



Western Fire Center, Inc.

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**Report on Roof Fire Classification Testing in
Accordance with
ASTM E 108-07a
*Standard Test Methods for
Fire Tests of Roof Coverings***

GacoFlex U-8782 Elastomeric Coating, 42 mils

Class A Noncombustible – Slope 4":12"

Conducted For:

GACO WESTERN

**Report # 09015.3
WFCi Project # 09015**

Testing Conducted on March 10, 2009

Report Issued: March 26, 2009



ACCREDITED

TL-180

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INTRODUCTION

ASTM E-108 roof fire classification tests were conducted on test deck samples constructed by the client and provided in a 'ready-to-test' condition. Testing was performed at Western Fire Center, Inc (WFCi) on March 10, 2009. This evaluation covers a Class A (noncombustible) liquid-applied roof coating system prepared with GACO Western Gacoflex U-8782 elastomeric coating (42 mils) over Dens-Deck[®]. Testing was performed in accordance with ASTM 108-07a at a slope of 4":12".

TEST APPARATUS AND PROCEDURE

The essential elements of the ASTM E108 Fire Test Apparatus include a test roof deck mounted on an adjustable pitch steel frame, a gas burner or wood brand ignition source, a wind tunnel duct, and variable speed blowers to provide a controlled air flow across the test specimen. Airflow is measured at three locations across the test deck midway up the slope of the deck at its center and two outside edges. The measurements were made using an OMEGA-FLO[™], Model No. HH-30, vane anemometer manufactured by Omega Engineering, Inc. The airflow is adjusted and maintained at 12 ± 0.5 mph (5.4 ± 0.2 m/s) throughout the duration of the test.

For the **Class A Spread of Flame Fire Test**, a bright orange luminous gas flame is applied to the deck at a temperature of 1400 ± 50 °F (760 ± 28 °C) as measured by a type K 14 gauge thermocouple located 1" above the surface and 1/2" toward the test flame from the lower edge of the first board of a noncombustible calibration deck. The flame is applied for 10 minutes and the flame attached to the deck is monitored for length of travel along the deck over the duration of the test. The flame covers the width of the bottom portion of the deck and extends in a triangular pattern with flames extending upward a distance of 4 1/3' from the lower edge of the deck prior to any contribution (if any) from the deck. During the application of the test flame, the test sample is observed for the distance to which flaming of the material has spread, production of flaming or glowing brands, and displacement of portions of the test sample.

The test items were stored in the WFCi heated laboratory space with access to freely circulating air from the time of receipt until testing.

SAMPLE DESCRIPTION

The test deck samples were prepared by GACO Western personnel and tested as received. Based on the client's information, Gacoflex U-8782 liquid-applied roof coating was applied to Dens-Deck[®] with 3/4" plywood as the base deck.

U 8782 Preparation:

- Base deck: 3/4" Plywood
- 5/8" Dens-Deck[®]
- Liquid-applied roof coating: U 8782 (white coloration)
 - Applied at a coverage of 2.625 gallons/100 sq.ft (42 mils)

The test specimen identification is as provided by the client and WFCi accepts no responsibilities for any inaccuracies therein. WFCi did not select the specimen and has not verified the composition, manufacturing techniques or quality assurance procedures.

SUMMARY OF TEST RESULTS

Results from the roof classification testing of the U 8782 system are presented in the following. Tests are reported as numbered as part of a larger test series conducted under WFCi project number 09015.

SPREAD OF FLAME TEST – CLASS A Noncombustible Tested system: U 8782 at 42 mils over Dens-Deck[®]

Test No.	Slope (in./ft)	Maximum Spread of Flame (ft)	Lateral Spread of Flame (Yes/No)
T2 (09015)	4: 12	4	No
T3 (09015)	4: 12	4.33	No

At no time during these tests were any flying flaming or glowing brands or pieces of roof covering material produced. No portion of the roof deck fell away in the form of glowing particles.

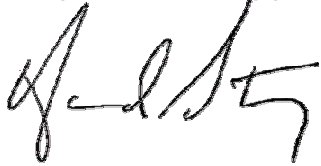
CONCLUSION

The results from the ASTM E 108 testing of the Gacoflex U 8782 roof coating system described herein demonstrate successful test performance under the standard test conditions of classification as follows:

- **Class A Noncombustible- 2.625 gal/100 sq.ft (42 mils), 4":12" slope**

SIGNATURE

Prepared and approved by,

A handwritten signature in black ink, appearing to read 'H. Stacy', written over a white background.

Howard Stacy
Director, Testing Services

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