

CCMC 13418-L

CCMC Standard compliance evaluation

CCMC number:	13418-L
Status:	Active
Issue date:	2008-11-20
Modified date:	2023-11-08
Evaluation holder:	<p>Simpson Strong-Tie Canada, Limited 11476 Kingston Street Maple Ridge BC V2X 0Y5 Canada Website: www.strongtie.com Telephone: 604-465-0296</p>
Product name:	AS-18-HS Truss Plate
Criteria:	CSA-S347-14, "Method of Test for Evaluation of Truss Plates Used in Lumber Joints"

In most jurisdictions this document is sufficient evidence for approval by Canadian authorities.

[Learn more about CCMC recognition](#) Look for the trusted CCMC mark on products to verify compliance.

Product information

Product name

AS-18-HS Truss Plate

Product description

The product is manufactured from an 18-gauge steel sheet that meets the minimum strength and yield requirements of ASTM A 653/A 653-M, “Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process” Grade HSLA I410 steel, and galvanized with G90 zinc coating as per ASTM A 924/A 924M, “Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.” The product has an uncoated nominal thickness of 1.184 mm and is stamped with 0.0124 teeth per square mm. The teeth are approximately 9.5 mm in length.

Manufacturing plants

This evaluation is limited to products produced at the following plants:

Product name	Manufacturing plants		
	Columbus, OH, US	McKinney, TX, US	Stockton, CA, US
AS-18-HS Truss Plate	☑	☑	☑

☑ Indicates that the product from this manufacturing facility has been evaluated by the CCMC

Technical information

This evaluation is based on demonstrated conformance with the following criteria:

Criteria number	Criteria name
CSA-S347-14	Method of Test for Evaluation of Truss Plates Used in Lumber Joints

Results of testing the ultimate tensile strength of the plate on the product

Grade of steel	Uncoated nominal plate thickness (mm)	Mean ultimate tensile strength (MPa)	Correction factor
HSLA I410	1.184	523	0.902

Results of testing the lateral resistance of teeth (hydraulic press) on the product

Direction of load	Lateral resistance (MPa/plate) Specific gravity (SG) = 0.42	
	Ultimate lateral resistance, n_u	Lateral slip resistance, n_s
Load parallel to grain, plate length parallel to load	2.37	1.97
Load parallel to grain, plate length perpendicular to load	2.11	1.80
Load perpendicular to grain, plate length parallel to load	1.52	1.36
Load perpendicular to grain, plate length perpendicular to load	1.96	1.88

Results of testing the lateral resistance of teeth (hydraulic press) on the product

Direction of load	Lateral resistance (MPa/plate) Specific gravity (SG) = 0.47	
	Ultimate lateral resistance, n_u	Lateral slip resistance, n_s
Load parallel to grain, plate length parallel to load	2.48	2.86
Load parallel to grain, plate length perpendicular to load	2.60	2.95
Load perpendicular to grain, plate length parallel to load	1.88	2.08
Load perpendicular to grain, plate length perpendicular to load	2.03	2.15

Roller press modification factors

Roller diameter	457 mm (18 in.)	
Roller feed speed	37.3 m/min (122.5 ft/min)	
Ultimate strength modification factor, K_{pu}	0.95 (SG = 0.42)	0.80 (SG = 0.47)
Slip modification factor, K_{ps}	0.94 (SG = 0.42)	0.69 (SG = 0.47)

This PDF is an alternative version. This document was published on 2024-02-29 and may not be the latest version of this evaluation. Users should consult the latest [published assessment](#) on the [CCMC Registry of Product Assessments](#), which contains the most up to date information. This PDF is intended for use as a record, not the latest information available.

Results of testing the tensile strength of plate on the product

Direction of load	Limit states design tensile resistance, t_p
Units	N/mm/plate
Plate length parallel to load	267
Plate length perpendicular to load	264

Results of testing the shear strength of the plate on the product

Angle (degree)	Limit states design for shear resistance, v_p (N/mm/plate)	Slots in plate axis
0,180	161	⊥
30T	185	//
30C	139	⊥
60T	221	//
60C	121	⊥
90	143	//
120T	165	⊥
120C	117	//
150T	203	⊥
150C	135	//

Legend for symbols:

⊥: Slots perpendicular to plate, long dimension

//: Slots parallel to the plate, long dimension

C: Compression

T: Tension

Administrative information

Use of Canadian Construction Materials Centre (CCMC) assessments

This assessment must be read in the context of the entire [CCMC Registry of Product Assessments](#), any applicable building code or by-law requirements, and/or any other regulatory requirements (for example, the [Canada Consumer Product Safety Act](#), the [Canadian Environmental Protection Act](#), etc.).

It is the responsibility of the user to confirm that the assessment they are using is current and has not been withdrawn or superseded by a later version on the [CCMC Registry of Product Assessments](#).

Disclaimer

The National Research Council of Canada (NRC) has evaluated only the characteristics of the specific product described herein. The information and opinions in this evaluation are directed to those who have the appropriate degree of experience to use and apply its contents (such as authorities having jurisdiction, design professionals and specifiers). This evaluation is valid when the product is used as part of permitted construction, respecting all conditions and limitations stated in the evaluation, and in accordance with applicable building codes and by-laws.

This evaluation is provided without representation, warranty or guarantee of any kind, expressed or implied, and the NRC provides no endorsement for any evaluated product. The NRC accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained herein or the use of any evaluated product. The NRC is not undertaking to render professional or other services on behalf of any person or entity nor to perform any duty owed by any person or entity to another person or entity.

Language

Une version française de ce document est disponible.

In the case of any discrepancy between the English and French version of this document, the English version shall prevail.

Copyright

© His Majesty the King in Right of Canada, as represented by the National Research Council of Canada, 2024

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the CCMC.

This PDF is an alternative version. This document was published on 2024-02-29 and may not be the latest version of this evaluation. Users should consult the latest [published assessment](#) on the [CCMC Registry of Product Assessments](#), which contains the most up to date information. This PDF is intended for use as a record, not the latest information available.

CCMC recognition

The Canadian Construction Materials Centre (CCMC) assesses compliance with Canadian building, energy and safety codes. We are the only construction code compliance service supported and operated by the Government of Canada. Trusted by over 6,000 regulators across Canada.

Most Canadian authorities having jurisdiction (AHJs) consider CCMC product assessments acceptable as evidence for product approval.

CCMC assessments are recognized by construction authorities across Canada:

Alliance of Canadian Building Official Associations (ACBOA)



(Alliance of Canadian Building Official Associations (ACBOA))

First Nations National Building Officers Association (FNNBOA)



(First Nations National Building Officers Association (FNNBOA))

Canadian Home Builders' Association (CHBA)



(Canadian Home Builders' Association (CHBA))

Alberta Building Officials Association (ABOA)



(Alberta Building Officials Associations (ABOA))

Saskatchewan Building Officials Association (SBOA)



(Saskatchewan Building Officials Association (SBOA))

Manitoba Building Officials Association (MBOA)



(Manitoba Building Officials Association (MBOA))

Ontario Building Officials Association (OBOA)



(Ontario Building Officials Association (OBOA))

New Brunswick Building Officials Association (NBBOA)



(New Brunswick Building Officials Association (NBBOA))

Nova Scotia Building Officials Association (NSBOA)



(Nova Scotia Building Officials Association (NSBOA))

The CCMC provides code compliance assessments to Canadian code requirements, consulting nationwide with construction regulators to elicit regional variations in code requirements as well as provincial and local interpretations. Users are advised to review the technical information presented in CCMC assessments when making approval decisions. [Learn more about how the CCMC provides a unique service for Canada.](#)

For more information, contact the CCMC by phone at (613) 993-6189 or by email at ccmc@nrc-cnrc.gc.ca

NOTICE

The information presented on this webpage (in HTML format) is the most up-to-date information available from the CCMC about this assessment.

By downloading this PDF you acknowledge that:

- this PDF is intended for record-keeping purposes only,
- it represents the information as it was available at the time of downloading, and
- it may not reflect the latest available information at some future date.

References to this CCMC assessment (in product literature, on websites, etc.) must be made by linking to the evaluation webpage. **This PDF must not be used as a means of distributing this assessment to an audience.**

[View PDF \(Portable document format\)](#)