



*Zimmerman*

**FF1000**  
**1" FASTENING FLANGE**  
**SNAP LOCK PANEL**



**Underwriters**  
**Laboratories Inc.®**  
A Century Of Public Safety



File R18721  
Project 11NK16546

January 13, 2012

REPORT

on

Metal Roof Deck Panels  
For  
Wind Uplift Resistance

Under The

CLASSIFICATION PROGRAM

ZIMMERMAN METALS INC.  
DENVER, CO

Copyright© 2012 UL LLC.

UL LLC authorizes the above named company to reproduce this Report provided it is reproduced in its entirety.

DESCRIPTION

PRODUCT COVERED:

The products covered by this Report are metal roof deck panels designated "FF-1000".

The products in this Report are Classified as to uplift resistance only.

USE:

The products are intended for use as building materials as permitted by authorities having jurisdiction.

TEST RECORD NO. 1

SAMPLE:

Classified metal roof deck panels designated "FF-1000" panels.

STUDY FOR CLASSIFICATION PURPOSES:

Testing of the metal roof deck panels designated "FF-1000", for use in Uplift Resistance was not considered necessary based upon previous test experience on similar products as documented internally in Test Reference No. 1.

TEST RECORD 1 SUMMARY:

The results of this investigation indicate that the metal panels evaluated in this test record comply with applicable requirements, and therefore, are judged to be eligible for Classification under the Laboratories product categories of Uplift Resistance (TJPV).

Standard	Title	Edition or Publication Date	Latest Revision Date
UL 580	Tests for Uplift Resistance of Roof Assemblies	Fifth	November 2, 2006

The Classification Mark for the TJPV category (UL 580) to be used on the "FF-1000" panels is illustrated below:

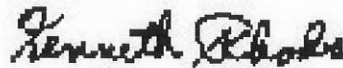
METAL ROOF DECK PANELS  
AS TO UPLIFT RESISTANCE  
CLASS 90  
AS SHOWN BY CONSTRUCTION NO. 529  
SEE UL ROOFING MATERIALS AND SYSTEMS DIRECTORY

Test Record 1 By:



JUDITH G. MARZULLO  
Lead Engineering Associate  
Fire Protection Division

Reviewed by:



KENNETH RHODES  
Senior Staff Engineer  
Fire Protection Division

## CONCLUSION:

Samples of the products covered by this Report have been found to comply with the requirements covering the category and the products are found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the samples investigated by UL and does not signify the products described as being covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the UL Classification Mark on such products which comply with UL's Follow-Up Service Procedure and any other application requirements of Underwriters Laboratories Inc. The Classification Mark of Underwriters Laboratories Inc. on the product, or the UL symbol on the product and the Classification Mark on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Classification and Follow-Up Service.

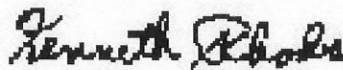
This Report is intended solely for the use of UL and the Applicant for establishment of UL certification coverage of the product under UL's Follow-Up Service. UL retains all rights, title and interest (including exclusive ownership) in this Report and all copyright therein. Unless expressly authorized in writing by UL, the Applicant shall not disclose or otherwise distribute this Report or its contents to any third party or use this Report for any purpose other than to establish UL certification and become eligible for Follow-Up Service for the product(s) described in this Report. Any other use of this Report including without limitation, evaluation or certification by a party other than UL unless part of a certification scheme, is prohibited and renders the Report null and void. UL shall not incur any obligation or liability for any loss, expense, or punitive damages, arising out of or in connection with the use or reliance upon the contents of this Report to anyone other than the Applicant as provided in the agreement between UL and Applicant. Any use or reference to UL's name or certification mark(s) by anyone other than the Applicant in accordance with the agreement is prohibited without the express written approval of UL. UL shall not otherwise be responsible to anyone for the use of or reliance upon the contents of this Report.

Report by:



JUDITH G. MARZULLO  
Lead Engineering Associate  
Fire Protection Division

Reviewed by:



KENNETH RHODES  
Senior Staff Engineer  
Fire Protection Division



## DESCRIPTION

## PRODUCT COVERED:

This section of the Procedure covers coated steel roof panels, which are identified by the manufacturer as "FF-1000", 1 in. high panels.

The panels are roll-formed from 26 MSG or heavier gauge steel to the configuration shown in Ill. 1.

The panels may also have a paint finish over the coating.

## SPECIFICATIONS OF FINISHED PRODUCT:

## THICKNESS

The metal thickness of the steel used in the fabrication of the panels shall be not less than 0.0185 in. (26 MSG min).

## DIMENSIONS

The cross sectional dimensions of the finished panel shall be in accordance with the cross section in Ill. 1.

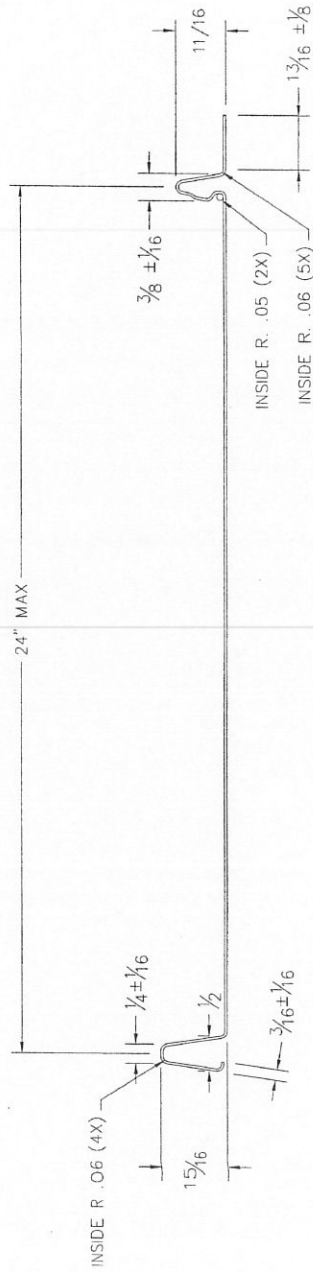
The panels are made in any convenient length.

## STRENGTH

The strength records of the steel shall be reviewed. The steel used shall conform to ASTM A653, Grade 50 specifications or the minimum yield point of the steel shall be 50,000 psi.

**MODEL FF-1000**

26 GA MIN, GRADE "D", 50 KSI MIN. YIELD



ZIMMERMAN METALS INC.  
201 E 58th AVE.  
DENVER, CO 80216  
(303) 294-0180

TITLE	FASTENING FLANGE	TOLERANCES	UNLESS OTHERWISE SPECIFIED	3rd ANGLE PROJ.
SNAP LOCK PROFILE		.XX = ±0.05	FRACTION = ±1/32"	
MACH. MOD. NO.		.XXX = ±0.005	ANGLES = ±1°	
DRAWING NO.	FF-1000	BREAK ALL UNMARKED CORNERS		
SHEET / OF		PROPRIETARY INFORMATION NOTICE		
SCALE:	±10%	THIS DOCUMENT CONTAINS PROPRIETARY & CONFIDENTIAL INFORMATION WHICH SHALL NOT BE REPRODUCED, TRANSFERRED TO OTHER DOCUMENTS, DISCLOSED TO OTHERS, OR USED FOR OTHER PURPOSES WITHOUT PRIOR WRITTEN PERMISSION OF ZIMMERMAN METALS INC., OF DENVER CO.		
NOTES:	ALL DIMENSIONS	DO NOT SCALE DIMS	DRAWN BY	DATE
MAT'L:				

C121230424



**Construction No. 529**  
**TGKX.529**  
**Roof Deck Constructions**

[Page Bottom](#)

---

**Design/System/Construction/Assembly Usage Disclaimer**

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use of UL Listed or Classified products, equipment, system, devices, and materials.
  - Authorities Having Jurisdiction should be consulted before construction.
  - Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
  - When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
  - Only products which bear UL's Mark are considered as Classified, Listed, or Recognized.
- 

**Roof Deck Constructions**

[See General Information for Roof Deck Constructions](#)

---

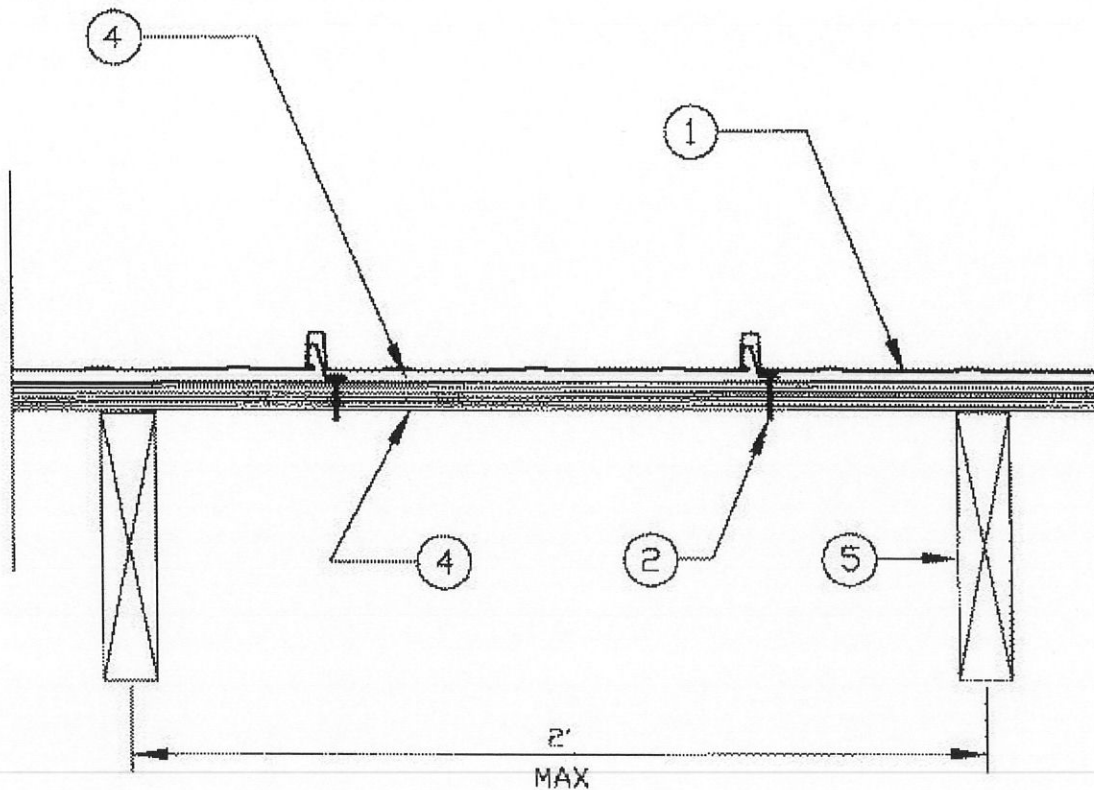
**Construction No. 529**

January 17, 2012

**Uplift — Class 90**

**Fire Not Investigated**





1. **Metal Roof Deck Panels\*** — No. 29 MSG min coated steel. Max panel width 24 in. Rib height nominal 1 in. Panels continuous over two or more spans. A bead of sealant may be used at panel endlaps.

**AMERICAN BUILDING COMPONENTS** ([View Classification](#)) — "SL-16"

**AUSTIN SNAP LOC SUPPLY** ([View Classification](#)) — "ASL 100"

**B & T METAL WORKS INC** ([View Classification](#)) — "BT Snap Lock"

**CENTRAL TEXAS METAL ROLLFORMING INC** ([View Classification](#)) — "PRO-SNAP 100"

**CONSOLIDATED SYSTEMS INC** ([View Classification](#)) — "CF1"

**DAVISS COUNTY METAL SALES INC** ([View Classification](#)) — "Panel Lock"

**DREXEL METALS INC** ([View Classification](#)) — "DMC 100NS"

**EAGLE METALS MFG INC** — "Eagle Metals Nail-strip Panel"

**FABRAL INC** ([View Classification](#)) — "Climaguard"

**MBCI** ([View Classification](#)) — "Slimline"

**MCELROY METAL MILL INC** ([View Classification](#)) — "Meridian"

**METAL SALES MFG CORP** ([View Classification](#)) — "Image II"

**NCI BUILDING SYSTEMS L P** ([View Classification](#)) — "Slimline"

**SAN ANTONIO QUALITY METALS** ([View Classification](#)) — "NS-100"

**NEW TECH MACHINERY CORP** ([View Classification](#)) — "FF100"

**PREMIUM PANELS INC** ([View Classification](#)) — "Premium Snap 100ns" or "P.S. 100ns"

**SCHULTE ROOFING INC** ([View Classification](#)) — "FF100"

**SHEFFIELD METALS INTERNATIONAL** ([View Classification](#)) — "CR-100-NS"

**TAYLOR METAL INC** ([View Classification](#)) — "EASY LOCK"

**UNION CORRUGATING CO** ([View Classification](#)) — "Advantage Lok"

**WHIRLWIND STEEL BUILDINGS INC** ([View Classification](#)) — "Weather-Guard"

**ZIMMERMAN METALS INC** ([View Classification](#)) — "FF-1000"

**2. Fasteners — (Screws)** — For panel attachment to wood deck (Item 3), fasteners to be No. 10 x 1 in. long No. 2 Phillips, Pancake Head Type A. Fasteners spacing to be 12 in. OC with fasteners installed through prepunched slots in fastener flange of panel. For attachment of plywood deck (Item 3) to joists (Item 5), fasteners to be min. No. 6 by 1-7/8 bugle head screw or annular ring-shank nails. Spacing to be 6 in. OC at plywood edges and 12 in. OC at intermediate supports. When light gauge structural steel joists are used, fasteners to be No. 12 by 1-5/8 in. long with a Phillips head.

**3. Substructure — (Plywood)** — Plywood decking to be a nom 5/8 in. thick, exposure sheathing span C-D, 40/20 plywood. All butt joints to be sealed against leakage by using tape and/or caulk or with one-part urethane sealant.

**4. Moisture Barrier** — (Optional) — Any suitable membrane to protect substructure (Item 3).

**5. Joists** — Joists spaced at 2 ft, 0 in. OC, may be one of the following:

A. Nom 2 by 6 in. wood joists No. 2 or better.

B. Nom 2 by 4 in. wood when used on a top cord of a wood truss, No. 2 or better.

C. Light gauge structural steel framing with the member against the plywood to be a min No. 22 MSG coated steel.

Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for Items Not Evaluated.

\*Bearing the UL Classification Mark

Last Updated on 2012-01-17

[Questions?](#)

[Print this page](#)

[Notice of Disclaimer](#)

[Page Top](#)

© 2012 UL LLC

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Listed and covered under UL's Follow-Up Service. Always look for the Mark on the product.

UL permits the reproduction of the material contained in the Online Certification Directory subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the

data (or drawings). 2. The statement "Reprinted from the Online Certifications Directory with permission from UL" must appear adjacent to the extracted material. In addition, the reprinted material must include a copyright notice in the following format: "© 2012 UL LLC".