Job	Truss	Truss Type	Qty	Ply	ST LAWRENCE / DIPHILIPPO
668644	001	GESI	1	1	A_MGE_e125990_5/8/2015 11:55:05 AM Job Reference (optional)

Boise Cascade, Biddeford, ME 04005

Run: 7.610 s Jan 29 2015 Print: 7.610 s Jan 29 2015 MiTek Industries, Inc. Wed May
ID:h1ndBKqXhV2FIVnEoCv0vkzJYYo-ZSRcG3Cc1zxbqhO2veXMdr2

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/20/15

PRELIMINARY-NOT FOR CONSTRUCTION-DESIGNED EXCLUSIVELY FOR MANUFACTURING BY BOISE CASCADE

Plate Offsets (X,Y)-- [1:0-0-0,0-1-8], [1:0-2-7,0-5-14], [9:Edge,0-1-8], [9:0-2-7,0-5-14]

LOADING (psf)		**SPACING-** 2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	60.0	Plate Grip DOL 1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	169/123
(Roof Snow=60.0)		Lumber DOL 1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
TCDL	10.0	Rep Stress Incr YES	WB	0.13	Horz(TL)	0.00	9	n/a	n/a		
BCLL	0.0 *	Code IBC2009/TPI2007	(Matrix)							Weight: 80 lb	FT = 0%
BCDL	10.0										

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
OTHERS 2x4 SPF-S No.2
WEDGE
Left: 2x4 SPF-S No.2, Right: 2x4 SPF-S 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.

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

REACTIONS. All bearings 18-0-0.
(lb) - Max Horz 1=-74(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 9, 15, 16, 13, 11 except 17=-291(LC 8), 10=-289(LC 9)
Max Grav All reactions 250 lb or less at joint(s) except 1=260(LC 1), 9=260(LC 1), 14=272(LC 1), 15=448(LC 2), 16=287(LC 2), 17=605(LC 2), 13=448(LC 3), 11=287(LC 3), 10=605(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-15=-393/182, 3-16=-301/113, 2-17=-447/278, 6-13=-393/182, 7-11=-301/114, 8-10=-447/276

NOTES- (11)
1) Wind: ASCE 7-05; 120mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 6-8-0, Exterior(2) 6-8-0 to 9-8-0, Interior(1) 12-8-0 to 16-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) TCLL: ASCE 7-05; Pf=60.0 psf (flat roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
4) Unbalanced snow loads have been considered for this design.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9, 15, 16, 13, 11 except (jt=lb) 17=291, 10=289.
9) Non Standard bearing condition. Review required.
10) This truss is designed in accordance with the 2009 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Drawing prepared exclusively for manufacturing by Boise Structural Solutions

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	ST LAWRENCE / DIPHILIPPO
668644	002	Common	4	1	A_PMT_e125990_5/8/2015 11:55:03 AM Job Reference (optional)

Boise Cascade, Biddeford, ME 04005

Run: 7.610 s Jan 29 2015 Print: 7.610 s Jan 29 2015 MiTek Industries, Inc. Wed May
ID:h1ndBKqXhV2FIVnEoCv0vkzJYYo-ZSRcG3Cc1zxbqhO2veXMdr2

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Inspections Division
Approved with Conditions
Date: 05/20/15

0-8-0 | 9-8-0 | 18-8-0 | 19-4-0
0-8-0 | 9-0-0 | 9-0-0 | 0-8-0

Plate Offsets (X,Y)-- [1:0-2-11,0-8-4], [5:0-2-11,0-8-4]

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	60.0	Plate Grip DOL	1.15	TC	0.85	Vert(LL)	-0.09	1-7	>999	240	MT20	169/123
(Roof Snow=60.0)		Lumber DOL	1.15	BC	0.66	Vert(TL)	-0.19	1-7	>999	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.44	Horz(TL)	0.04	5	n/a	n/a		
BCLL	0.0 *	Code IBC2009/TPI2007		(Matrix)							Weight: 77 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
WEBS 2x4 SPF-S No.2
WEDGE
Left: 2x6 SPF 1650F 1.5E, Right: 2x6 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-2 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) 1=1510/0-5-8 (min. 0-2-6), 5=1510/0-5-8 (min. 0-2-6)
Max Horz 1=-74(LC 9)
Max Uplift1=-408(LC 8), 5=-408(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-8=-2535/843, 8-9=-2335/846, 2-9=-2239/857, 2-10=-1900/680, 10-11=-1813/685, 3-11=-1765/700, 3-12=-1765/700, 12-13=-1813/685, 4-13=-1900/680, 4-14=-2239/857, 14-15=-2335/846, 5-15=-2535/843
BOT CHORD 1-7=-627/2092, 6-7=-627/2092, 5-6=-627/2092
WEBS 3-7=-248/859, 4-7=-745/356, 2-7=-745/355

NOTES- (8)
1) Wind: ASCE 7-05; 120mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 6-8-0, Exterior(2) 6-8-0 to 9-8-0, Interior(1) 12-8-0 to 16-1-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-05; Pf=60.0 psf (flat roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
3) Unbalanced snow loads have been considered for this design.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=408, 5=408.
7) This truss is designed in accordance with the 2009 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
8) Drawing prepared exclusively for manufacturing by Boise Structural Solutions

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	ST LAWRENCE / DIPHILIPPO
668644	003	GESI	1	1	B_MGE_e125990_5/8/2015 11:55:09 AM Job Reference (optional)

Boise Cascade, Biddeford, ME 04005

Run: 7.610 s Jan 29 2015 Print: 7.610 s Jan 29 2015 MiTek Industries, Inc. Wed May
ID:h1ndBKqXhV2FIVnEoCv0vkzJYYo-1e?_UPDEoH4SSrzFSM2b93a4

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Inspections Division
Approved with Conditions
Date: 05/20/15

Plate Offsets (X,Y)-- [16:0-4-0,0-4-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.42	19-20	>279	240	MT20	169/123
(Roof Snow=60.0)		Lumber DOL	1.15	BC	0.73	Vert(TL)	-0.50	19-20	>234	180		
TCDL	10.0	Rep Stress Incr	YES	WB	0.16	Horz(TL)	0.01	12	n/a	n/a		
BCLL	0.0 *	Code IBC2009/TPI2007		(Matrix)							Weight: 101 lb	FT = 0%
BCDL	10.0											

LUMBER-
TOP CHORD 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 1650F 1.5E
OTHERS 2x4 SPF-S No.2
WEDGE
Left: 2x3 SPF No.2, Right: 2x3 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.

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

REACTIONS. (lb/size) 17=1150/0-5-8 (min. 0-1-13), 22=1292/2-5-8 (min. 0-2-2), 12=1292/2-5-8 (min. 0-2-2)
Max Horz 22=-74(LC 9)
Max Uplift17=-42(LC 8), 22=-475(LC 8), 12=-477(LC 9)
Max Grav 17=1150(LC 1), 22=1352(LC 2), 12=1352(LC 3)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-23=-778/248, 2-23=-558/267, 2-3=-731/367, 3-24=-655/390, 4-24=-618/398, 4-25=-640/457, 5-25=-593/463, 5-6=-609/528, 6-7=-609/528, 7-26=-593/463, 8-26=-640/457, 8-27=-618/398, 9-27=-655/390, 9-10=-731/367, 10-28=-558/264, 11-28=-778/245
BOT CHORD 1-22=-167/562, 21-22=-163/562, 20-21=-163/562, 19-20=-163/562, 18-19=-163/562, 17-18=-163/562, 16-17=-163/562, 15-16=-163/562, 14-15=-163/562, 13-14=-163/562, 12-13=-163/562, 11-12=-163/562
WEBS 5-18=-296/132, 4-19=-326/131, 2-21=-454/265, 7-16=-296/132, 8-15=-326/131, 10-13=-454/265

NOTES- (11)
1) Wind: ASCE 7-05; 120mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-0-0 to 3-0-0, Interior(1) 3-0-0 to 8-8-0, Exterior(2) 8-8-0 to 11-8-0, Interior(1) 14-8-0 to 20-4-0 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) TCLL: ASCE 7-05; Pf=60.0 psf (flat roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
4) Unbalanced snow loads have been considered for this design.
5) All plates are 1.5x4 MT20 unless otherwise indicated.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 17 except (jt=lb) 22=475, 12=477.
10) This truss is designed in accordance with the 2009 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
11) Drawing prepared exclusively for manufacturing by Boise Structural Solutions

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	ST LAWRENCE / DIPHILIPPO
668644	004	SCISSOR	8	1	B_PMT_e125990_5/8/2015 11:55:07 AM Job Reference (optional)

Boise Cascade, Biddeford, ME 04005

Run: 7.610 s Jan 29 2015 Print: 7.610 s Jan 29 2015 MiTek Industries, Inc. Wed May
ID:h1ndBKqXhV2FIVnEoCv0vkzJYYo-1e?_UPDEoH4SSrzFSM2b93a?0

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/20/15

PRELIMINARY-NOT FOR CONSTRUCTION-DESIGNED EXCLUSIVELY FOR MANUFACTURING BY BOISE CASCADE

Plate Offsets (X,Y)-- [1:0-5-7,3-9-12], [1:0-5-7,Edge], [3:0-3-12,0-3-0], [5:0-5-7,3-9-12], [5:0-5-7,Edge], [6:0-7-0,0-4-0]

LOADING (psf)		**SPACING-** 2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	60.0	Plate Grip DOL 1.15	TC	0.83	Vert(LL)	-0.74	6	>373	240	MT20	169/123
(Roof Snow=60.0)		Lumber DOL 1.15	BC	0.59	Vert(TL)	-1.09	6	>251	180	MT20HS	127/93
TCDL	10.0	Rep Stress Incr YES	WB	0.88	Horz(TL)	0.87	5	n/a	n/a		
BCLL	0.0 *	Code IBC2009/TPI2007	(Matrix)							Weight: 149 lb	FT = 0%
BCDL	10.0										

LUMBER-
TOP CHORD 2x6 SPF 1650F 1.5E
BOT CHORD 2x8 SP M 23
WEBS 2x4 SPF-S No.2 *Except*
W2: 2x4 SPF 1650F 1.5E
WEDGE
Left: 2x6 SPF 1650F 1.5E, Right: 2x6 SPF 1650F 1.5E

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 6-8-2 oc bracing.

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

REACTIONS. (lb/size) 1=2230/0-5-8 (min. 0-1-12), 5=2230/0-5-8 (min. 0-1-12)
Max Horz 1=74(LC 8)
Max Uplift1=-612(LC 8), 5=-612(LC 9)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-7=-9275/2980, 7-8=-9049/2980, 2-8=-8900/3001, 2-9=-7903/2281, 9-10=-7650/2216, 3-10=-7631/2231, 3-11=-7631/2231, 11-12=-7650/2216, 4-12=-7903/2281, 4-13=-8900/3001, 13-14=-9049/2980, 5-14=-9275/2980
BOT CHORD 1-6=-2636/8427, 5-6=-2636/8427
WEBS 3-6=-1426/5419, 4-6=-1521/856, 2-6=-1521/828

NOTES- (13)
1) Wind: ASCE 7-05; 120mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 0-2-12 to 3-2-12, Interior(1) 3-2-12 to 8-8-0, Exterior(2) 8-8-0 to 11-8-0, Interior(1) 14-8-0 to 20-1-4 zone; cantilever left and right exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) TCLL: ASCE 7-05; Pf=60.0 psf (flat roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
3) Unbalanced snow loads have been considered for this design.
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) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Bearing at joint(s) 1, 5 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 100 lb uplift at joint(s) except (jt=lb) 1=612, 5=612.
9) This truss is designed in accordance with the 2009 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.
10) "Semi-rigid pitchbreaks including heels" Member end fixity model was used in the analysis and design of this truss.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 400 lb down and 159 lb up at 8-4-0 , and 400 lb down and 159 lb up at 15-0-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
12) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).
13) Drawing prepared exclusively for manufacturing by Boise Structural Solutions

LOAD CASE(S) Standard

Continued on page 2

CITY OF PORTLAND, MAINE · RESURGAM

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 05/20/15

LOAD CASE(S) Standard

1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
      Vert: 1-3=-140, 3-5=-140, 1-6=-20, 5-6=-20
   Concentrated Loads (lb)
      Vert: 9=-400(F) 12=-400(F)