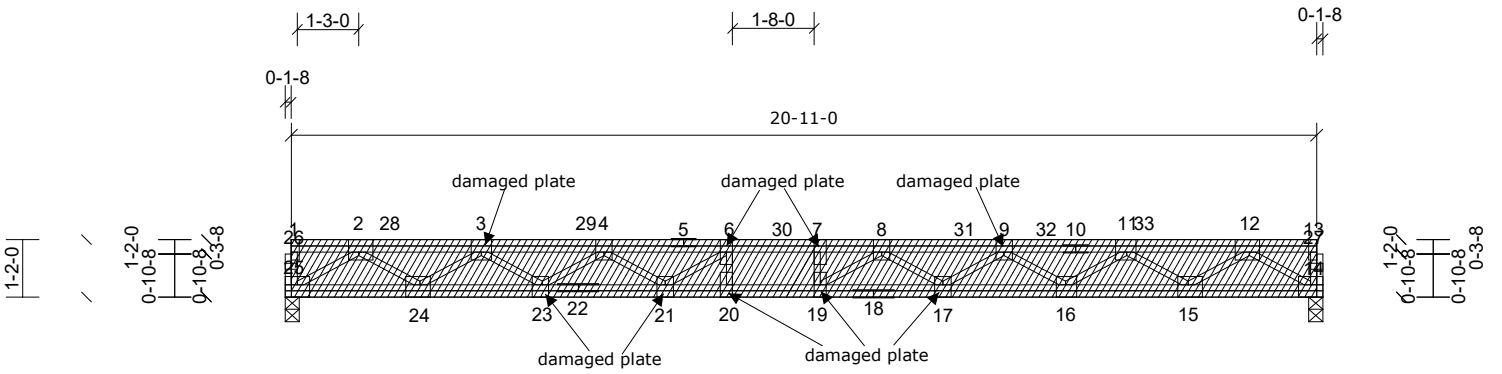
Job	Truss	Truss Type	Qty	Ply	Professional / Raleigh Farmhouse - F2
72342822REP1	2FG1	Truss	1	1	Job Reference (optional)



Repair for nine damaged plates as shown.

Attach 1.75" x 14" x 20-11-0 2.0E Microllam LVL (or equivalent) scab to one face of truss as shown with 16d (.162" x 3.5") nails 6" oc in all top/bottom chord members, and two evenly spaced 16d nails in each web.

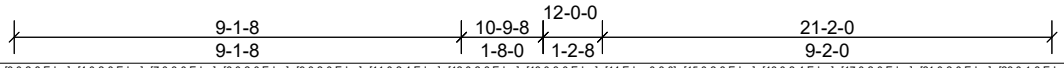


Plate Offsets (X, Y): [2:0-2-8,Edge], [3:0-2-8,Edge], [4:0-2-0,Edge], [7:0-3-0,Edge], [8:0-2-0,Edge], [9:0-2-0,Edge], [11:0-2-4,Edge], [12:0-2-8,Edge], [13:0-3-0,Edge], [14:Edge,0-3-0], [15:0-2-8,Edge], [16:0-2-4,Edge], [17:0-2-0,Edge], [21:0-2-0,Edge], [23:0-1-8,Edge], [24:0-2-8,Edge], [25:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.38	17-19	>655	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.52	17-19	>476	360	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.77	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-SH							Weight: 163 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP SS(flat)
BOT CHORD	2x4 SP SS(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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.

REACTIONS (lb/size) 14=1146/0-3-8, (min. 0-1-8), 25=1247/0-3-8, (min. 0-1-8)
Max Grav 14=1320 (LC 4), 25=1373 (LC 3)

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

TOP CHORD	2-28=-3362/0, 3-28=-3362/0, 3-29=-5686/0, 4-29=-5686/0, 4-5=-6953/0, 5-6=-6953/0, 6-30=-7439/0, 7-30=-7439/0, 7-8=-7439/0, 8-31=-7119/0, 9-31=-7119/0, 9-32=-5606/0, 10-32=-5606/0, 10-11=-5606/0, 11-33=-3221/0, 12-33=-3221/0
BOT CHORD	24-25=0/2063, 23-24=0/4781, 22-23=0/6581, 21-22=0/6581, 20-21=0/7439, 19-20=0/7439, 18-19=0/7563, 17-18=0/7563, 16-17=0/6603, 15-16=0/4603, 14-15=0/1947
WEBS	12-14=-2270/0, 2-25=-2406/0, 12-15=0/1583, 2-24=0/1615, 11-15=-1714/0, 3-24=-1759/0, 11-16=0/1243, 3-23=0/1155, 9-16=-1237/0, 4-23=-1121/0, 9-17=0/771, 4-21=0/805, 8-17=-778/0, 6-21=-930/0, 8-19=-151/469

NOTES (7)

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) 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.
4) 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.
5) Use MiTek MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 2-0-0 oc max. starting at 2-1-12 from the left end to 19-6-4 to connect truss(es) 2F9 (1 ply 2x4 SP), 2F10 (1 ply 2x4 SP) to back face of top chord.
6) Fill all nail holes where hanger is in contact with lumber.
7) 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.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

Uniform Loads (lb/ft)

Vert: 14-25=-7, 1-13=-67

Concentrated Loads (lb)

Vert: 5=-107, 12=-39, 3=-107, 8=-107, 28=-107, 29=-107, 30=-107, 31=-107, 32=-39, 33=-39