 12=-75 (LC 4)
Max Grav 7=875 (LC 1), 8=459 (LC 3),
12=1217 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3067/198, 2-3=-3105/214,
3-4=-3097/216, 4-5=-3104/220
BOT CHORD 10-11=-175/3063, 9-10=-175/3063,
8-9=-95/1018, 7-8=-95/1018
WEBS 1-12=-1162/104, 2-11=-707/137,
1-11=-202/3177, 4-9=-616/117, 5-9=-99/2196,
5-7=-1619/173

- NOTES**
- 1) Wind: ASCE 7-05; 90mph; TC DL=6.0psf; BC DL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) Provide adequate drainage to prevent water ponding.
 - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

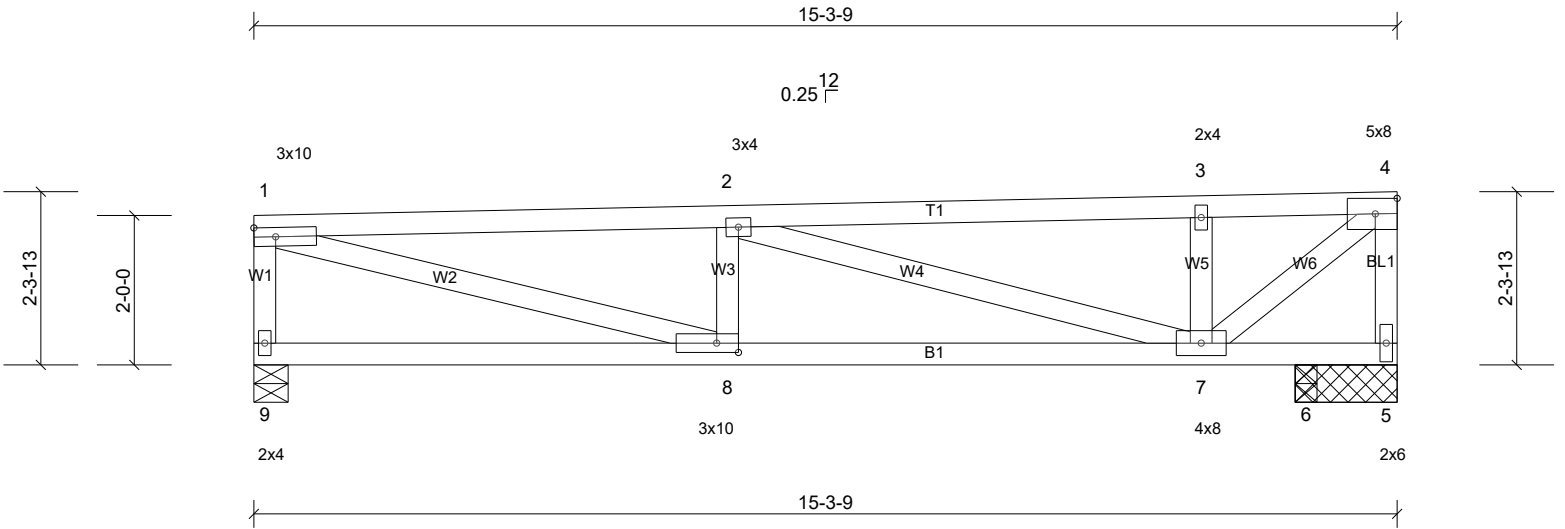
Job 2860207	Truss T17	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	--

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:Pg7QFVgwLMEUd3oyqiAcROyg3s_-cZdgVHbyOuHaGQMXRAENpCddguDkzTQ7vLs9Hzyg3TY



Scale = 1:31

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

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.80	Vert(LL)	-0.08	7-8	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.60	Vert(TL)	-0.21	7-8	>781	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.82	Horiz(TL)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 59 lb	FT = 10%

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

6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

BRACING
 TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 5=506/1-4-6, (min. 0-1-8),
 6=424/0-3-8, (min. 0-1-8),
 9=870/0-5-8, (min. 0-1-8)
 Max Horiz 9=31 (LC 5)
 Max Uplift 5=-9 (LC 6), 6=-45 (LC 4), 9=-49 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-1923/111, 2-3=-881/52, 3-4=-878/55,
 4-5=-749/39
 BOT CHORD 7-8=-86/1919
 WEBS 1-9=-817/78, 2-8=-388/117, 1-8=-113/1990,
 3-7=-517/95, 2-7=-1088/66, 4-7=-55/1176

- NOTES**
- 1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) Provide adequate drainage to prevent water ponding.
 - 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 49 lb uplift at joint 9, 9 lb uplift at joint 5 and 45 lb uplift at joint 6.

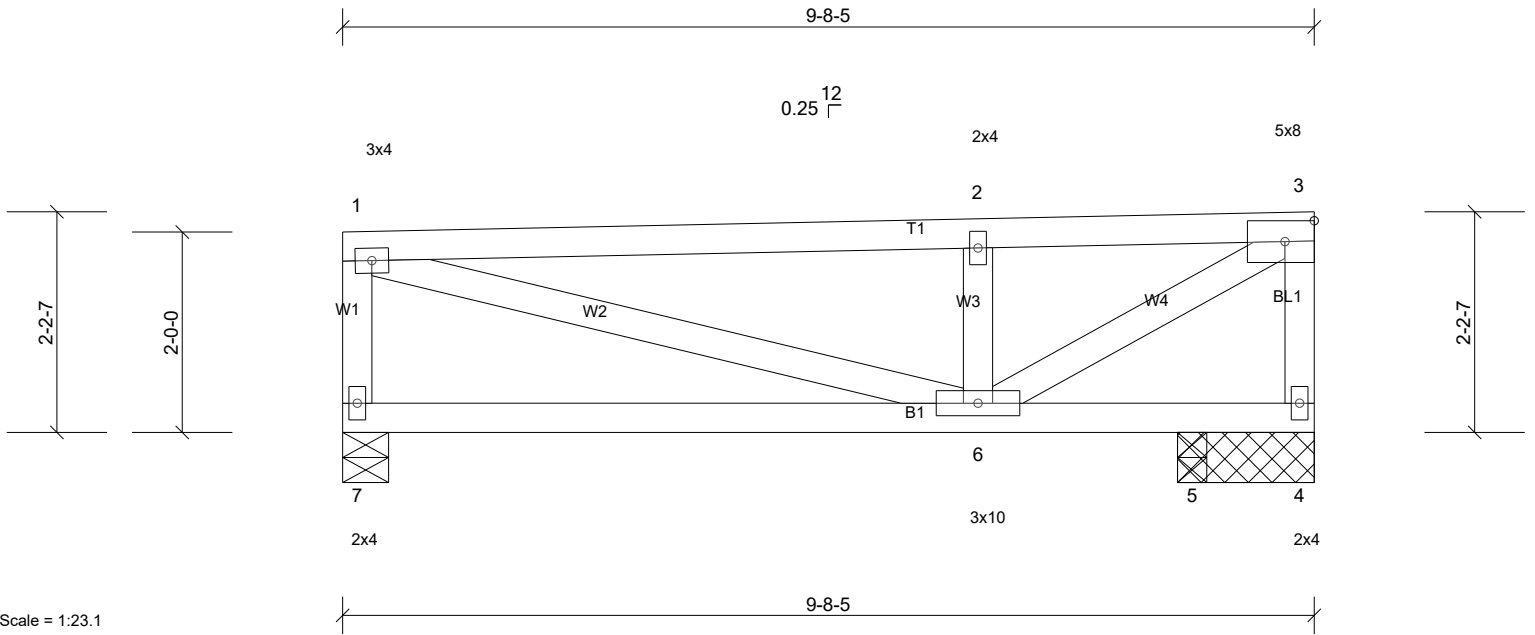
Job 2860207	Truss T18	Truss Type Monopitch	Qty 1	Ply 1	Corporate Cont_ Johnson Boathouse Job Reference (optional)
----------------	--------------	-------------------------	----------	----------	---

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID: X_?chOR3G0IPvhFZ8Kd1tyg3r_-cZdgVHby0uHaGQMXRAENpCdd9ulbzc7vLs9Hzyg3TY



Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.77	Vert(LL)	-0.05	6-7	>999	240	MT20 197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.29	Vert(TL)	-0.15	6-7	>649	180	
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horiz(TL)	n/a	-	n/a	n/a	
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-S							Weight: 38 lb FT = 10%

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 3-8-2 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 4=447/1-4-6, (min. 0-1-8),
 5=132/0-3-8, (min. 0-1-8),
 7=549/0-5-8, (min. 0-1-8)
 Max Horiz 7=27 (LC 5)
 Max Uplift 4=-4 (LC 6), 5=-30 (LC 4), 7=-31 (LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-803/45, 2-3=-805/48, 3-4=-521/30
 WEBS 1-7=-492/60, 2-6=-634/121, 1-6=-44/829, 3-6=-43/951

- NOTES**
- 1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
 - 3) Provide adequate drainage to prevent water ponding.
 - 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 31 lb uplift at joint 7, 4 lb uplift at joint 4 and 30 lb uplift at joint 5.
 - 6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

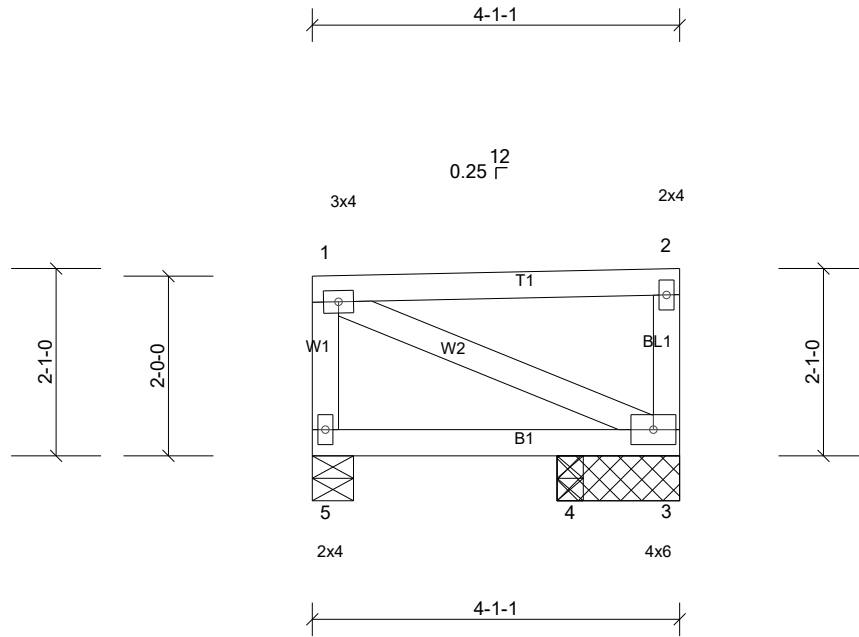
Job 2860207	Truss T19	Truss Type Monopitch Structural Gable	Qty 1	Ply 1	Corporate Cont_ Johnson Boathouse Job Reference (optional)
----------------	--------------	--	----------	----------	---

Builders FirstSource, De Pere, WI., David Holzer

Run: 8.42 S Dec 30 2020 Print: 8.420 S Dec 30 2020 MiTek Industries, Inc. Tue Sep 07 09:26:36

Page: 1

ID:QII_gNvuJh50sbYo7?XZuyg3qO-cZdgVHby0uHaGQMXRAENpCdkOuMKzfm7vLs9Hzyg3TY



Scale = 1:25.7

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	30.0	Plate Grip DOL	1.15	TC	0.37	Vert(LL)	0.00	4-5	>999	240	MT20	197/144
TCDL	20.0	Lumber DOL	1.15	BC	0.05	Vert(TL)	0.00	4-5	>999	180		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2009/TPI2007	Matrix-P							Weight: 17 lb	FT = 10%

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 4-1-1 oc purlins.

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 3=187/1-4-6, (min. 0-1-8),
 4=56/0-3-8, (min. 0-1-8),
 5=212/0-5-8, (min. 0-1-8)
 Max Horiz 5=-27 (LC 9)
 Max Uplift 3=-32 (LC 6), 5=-28 (LC 4)
 Max Grav 3=187 (LC 1), 4=113 (LC 3), 5=212 (LC 1)

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

NOTES

- 1) Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) exterior zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 3) Provide adequate drainage to prevent water ponding.
- 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 28 lb uplift at joint 5 and 32 lb uplift at joint 3.
- 6) This truss is designed in accordance with the 2009 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Strong-Drive® SDWC

Truss Screws

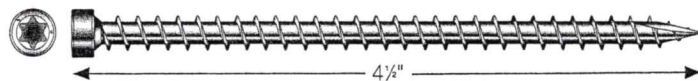
The Strong-Drive SDWC Truss Screw is tested in accordance with ICC-ES AC233 (screw) and AC13 (wall assembly and roof-to-wall assembly) for uplift and lateral loads between wall plates and vertical wall framing and between the top plate and the roof rafters or trusses. Strong-Drive SDWC15450 (not SDWC15600) is recognized for use in chemically-treated wood as described in the evaluation report.

Material: Carbon steel

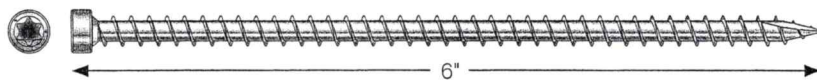
Finish: SDWC15450 — E-Coat™; SDWC15600 — Clear Zinc Coating (with Orange indicator)

Installation: • See General Notes

Codes: See p. 14 for Code Reference Key Chart



Strong-Drive SDWC15450



Strong-Drive SDWC15600

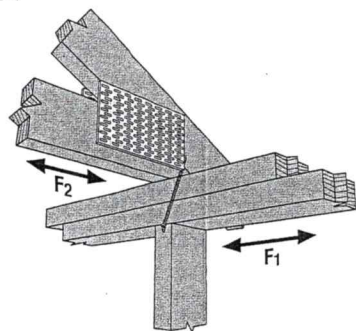
Strong-Drive® SDWC TRUSS Screw Allowable Roof-to-Wall Connection Loads – DF, SP, SPF, HF

Model No.	Minor Diameter (in.)	Length (in.)	Thread Length (in.)	Allowable Loads (lb.)						Code Ref.
				DF/SP			SPF/HF			
				Uplift	F ₁	F ₂	Uplift	F ₁	F ₂	
SDWC15600	0.152	6	5 3/4	615	130	225	485	115	192	IP5, FL, L25

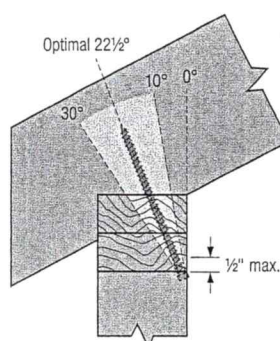
1. Loads have been increased for wind and earthquake ($C_D = 1.6$); no further increases allowed. Reduce when other loads govern.
2. Allowable loads are for a Strong-Drive SDWC Truss screw installed per the 'Recommended' or 'Optional' installation instructions. The Strong-Drive SDWC Truss screw is to be installed through a double 2x top plate into a minimum 2x4 truss or rafter.
3. A Strong-Drive SDWC Truss screw may be used in each ply of a 2- or 3-ply rafter or truss. The allowable uplift load for each screw shall be multiplied by 0.90, but may be limited by the capacity of the plate or the connection between the top plate to the framing below. Strong-Drive SDWC Truss screws in multi-ply

- assemblies must be spaced a minimum of 1 1/2" o.c.
4. Screws are shown installed on the interior side of the wall. Installations on the exterior side of the wall are acceptable when the rafter or truss overhangs the top plates a minimum of 3 1/2".
5. For uplift continuous load path, plate-to-stud connections should be made using the SDWC screw shown on pp. 322–323.
6. When the screw is loaded simultaneously in more than one direction, the allowable load must be evaluated using the following unity equation: $(\text{Design Uplift} \div \text{Allowable Uplift}) + (\text{Design } F_1 \div \text{Allowable } F_1) + (\text{Design } F_2 \div \text{Allowable } F_2) \leq 1.0$.
7. Table loads do not apply to trusses with end-grain bearing.
8. Top plate-to-stud and top-plate splice fastened per applicable building code.

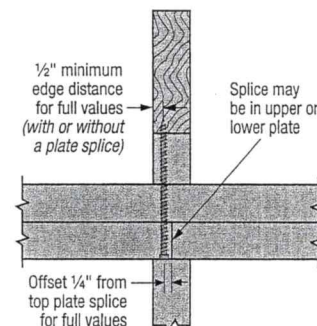
Typical Roof-to-Wall Connection



Typical Strong-Drive® SDWC Installation – Truss Aligned with Stud
(Offset truss similar)

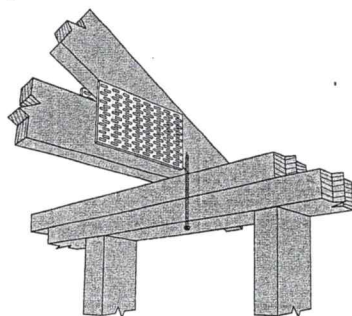


Installation Angle Limit

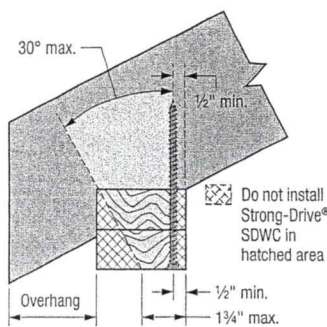


Min. Edge Distance for Top Plate Splice

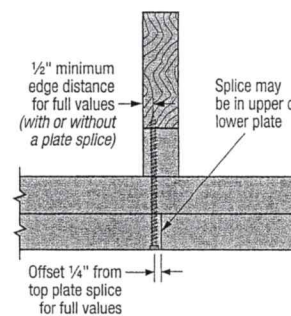
Optional Roof-to-Wall Connection



Optional Strong-Drive® SDWC Installation – Truss Offset from Stud

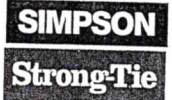


Allowable Installation Range
(Truss offset from stud only)



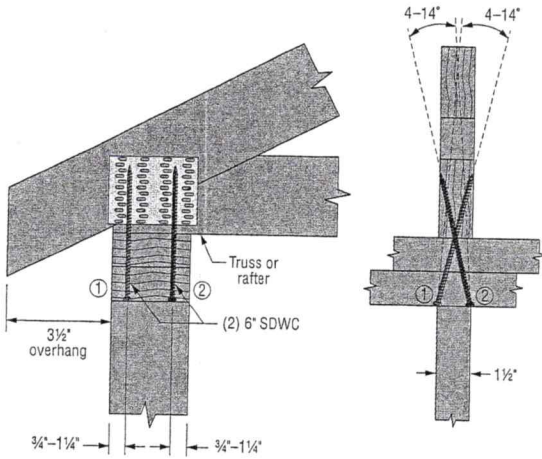
Min. Edge Distance for Top Plate Splice

Strong-Drive® SDWC

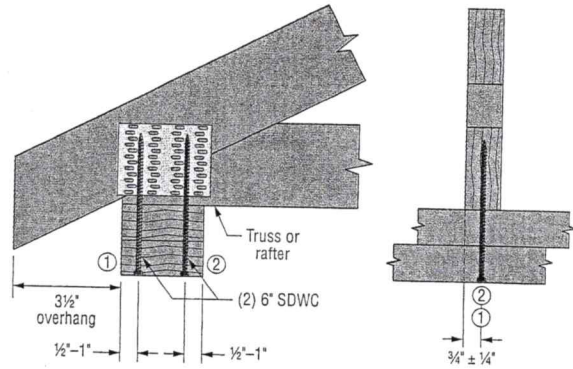


Truss Screws (cont.)

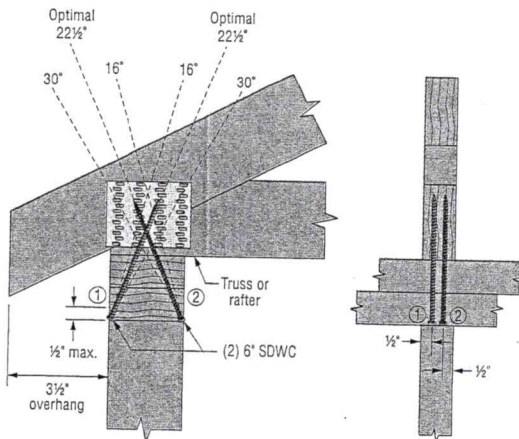
Typical Roof-to-Wall Connection Utilizing Two-Screw Configurations



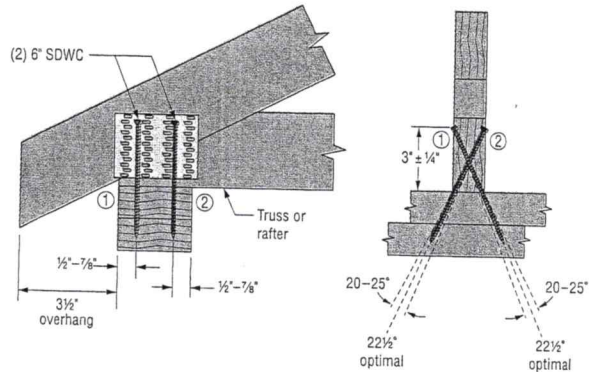
Configuration A:
Truss Aligned with Stud
 Install through Top Plate into Truss/Rafter
 Both screws installed at a 4°–14° angle,
 offset 3/4"–1 1/4" from opposite edges of the top plate.



Configuration B:
Truss Offset from Stud
 Install through Top Plate into Truss/Rafter
 Both screws installed vertically ±5° into the center of the
 truss/rafter from the underside of the top plate,
 1/2"–1" from opposite edges of the top plate.



Configuration C:
Install through Top Plate into Truss/Rafter
 Both screws installed at a 16°–30° angle,
 offset 1/2" from the opposite edges of truss/rafter.
 Use metal installation guide included in screw kits
 for optimal 22.5° installation.



Configuration D:
Install Truss/Rafter to Top Plate
 Both screws installed at a 20°–25° angle with a
 1/2"–7/8" offset from the opposite edges of top plate
 3" ± 1/4" above top plate. Use metal installation guide
 included in screw kits for optimal 22.5° installation.
 To pre-drill through truss plates, use a 1/8" drill bit.

C-C-2017 ©2017 SIMPSON STRONG-TIE COMPANY INC.

Straps and Ties

Strong-Drive® SDWC

Truss Screws (cont.)

SDWC Truss/Rafter-to-Top Plate Connections Utilizing Two-Screw Configurations

Allowable loads for the SDWC Truss screws when installed from the underside of the top plate and from the face of the truss/rafter using a two-screw configuration per the detail configurations shown on following page.

SDWC – Allowable Loads for Truss/Rafter-to-Top Plate Two-Screw Connections

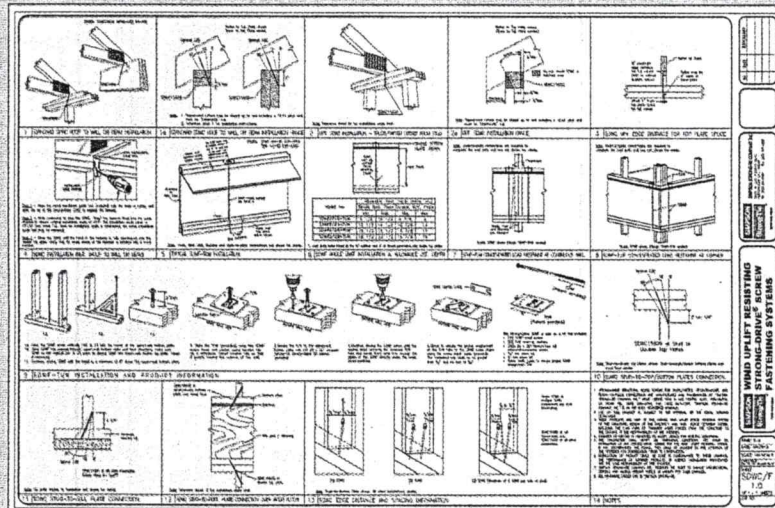
Model No.	Minor Diameter (in.)	Length (in.)	Thread Length (in.)	Quantity Required	Allowable Loads (lb.)						
					DF/SP			SPF/HF			Configuration
					Uplift	F ₁	F ₂	Uplift	F ₁	F ₂	
SDWC15600	0.152	6	5¾	2	1,200	685	995	1,045	495	670	A
					1,195	680	925	1,195	405	680	B
					905	535	790	850	330	595	C
					1,115	645	920	960	385	610	D

1. Loads have been increased for wind and earthquake loading ($C_D = 1.6$) with no further increase allowed; reduce where other loads govern.
2. For Uplift Connection Load Path, the designer shall verify complete continuity of the uplift load path.
3. When cross-grain tension cannot be avoided, supplemental reinforcement shall be considered by the Designer.
4. The SDWC screws shall not interfere with other fasteners or truss plates. Where truss plates must be penetrated for Configuration D, a Truss Designer approval is required in accordance with ANSI/TPI 1-2007/2014, Section 7.5.3.4 and 8.9.2. To pre-drill through truss plate, use a 1/8" drill bit.
5. The metal installation guide provided with the screw is angled at 22.5° and can be used for Configurations C and D; proper installation angles for all configurations are the responsibility of the installer.
6. SDWC screws must be offset min. 1/4" from top plate splices for full values.
7. Loads assume minimum overhang of 3 1/2".
8. When a screw is loaded simultaneously in more than one direction, the allowable load must be evaluated using the unity equation: $(\text{Design Uplift} \div \text{Allowable Uplift}) + (\text{Design } F_1 \div \text{Allowable } F_1) + (\text{Design } F_2 \div \text{Allowable } F_2) \leq 1.0$. The three terms in the unity equation represent the possible generated force directions. The number of terms that must be considered for simultaneous loading is the sole discretion of the Designer and depends on the method of calculating wind forces and the utilization of the screws within the structural system.

Straps and Ties

SDWC and SDWF Detail Sheet

When used together as a system with anchor bolts at the foundation, the SDWC and SDWF screws are a reliable, safe and economical solution for creating a continuous load path and resisting wind uplift. To learn more, visit strongtie.com/sdwc.



C-C-2017 © 2017 SIMPSON STRONG-TIE COMPANY INC.