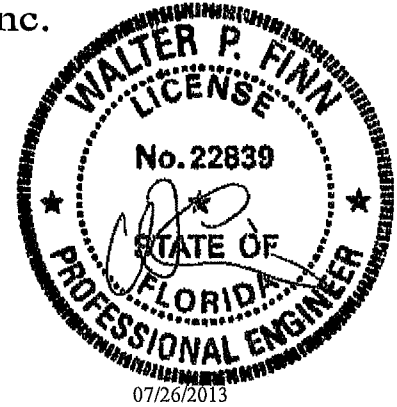


ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844
Florida Engineering Certificate of Authorization Number 0 278
Florida Certificate of Product Approval # FL1999
Page 1 of 1 Document ID IUY8215-Z0126074429



Truss Fabricator **W.B. Howland**
Job Identification **8080-/18X24 GARAGE /Plumb Level Construction -- , FL**
Truss Count **2**
Model Code **Florida Building Code 2010**
Truss Criteria. **FBC2010Res/TPI-2007(STD)**
Engineering Software **Alpine Software, Version 12.03.**
Structural Engineer of Record **The identity of the structural EOR did not exist as of**
Address **the seal date per section 61G15-31.003(5a) of the FAC**
Minimum Design Loads **Roof - 40.0 PSF @ 1.25 Duration**
Floor - N/A
Wind - 130 MPH ASCE 7-10 -Closed

Notes

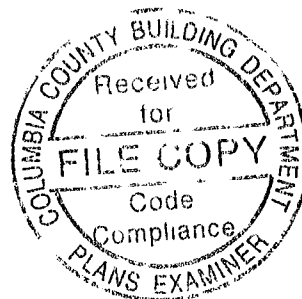
- Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1**
- The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.**
- As shown on attached drawings; the drawing number is preceded by: HCUSR215**

Walter P Finn
-Truss Design Engineer-

1950 Marley Drive
Haines City, FL 33844

Details: 14015EC1-GBLLETIN-

#	Ref	Description	Drawing#	Date
1	41329--A		13207001	07/26/13
2	41330--A1		13207002	07/26/13



(8080-)/18X24 GARAGE /Plumb Level Construction --, FL - A1)

THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS WFR

Top chord 2x4 SP #2 N-12A
 Bot chord 2x4 SP #2 N-12A
 Webs 2x4 SP #2 N-12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC.

This design is based on lumber values in effect prior to June 1, 2013 and shall only be used on projects designed and permitted prior to this date unless specifically approved in writing by the building authority having jurisdiction, the building designer and the project owner.

Deflection meets L/240 live and L/180 total load Creep increase Factor for dead load is 1.50

130 mph wind, 15' 00" mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP C, wind TC DL=5.0 psf, wind BC DL=5.0 psf GCP(+/-)=0.18

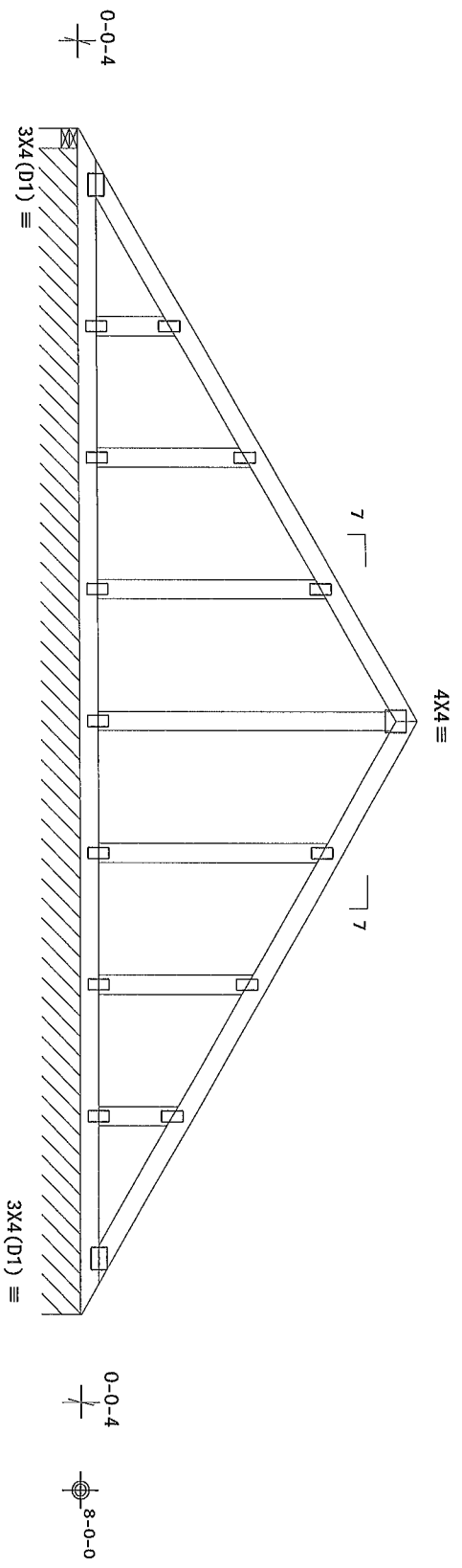
Wind loads and reactions based on MWFRS with additional C&C member design

Gable end supports 8" max rake overhang

See DWGS A14015ENC100212 & GBLLET110212 for more requirements

Bottom chord checked for 10 00 psf non-concurrent live load

The overall height of this truss excluding overhang is 5-3-4



9'-0-0
 18'-0-0 Over 2 Supports
 9'-0-0

R=110 U=18 W=3.5" (3.5" min)
 R=75 PRC=4263-RD5 W=17-8-8

Note: All Plates Are 2X4 Except As Shown.

PLT TYP. Wave

Design Crit: FBC2010Res/TP1-2007(SD)
 FT/RT=20%(0%)/10(0)

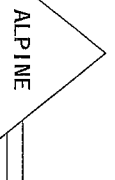
12.03.07.093.11

07/26/2013

FL-/5-/-/R/-

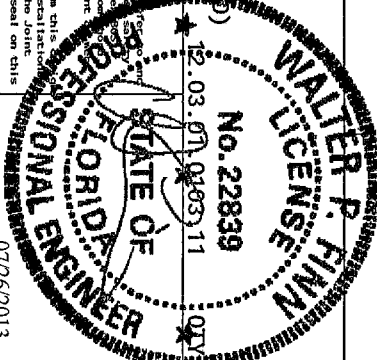
Scale = .375"/Ft.

TC LL	20.0 PSF	REF	R215--	41330
TC DL	10.0 PSF	DATE	07/26/13	
BC DL	10.0 PSF	DRW	HCSR215	13207002
BC LL	0.0 PSF	HC-ENG	AP/AP	
TOT. LD.	40.0 PSF	SEQN-	367282	
DUR. FAC.	1.25	FROM	CDM	
SPACING	24.0"	JREF-	1UY8215_Z01	



Orlando, FL, 32837
 FL COA #0 278

****WARNING**** READ AND FOLLOW ALL NOTES ON THIS SHEET!
 FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS
 Trusses require extreme care in fabricating handling shipping installing and bracing
 Follow the latest edition of BCSI (Building Component Survey Information) by TPI and WDA
 practices prior to performing these functions. Installers shall provide temporary bracing
 unless noted otherwise. Top chord shall have properly attached structural sheathing and become
 a permanent part of the truss. Trusses shall be installed in accordance with the manufacturer's
 shall have bracing installed per BCSI Sect. 83, 87 or 810, as applicable.
 TPI Building Component Group Inc. (TMBCG) shall not be responsible for any deviation from this
 any failure to build the truss in conformance with ANSI/TPI 1 or for handling shipping installing
 bracing of trusses. Apply plates to each face of truss and position as shown above and on the joint.
 Details unless noted otherwise. Refer to drawings 1604-Z for standard plate positions. A seal on this
 drawing or cover page listing this drawing indicates acceptance and use of this design for any structure is
 the responsibility of the Building Designer. Per ANSI/TPI 1 Sec 2 For more information see
 the responsibility of the Building Designer. Per ANSI/TPI 1 Sec 2 For more information see
 TPI www.tpicorp.com TPI www.trussinfo.com TPI www.alpine.org TPI www.alpine.org

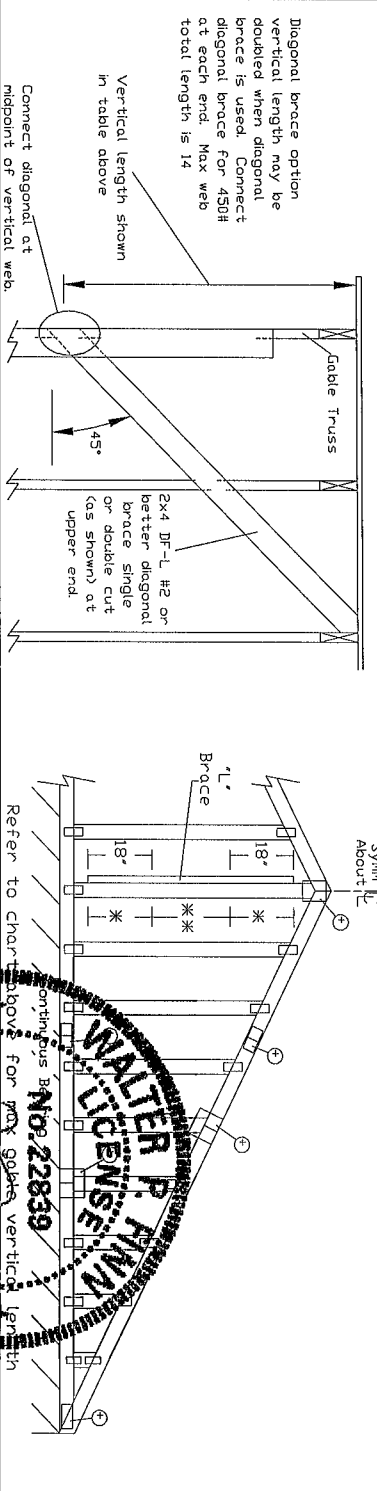


Gable Stud Reinforcement Detail

ASCE 7-10 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 100

Dr. 120 mph Wind Speed, 15 Mean Height Partially Enclosed Exposure C Kzt = 100
 Dr. 120 mph Wind Speed 15 Mean Height Enclosed Exposure D Kzt = 100
 Dr. 100 mph Wind Speed 15 Mean Height Partially Enclosed Exposure D Kzt = 100

Gable Vertical Spacing	2x4 Species	Brace Grade	No Braces	Group A		Group B		Group A		Group B		Group A		Group B	
				(1) 1x4 'L' Brace	(1) 2x4 'L' Brace	(1) 2x4 'L' Brace	(2) 2x4 'L' Brace	(1) 2x6 'L' Brace	(2) 2x6 'L' Brace	(1) 2x6 'L' Brace	(2) 2x6 'L' Brace				
12" o.c.	SPF	#1 / #2	4 3'	7 3'	7 7'	8 7'	8 11'	10 3'	10 8'	13 6'	14 0'	14 0'	14 0'	14 0'	14 0'
			4 1'	7 2'	7 5'	8 5'	8 10'	10 1'	10 6'	13 4'	13 10'	14 0'	14 0'	14 0'	14 0'
			4 1'	5 11'	7 5'	8 5'	8 10'	10 1'	10 6'	13 4'	13 10'	14 0'	14 0'	14 0'	14 0'
	HF	Standard	4 1'	5 11'	7 5'	8 5'	8 10'	10 1'	10 6'	13 4'	13 10'	14 0'	14 0'	14 0'	14 0'
			4 4'	7 4'	7 7'	8 7'	9 0'	10 3'	10 8'	13 6'	14 0'	14 0'	14 0'	14 0'	14 0'
			4 3'	7 3'	7 7'	8 7'	8 11'	10 3'	10 8'	13 6'	14 0'	14 0'	14 0'	14 0'	14 0'
24" o.c.	DFL	Standard	3 11'	5 2'	5 5'	6 4'	7 11'	8 5'	10 1'	10 6'	12 5'	13 3'	14 0'	14 0'	14 0'
			4 1'	5 11'	5 11'	6 4'	7 11'	8 5'	10 1'	10 6'	12 5'	13 3'	14 0'	14 0'	14 0'
			4 1'	5 2'	5 5'	6 4'	7 11'	8 5'	10 1'	10 6'	12 5'	13 3'	14 0'	14 0'	14 0'
	SPF	#1 / #2	4 11'	8 4'	8 4'	8 8'	9 10'	10 3'	11 8'	12 2'	14 0'	14 0'	14 0'	14 0'	14 0'
			4 8'	8 2'	8 2'	8 6'	9 8'	10 1'	11 7'	12 1'	14 0'	14 0'	14 0'	14 0'	14 0'
			4 8'	8 2'	8 2'	8 6'	9 8'	10 1'	11 7'	12 1'	14 0'	14 0'	14 0'	14 0'	14 0'
HF	Standard	5 0'	8 5'	8 5'	8 8'	9 10'	10 3'	11 8'	12 2'	14 0'	14 0'	14 0'	14 0'	14 0'	
		4 11'	8 4'	8 4'	8 8'	9 10'	10 3'	11 8'	12 2'	14 0'	14 0'	14 0'	14 0'	14 0'	
		4 8'	8 2'	8 2'	8 6'	9 8'	10 1'	11 7'	12 1'	14 0'	14 0'	14 0'	14 0'	14 0'	
16" o.c.	DFL	Standard	4 8'	7 3'	7 9'	8 5'	9 8'	10 1'	11 7'	12 1'	14 0'	14 0'	14 0'	14 0'	14 0'
			4 8'	6 3'	6 8'	8 5'	8 11'	11 4'	12 1'	13 2'	14 0'	14 0'	14 0'	14 0'	
			4 8'	6 3'	6 8'	8 5'	8 11'	11 4'	12 1'	13 2'	14 0'	14 0'	14 0'	14 0'	
	SPF	#1 / #2	5 5'	9 2'	9 6'	10 10'	11 3'	11 8'	13 5'	14 0'	14 0'	14 0'	14 0'	14 0'	14 0'
			5 1'	9 0'	9 4'	10 8'	11 1'	12 9'	13 3'	14 0'	14 0'	14 0'	14 0'	14 0'	
			5 1'	9 0'	9 4'	10 8'	11 1'	12 9'	13 3'	14 0'	14 0'	14 0'	14 0'	14 0'	
HF	Standard	5 1'	9 0'	9 4'	10 8'	11 1'	12 9'	13 3'	14 0'	14 0'	14 0'	14 0'	14 0'	14 0'	
		5 6'	9 3'	9 7'	10 11'	12 11'	13 6'	14 0'	14 0'	14 0'	14 0'	14 0'	14 0'		
		5 5'	9 2'	9 6'	10 10'	12 11'	13 6'	14 0'	14 0'	14 0'	14 0'	14 0'	14 0'		



Diagonal brace option vertical length may be doubled when diagonal brace is used. Connect diagonal brace for 450H at each end. Max web total length is 14.

Vertical length shown in table above

Connect diagonal at midpoint of vertical web.

45°

2x4 DF-L #2 on better diagonal brace single or double cut (as shown) at upper end.

Refer to chart above for max gable vertical length

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI (Building Component Safety) Information, by IPI and WDAI for details on proper bracing and installation. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall have a properly attached rigid ceiling. Locations shown for permanent lateral resistance of trusses and position as shown above and on the Joint Details unless noted otherwise. Refer to drawings 100h-7 for standard plate positions.

ITV Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the trusses in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing shall be the responsibility of the user. For more information see this job's general notes page and these web sites: ITV/BCSI www.tbwg.com, TPI www.tpiinc.org, WDAI www.wdaiconsulting.com, ICC www.iccsafe.org

Bracing Group Species and Grades

Group A	Group B
SPF-Prime-Fir #1 / #2 Standard #3 Stud	Hem-Fir #2 Stud #3 Standard
Douglas Fir-Larch #3 Standard	Southern Pine #3 Stud Standard

Group B
Hem-Fir
#1 & Btr
#1

Douglas Fir-Larch
#1
#2

Southern Pine
#1
#2

Gable Truss Detail Notes

Wind load deflection criterion is L/240

Provide uplift connections for 55 psf over continuous bearing (5 psf TC Dead Load).

Gable end supports load from 4' 0" out-tookers with 2' 0" overhang on 12" plywood overhang.

So. Pine lumber design values based on the ALSC January 2012 rule.

Attach 'L' braces with 10d (0.128"x30" min) nails

* For (1) 'L' brace: space nails at 2' 0" c.c. in 18" end zones and 4' 0" c.c. between zones

** For (2) 'L' braces: space nails at 3' 0" c.c. in 18" end zones and 6' 0" c.c. between zones.

'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes

Vertical Length	No Splice
Less than 4' 0"	1x4 or 2X3
Greater than 4' 0" but less than 11' 6"	25X4
Greater than 11' 6"	3X4

* Refer to common truss design for peak splice and heel plates

Refer to the Building Designer for conditions not addressed by this detail.

REF: ASCET-10-CAB14015

DATE: 2/14/12

DRWG: A14015ENC100212

MAX TDT LD: 60 PSF

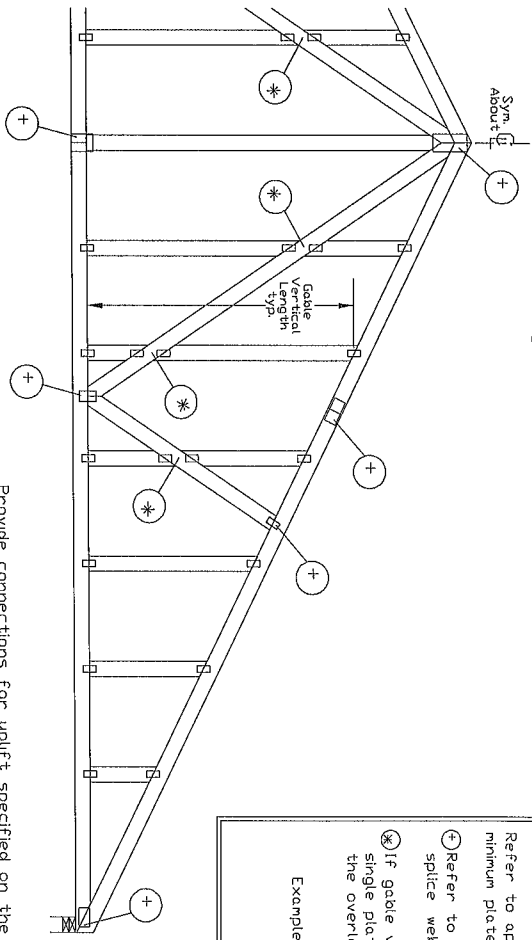
MAX SPACING: 24 0"

Building Components Group Inc.
 Earth City MO 63045



Jul 26 '13

Gable Detail For Let-in Verticals



Gable Truss Plate Sizes

Refer to appropriate ITW gable detail for minimum plate sizes for vertical studs

⊕ Refer to Engineered truss design for peak splice web and heel plates

⊗ If gable vertical plates overlap use a single plate that covers the total area of the overlapped plates to span the web

Example:

Provide connections for uplift specified on the engineered truss design

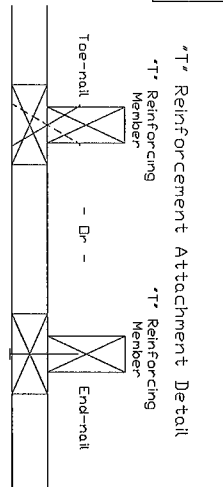
Attach each 'T' reinforcing member with

End Driven Nails
10d Common (0.148" x 3" min) Nails at 4' o.c plus
(4) nails in the top and bottom chords

Toenailed Nails
10d Common (0.148" x 3" min) Toenails at 4' o.c plus
(4) toenails in the top and bottom chords

This detail to be used with the appropriate ITW gable detail for ASCE wind load

- ASCE 7-98 Gable Detail Drawings
- A13015980109 A12015980109 A11015980109 A10015980109
 - A13030980109 A12030980109 A11030980109 A10030980109
- ASCE 7-02 Gable Detail Drawings
- A13015020109 A12015020109 A11015020109 A10015020109
 - A13030020109 A12030020109 A11030020109 A10030020109
- ASCE 7-05 Gable Detail Drawings
- A13015050109 A12015050109 A11015050109 A10015050109
 - A13030050109 A12030050109 A11030050109 A10030050109
- ASCE 7-10 Gable Detail Drawings
- A11515020109 A12015020109 A14015020109 A13015020109
 - A18015020109 A12015020109 A14015020109 A13015020109
 - A15300020109 A120300020109 A14300020109 A130300020109
 - A190300020109 A200300020109 A140300020109 A130300020109
- See appropriate ITW gable detail for maximum uplift reinforced gable vertical length



To convert from 'L' to 'T' reinforcing members multiply 'T' increase by length (based on appropriate ITW gable detail)

Maximum allowable 'T' reinforced gable vertical length is 14' from top to bottom chord

'T' reinforcing member material must match size, specie and grade of the 'L' reinforcing member

Web Length Increase w/ 'T' Brace

'T' Reinf Mbr Size	'T' Increase
2x4	30 %
2x6	20 %

Example

ASCE 7-10 Wind Speed = 120 mph
Mean Roof Height = 30 ft Kzt = 100
Gable Vertical = 24' o.c SP #3

'T' Reinforcing Member Size = 2x4
'T' Brace Increase (from Above) = 30% = 130
(1) 2x4 'L' Brace Length = 8' 7"
Maximum 'T' Reinforced Gable Vertical Length = 130 x 8' 7" = 11' 2"



Building Components Group Inc.

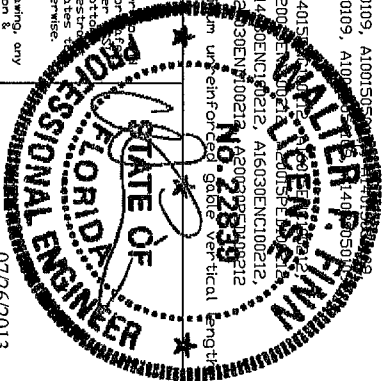
Earth City MO 63045

****WARNING** READ AND FOLLOW ALL NOTES ON THIS DRAWING**

****IMPORTANT** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.**

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI (Building Component Safety) Information, by TPI and WTCA for practices prior to performing these functions. Installers shall provide temporary bracing per BCSI and other manufacturer's instructions. Trusses shall be properly braced and supported during erection. Trusses shall have bracing installed per BCSI sections 33 B7 or B10 as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details unless noted otherwise. Refer to drawings 160A-7 for standard plate positions.

ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the trusses in conformance with ANSI/TPI 1, or for handling, shipping, installation & bracing of trusses. A seal on this drawing or cover page listing the design engineer's acceptance of professional engineering responsibility solely for the design shown. The stability and use of this drawing for any structure is the responsibility of the building designer per ANSI/TPI 1. See: ITW/BCG www.itwbcg.com, IPI www.ipiinc.com, WTCa www.wtcaindust.com, ICC www.iccsafe.org



Jul 26 '13
07/26/2013

REF	LET-IN VERT
DATE	2/16/12
DRWG	GBLETTIN0212
MAX TOT LD	60 PSF
DUR FAC	ANY
MAX SPACING	24 0