

Evaluation Listing CCMC 11996-L MT20

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1. Evaluation

The "MT20" truss plate conforms to CSA S347-14, "Evaluation of truss plates used in lumber joints" and to CSA O86-14, "Engineering design in wood." Results from testing the product in conformance with CSA S347 are shown in the following tables.

Table 1.1 Results of Testing the Ultimate Tensile Strength

Grade of Steel	Uncoated Nominal Plate Thickness (mm)	Mean Ultimate Tensile (MPa)	Correction Factor
SQ275	0.914	400	0.872

Table 1.2 Results of Testing the Lateral Resistance of the Teeth (Hydraulic Press)

	Specified Strength (MPa/Plate) Specific Gravity (SG) = 0.42	
Direction of Load	Ultimate Lateral Resistance, n _u	Lateral Slip Resistance, n _s
Load parallel to grain, plate length parallel to load	2.24	2.37
Load parallel to grain, plate length perpendicular to load	1.80	2.17
Load perpendicular to grain, plate length parallel to load	1.28	1.66
Load perpendicular to grain, plate length perpendicular to load	1.34	1.62

Table 1.3 Roller Press Modification Factors

Roller Diameter	Roller Feed Speed	Ultimate Strength Modification Factor, K_{pu}	$ \begin{array}{c} \text{Slip Modification Factor,} \\ K_{\text{ps}} \end{array} $
610 mm (24 in.)	45.7m/min (150 ft/min)	0.69	0.83

Table 1.4 Results of Testing the Tensile Strength

Direction of Load	Unit	Limit States Design Tensile Resistance, tp
Plate length parallel to load	N/mm/mlata	174
Plate length perpendicular to load	iv/mii/prate	164

Table 1.5 Results of Testing the Shear Strength

Limit States Design		
Angle (Degree)	Shear Resistance, vp (N/mm/Plate)	Slots in Plate Axis
0, 180	107	^
30T	127	//
30C	88	^
60T	153	//
60C	69	^
90	83	//
120T	102	^
120C	81	//
150T	128	^
150C	76	//

Legend for symbols in Table 1.5:

- ^ Slots perpendicular to the plate length
- // Slots parallel to the plate length
- C Compression
- T Tension

2. Description

The "MT20" truss plate is manufactured from 20 gauge steel sheet that meets the minimum strength and yield requirements of ASTM A653, SS Grade 40 SQ275 and galvanized with G90 zinc coating per ASTM A924/A924M. The "MT20" truss plate has an uncoated nominal thickness of 0.91 mm and is stamped with 0.0124 teeth per square mm. The teeth are approximately 8.3 mm in length.

3. Standard and Regulatory Information

See the Annex, appended to this Listing, which summarizes the product standard.

This/these product(s) was/were evaluated to the product standard referenced in the Annex current as of 2015-02-03. Note that the Annex may have been updated since this Listing was issued to include more recent editions of the applicable product standard. Therefore, this Listing may not reflect the requirements contained in any updated version of this product standard.

Listing Holder

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