

Plate Offsets (X, Y): [15.0-1.8, Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.31	13-14	>702	360	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.43	13-14	>510	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.07	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TP12014	Matrix-SH						Weight: 91 lb	FT = 20%F, 12%E

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2(flat)	TOP CHORD	Structural wood sheathing directly applied or 5-11-12 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		

REACTIONS	(lb/size)	11=803/0-3-8, (min. 0-1-8), 18=803/0-5-8, (min. 0-1-8)
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FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-2353/0, 3-4=-3519/0, 4-5=-3519/0, 5-6=-3519/0, 6-7=-3199/0, 7-8=-3199/0, 8-9=-2352/0
BOT CHORD	17-18=0/1779, 16-17=0/2892, 15-16=0/2892, 14-15=0/3519, 13-14=0/3470, 12-13=0/2894, 11-12=0/1778
WEBS	9-11=-1907/0, 2-18=-1908/0, 9-12=0/747, 2-17=0/747, 8-12=-706/0, 3-17=-701/0, 8-13=0/397, 3-15=0/848, 6-13=-353/0, 6-14=-227/407

- NOTES (5)**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - This repair has been prepared based on information and use conditions supplied by client. Designer has made a good faith effort to outline damage and repair conditions as reported by client. When actual field conditions do not approximate those indicated on this drawing, client shall immediately inform the engineer and refrain from applying the repair.



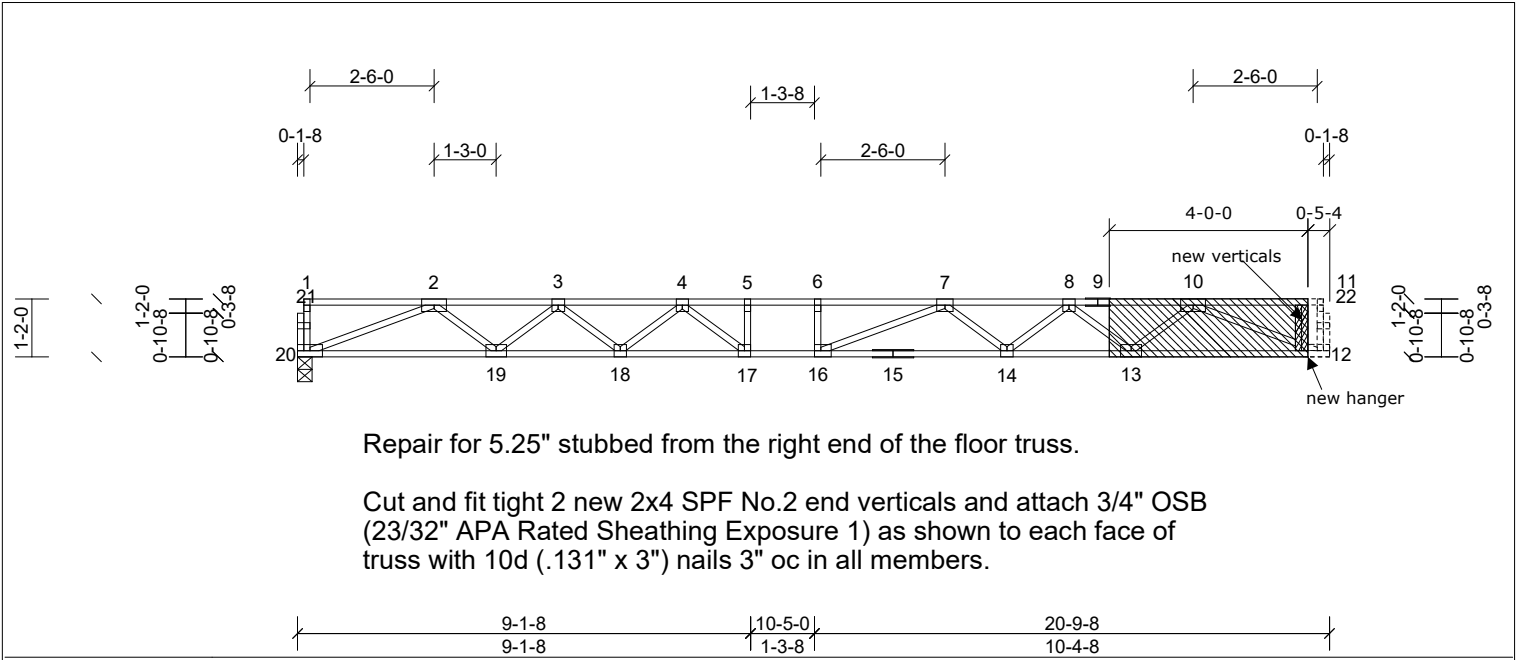


Plate Offsets (X, Y): [16.0-1.8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.48	14-16	>518	360	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.66	14-16	>374	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.09	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH						Weight: 102 lb	FT = 20%F, 12%E

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2(flat)	TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		

REACTIONS	(lb/size)	12=899/0-3-8, (min. 0-1-8), 20=899/0-3-8, (min. 0-1-8)
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	

TOP CHORD	2-3=2707/0, 3-4=3766/0, 4-5=4423/0, 5-6=4423/0, 6-7=4423/0, 7-8=3794/0, 8-9=2701/0, 9-10=2701/0
BOT CHORD	19-20=0/2017, 18-19=0/3359, 17-18=0/4171, 16-17=0/4423, 15-16=0/4185, 14-15=0/4185, 13-14=0/3359, 12-13=0/2017
WEBS	10-12=2164/0, 2-20=2165/0, 10-13=0/891, 2-19=0/899, 8-13=856/0, 3-19=848/0, 8-14=0/566, 3-18=0/530, 7-14=509/0, 4-18=527/0, 7-16=156/611, 4-17=95/601

- NOTES (5)**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - This repair has been prepared based on information and use conditions supplied by client. Designer has made a good faith effort to outline damage and repair conditions as reported by client. When actual field conditions do not approximate those indicated on this drawing, client shall immediately inform the engineer and refrain from applying the repair.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.

