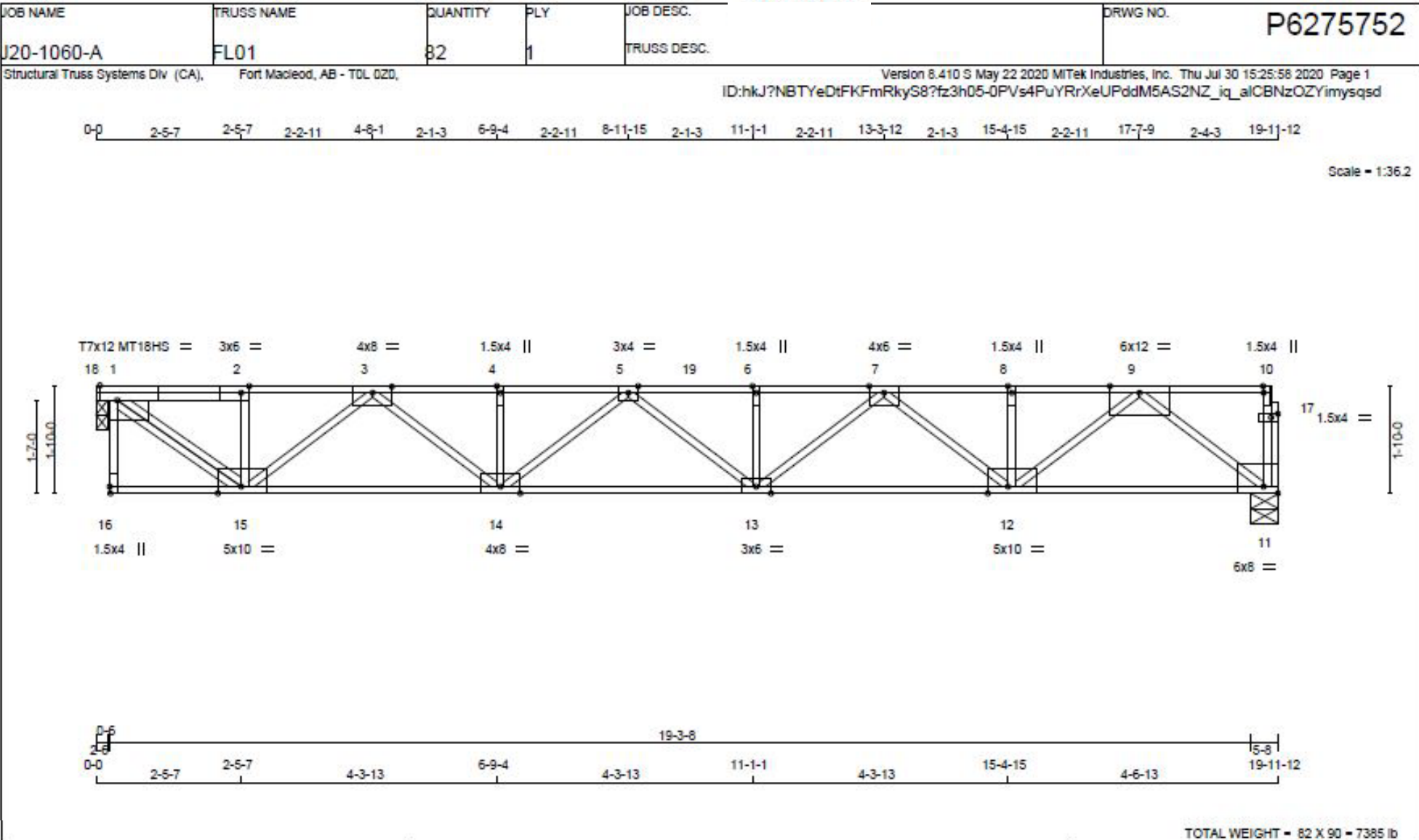
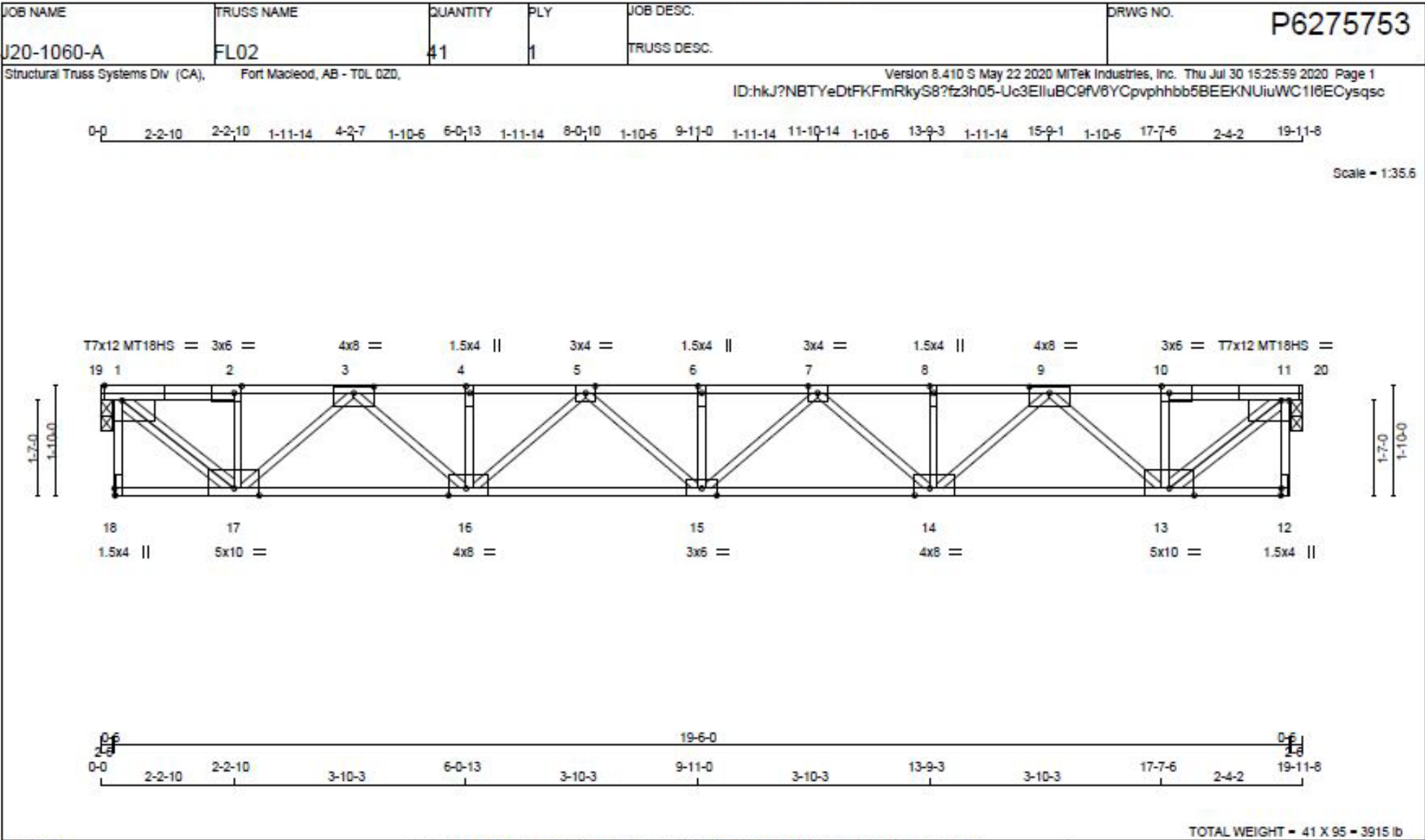






Structural Truss Systems Div (CA), Fort Macleod, AB - TOL 020,

Version 8.410 S May 22 2020 Mitek Industries, Inc. Thu Jul 30 15:25:59 2020 Page 1

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0-02-2-102-2-101-11-144-2-71-10-66-0-131-11-148-0-101-10-69-11-01-11-1411-10-141-10-613-9-31-11-1415-9-11-10-617-7-62-4-219-11-8

Scale = 1:35.6

T7x12 MT18HS = 3x6 =4x8 =1.5x4 ||3x4 =1.5x4 ||3x4 =1.5x4 ||4x8 =3x6 =T7x12 MT18HS =

19 123456789101120

18171615141312

1.5x4 ||5x10 =4x8 =3x6 =4x8 =5x10 =1.5x4 ||

0-62-6

0-02-2-102-2-103-10-36-0-133-10-39-11-03-10-313-9-33-10-317-7-62-4-219-11-8

0-62-6

LUMBER

N. L. G. A. RULES

CHORDS	SIZE	LUMBER	DESCR.
18 - 1	2x4	DRY,FL No.2	SPF
12 - 11	2x4	DRY,FL No.2	SPF
19 - 2	2x4	DRY,FL No.2	SPF
1 - 11	2x4	DRY,FL 2100F 1.8E	SPF
10 - 20	2x4	DRY,FL No.2	SPF
18 - 12	2x4	DRY,FL 2100F 1.8E	SPF
ALL WEBS EXCEPT	2x4	DRY,FL No.2	SPF
1 - 17	2 - 2x4	DRY,FL No.2	SPF
13 - 11	2 - 2x4	DRY,FL No.2	SPF

DRY: SEASONED LUMBER.

FL: INDICATE LUMBER ON FLAT

TOP CHORD BEARING JOINT(S) 1: ANGLE BETWEEN JOIST AND SUPPORT = 90.0 Deg. GAP BETWEEN INSIDE FACE OF SUPPORT AND VERTICAL WEB NOT TO EXCEED 0.375 INCHES

TOP CHORD BEARING JOINT(S) 11: ANGLE BETWEEN JOIST AND SUPPORT = 90.0 Deg. GAP BETWEEN INSIDE FACE OF SUPPORT AND VERTICAL WEB NOT TO EXCEED 0.375 INCHES

DESIGN FOR VIBRATION CONTROL IS BASED ON THE CONCLUDING REPORT: 'DEVELOPMENT OF DESIGN PROCEDURES FOR VIBRATION CONTROLLED SPANS USING ENGINEERED WOOD MEMBERS' DATED SEPTEMBER 04,1997.

DESIGN PASSES VIBRATION CHECK. USE 2 X 4 DRY SPF No.2 ON EDGE STRONGBACKS AT 5-6-0 OC MAX. FROM LEFT. STRONGBACK DESIGN IS BASED ON 3/4 OSB PANEL SUBFLOOR GLUED AND SCREWED USING #8 1-3/4" SCREWS AT 6" C/C TO TRUSS TOP CHORD AND NO CEILING FASTENED TO THE TRUSS BOTTOM CHORD.

STRONGBACKS SHALL BE FASTENED TO EACH TRUSS AS PER MITEK FLOOR TRUSS STRONGBACK DETAIL B97791E. WHERE STRONGBACKS ARE ATTACHED TO SINGLE TOP OR BOTTOM CHORD, 2 - 3" WOOD SCREWS(#8) MAY BE USED.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
1	TMQMVWQ1-t	MT18HS	7.0	12.0	Edge	3.500
2	TMQW-t	MT20	3.0	6.0	1.375	1.500
3	TMWW-t	MT20	4.0	8.0	1.250	4.000
4, 6, 8						
4	TMW+w	MT20	1.5	4.0	1.375	0.750
5	TMWW-t	MT20	3.0	4.0	1.375	1.875
7	TMWW-t	MT20	3.0	4.0	1.375	1.875
9	TMWW-t	MT20	4.0	8.0	1.250	4.000
10	TMQW-t	MT20	3.0	6.0	1.375	1.500
11	TMQMVWQ1-t	MT18HS	7.0	12.0		1.500
12	BMV+p	MT20	1.5	4.0	1.375	0.125
13	BMWQWW-t	MT20	5.0	10.0	1.375	5.000
14	BMWWW-t	MT20	4.0	8.0	1.375	3.000
15	BMWWW-t	MT20	3.0	6.0	1.375	3.000
16	BMWWW-t	MT20	4.0	8.0	1.375	3.500

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

BEARINGS

JT	FACTORED GROSS REACTION VERT	FACTORED GROSS REACTION HORZ	MAXIMUM FACTORED GROSS REACTION DOWN	MAXIMUM FACTORED GROSS REACTION HORZ	INPUT BRG UPLIFT	REQRD BRG IN-SX
1	2689	0	2689	0	0	2-6
11	2689	0	2689	0	0	2-6

("" SEE "BEARING NOTE" "")

UNFACTORED REACTIONS

JT	1ST LCASE COMBINED	MAX. MIN. COMPONENT REACTIONS SNOW	MAX. MIN. COMPONENT REACTIONS LIVE	MAX. MIN. COMPONENT REACTIONS PERM.LIVE	MAX. MIN. COMPONENT REACTIONS WIND	MAX. MIN. COMPONENT REACTIONS DEAD	MAX. MIN. COMPONENT REACTIONS SOIL
1	1840	0 / 0	1559 / 0	0 / 0	0 / 0	261 / 0	0 / 0
11	1840	0 / 0	1559 / 0	0 / 0	0 / 0	261 / 0	0 / 0

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) 1, 11

BRACING

MAX. UNBRACED TOP CHORD LENGTH = 7.36 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 23.33 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOADS: (0)

CHORDS				WEBS			
MEMB.	MAX. FACTORED FORCE (LBS)	FACTORED VERT. LOAD (PLF)	MAX. UNBRACED LENGTH	MEMB.	MAX. FACTORED FORCE (LBS)	MAX. UNBRACED LENGTH	MAX. FACTORED FORCE (LBS)
FR-TO		FROM TO		FR-TO			
18-1	0 / 7	0.0 0.0	0.00 (7)	1-17	0 / 3919	23.33	0.31 (1)
12-11	0 / 7	0.0 0.0	0.00 (7)	17-2	-680 / 0	23.33	0.07 (1)
19-1	0 / 0	0.0 0.0	0.00 (1)	17-3	-2620 / 0	23.33	0.33 (1)
1-2	-3056 / 0	-265.8 -265.8	0.16 (1)	3-16	0 / 2009	12.77	0.32 (1)
2-3	-3058 / 0	-265.8 -265.8	0.24 (1)	16-4	-509 / 1	11.35	0.05 (1)
3-4	-6518 / 0	-265.8 -265.8	0.37 (1)	16-5	-1187 / 0	8.07	0.15 (1)
4-5	-6518 / 0	-265.8 -265.8	0.36 (1)	5-15	0 / 410	8.07	0.07 (1)
5-6	-7712 / 0	-265.8 -265.8	0.45 (1)	15-6	-506 / 0	7.36	0.05 (1)
6-7	-7712 / 0	-265.8 -265.8	0.45 (1)	15-7	0 / 410	7.36	0.07 (1)
7-8	-6518 / 0	-265.8 -265.8	0.36 (1)	7-14	-1187 / 0	8.07	0.15 (1)
8-9	-6518 / 0	-265.8 -265.8	0.37 (1)	14-8	-509 / 1	8.07	0.05 (1)
9-10	-3058 / 0	-265.8 -265.8	0.24 (1)	14-9	0 / 2009	11.35	0.32 (1)
10-11	-3056 / 0	-265.8 -265.8	0.16 (1)	9-13	-2620 / 0	12.77	0.33 (1)
11-20	0 / 0	0.0 0.0	0.00 (1)	13-10	-680 / 0	23.33	0.07 (1)
18-17	0 / 0	-10.0 -10.0	0.03 (7)	13-11	0 / 3919	23.33	0.31 (1)
17-16	0 / 5015	-10.0 -10.0	0.41 (1)				
16-15	0 / 7406	-10.0 -10.0	0.59 (1)				
15-14	0 / 7406	-10.0 -10.0	0.59 (1)				
14-13	0 / 5015	-10.0 -10.0	0.41 (1)				
13-12	0 / 0	-10.0 -10.0	0.03 (7)				

LIVE LOAD SPECIFIED IN NBC TABLE 4.1.5.9 WAS NOT APPLIED TO THE DESIGN OF THIS TRUSS. LOADING TO BE VERIFIED BY BUILDING DESIGNER.

PLATES (table is in inches)

JT	TYPE	PLATES	W	LEN	Y	X
17	BMWQWW-t	MT20	5.0	10.0	1.375	5.000
18	BMV+p	MT20	1.5	4.0	1.375	0.125

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH.	LL	=	100.0	PSF
	DL	=	13.0	PSF
BOT CH.	LL	=	0.0	PSF
	DL	=	5.0	PSF
TOTAL LOAD		=	118.0	PSF

SPACING = 19.2 IN. C/C

THIS TRUSS IS DESIGNED FOR FLOOR REQUIREMENTS OF PART 4, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 4 OF CBC 2018, ABC 2019

- PART 4 OF OBC 2012 (2019 AMENDMENT)

- CSA 086-14

- TPIC 2014

DESIGN ASSUMPTIONS

-ALL SPLICES ARE PINNED

ALLOWABLE DEFL.(LL)= L/360 (0.65")

CALCULATED VERT. DEFL.(LL)= L/ 793 (0.30")

ALLOWABLE DEFL.(TL)= L/240 (0.98")

CALCULATED VERT. DEFL.(TL)= L/ 672 (0.35")

CSI: TC=0.45/1.00 (5-6:1) , BC=0.59/1.00 (15-16:1) , WB=0.33/1.00 (9-13:1) , SSI=0.21/1.00 (2-3:1) , VR= 0.79/1.00

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS= 1.10

LIVE LOAD IMPORTANCE FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT .

NAIL VALUES

PLATE	GRIP(DRY) (PSI)	SHEAR (PLI)	SECTION (PLI)
	MAX	MIN	MAX
MT20	650	371	1747
MT18HS	586	403	2455

PLATE PLACEMENT TOL. = 0.125 inches

PLATE ROTATION TOL. = 0.0 Deg.

JSI GRIP= 0.95 (9) (INPUT = 0.95)

JSI METAL= 0.68 (17) (INPUT = 1.00)

APEGA
Permit No. P3837

July 30, 2020