

Twining Consulting Inc.

Listing Report

Issued Date: Jan 1989
Revision Date: Feb 2024
Subjected to Renewal: Feb 2025

Product: Manufactured Building Steel Strap
Report Holder: Lippert Components Inc.
2375 Tamiami Trail North Suite 110
Naples, FL, 34103
www.corporate.lippert.com
(574)-535-1125
Plant Location: 160 Oriole Rd.
Fitzgerald, GA 31750

SECTION 1: INTRODUCTION

At the request of Lippert Components, Inc., (LCI), Twining Consulting Inc. has examined the steel straps supplied by LCI and the advisability of listing the product for the use of manufactured buildings as an uplift strap for floor to wall and wall to roof connections.

SECTION 2: DESCRIPTION

The straps are sheared from flat or preformed cold rolled steel sheets having a galvanized coating meeting the specifications of ASTM A653 (LFQ, chromated dry, G40 or better coating) which may have a painted finish over the galvanized coating. The steel used for this product is certified by the supplier which meets ASTM A653 with a minimum yield strength of 36,000 psi (range: 36-42,000 psi). The base metal minimum thickness (coating removed) is .0179" (26 gage). The straps are provided in a minimum width of 1-1/2" and varied lengths and shipped in bulk packaging. The corners of the strap may be rounded.

SECTION 3: INSTALLATION

The application of LCI strap is for use on manufactured buildings providing a structural connection between the roof and wall, and the wall and floor framing members. General: The straps may be secured with various fasteners under the following conditions:

- The specific type and quantity of fasteners are specified for the applicable connection.
- A maximum of 36,000 psi yield strength is used to determine the maximum working load.
- The net cross section area of the strap base metal is considered and reduced by the cross section of the hole(s) created by the fastener.

- The strap is only loaded in tension along its long dimension. Bending of the strap to conform with the lumber surfaces is acceptable provided no gaps are created at the joint by a difference in the lumber widths.
- The strap is not used in a twisted condition.

SECTION 4: EVIDENCE SUBMITTED

Tests have been conducted to substantiate the values identified in this listing.

- Twining Consulting Inc. maintains a quality assurance program to assure that the product is being manufactured to the minimum specifications of the material and conforms to the production tolerances through semi-annual inspections.
- Twining Consulting Inc. conducts sample selection and is sent to their fountain valley laboratory to be tested in tensile to verify minimum yield strength semi-annually.

SECTION 5: MARKINGS / IDENTIFICATION

Metal straps are to be Identified with one of the following criteria:

All straps will have "L" stamped on the strap for product identification.

- A) Division: _____
- B) Plant: _____
- C) Quantity: _____
- D) Listing No.: _____
- E) Twining Consulting Inc. Logo



SECTION 6 - RECOMMENDATIONS

Twining Consulting Inc. recommends that the steel straps produced by the Lippert Components Inc. facilities be accepted for the applications described provided that:

SECTION 5: RECOMMENDATIONS

Twining Consulting Inc. recommends that the galvanized steel straps and means of fastening described herein be accepted as meeting the requirements of the Federal Manufactured Home Construction and Safety Standards, the Florida Building Code and compliance with the 2015 IBC provided that:

- a) The product is produced at the facilities referenced in this listing.
- b) The Quality control of the product is maintained by the manufacturing facilities.
- c) All bulk packaging of straps carries the label referenced in Section 5.
- d) The Twining Consulting Inc. quality assurance program is maintained.
- e)

SECTION 7: APPROVAL:

This listing is subject to annual re-examination and renewal.