

## INTERTEK TEST REPORT 3096738 REVISED

REPORT

OF

ANSI/SPRI ES-1 2003

**TESTS ON** 

ROOF EDGE COPING SYSTEMS

**FOR** 

PETERSEN ALUMINUM 10551 PAC RD. TYLER, TEXAS 75707

BY

INTERTEK TESTING SERVICES, NA INC. 8431 MURPHY DRIVE MIDDLETON, WISCONSIN 53562

TEST DATE: MAY 4 THROUGH 10, 2006 REPORT DATE: MAY 10, 2006 REVISION DATE: AUGUST 8, 2006



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PRODUCT: ROOF EDGE COPING
CLIENT: PETERSEN ALUMINUM
REPORT DATE: MAY 10, 2006
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## INTRODUCTION

Intertek Testing Services NA Inc., of Middleton, Wisconsin conducted tests on three coping system samples supplied by Petersen Aluminum of Tyler, TX. This report gives the results of the evaluation of the provided samples. The test results described in this report are limited to the submitted items.

Test results apply to measurement uncertainties with a 95% confidence level for the following equipment: Roof Edging Testing Machine: (Intertek # 703), Applied load +/- 4.0 lbf. Ashcroft pressure gauges: (Intertek #'s 447 and 448),  $\pm$  0.1 psi. Mitutoyo 6-inch Dial Caliper, (ITS# 738)  $\pm$  0.001 inch. Cole Parmer Big Digit Timer (ITS #674) +/-0.001% over a 23-hour period.

## **DESCRIPTION AND PROCEDURES**

The test procedures in ANSI/ SPRI ES-1 2003 were strictly followed. Fasteners supplied by Petersen Aluminum were 10-12 x 1-inch Type A Pancake Head screws. The continuous cleat for the front or outer leg of the coping was fastened at 12-inches on center on both the top and side of the cleat. The rear or inner cleat was fastened on the top to the parapet 1-inch from the edge and 12-inches on center.

Coping Cap 1: SPRI Test method RE-3 (Samples numbered 1 and 2.) Supplied in 0.050" Aluminum, the coping is fixed to the parapet by attaching the front and the rear 24 ga steel continuous cleats to the parapet, engaging the outer leg of the coping and rotating it up and over to engage the inner cleat at the drip edge. The inner leg of the coping is then crimped to the cleat every two-feet with a 3-inch crimp. Crimping was accomplished with a hand held "duck billed" crimper. Samples 1 and 2 were supplied for a parapet 23-1/2-inches wide with nominal 6-inch outer leg and 4-inch inner leg.

Coping Cap 2: SPRI Test method RE-3 (Samples numbered 3 and 4) This coping differs from the first only in size. All other aspects are the same. The coping was supplied for a 14-1/2-inch parapet.

Coping Cap 3: SPRI Test method RE-3 (Samples numbered 5 and 6)
This coping was supplied in 24 ga painted steel for a 15-1/2-inch parapet. Fastening was the same as the other samples tested.

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## **RESULTS**

Product Tested	Size	SPRI Rating (lbs/Ft. <sup>2</sup> )	Failure Mode
Coping one Manufactured in 0.050" aluminum with 24 ga steel continuous cleats.	Nominal 6-inch front leg, 4-inch rear leg and 24- inch top. Tested to RE-3	90	The screws fastening the inner cleat were pulled free.
Coping two Manufactured in 0.050" aluminum with 24 ga steel continuous cleats	Nominal 6-inch front leg, 4-inch rear leg and 15- inch top.	180	The outer (front) leg of the coping bent the cleat up at the screw line and released.
Coping three Manufactured in 24 ga. painted steel with 24 ga. continuous cleats.	Nominal 6-inch front leg, 4-inch rear leg and 16- inch top. Tested to RE-3	140	The outer (front) leg of the coping bent the cleat up at the screw line and released

Based upon the test results (above) the following Coping sizes have been granted the same SPRI rating.

Coping Manufactured in 0.050" aluminum with 24 ga steel continuous cleats.	Nominal 6-inch front leg, 4-inch rear leg with a top width up to 24-inches	90 (lbs/Ft. <sup>2</sup> )
Coping Manufactured in 0.050" aluminum with 24 ga steel continuous cleats	Nominal 6-inch front leg, 4-inch rear leg with a top width up to 15-inch.	180 (lbs/Ft.²)
Coping Manufactured in 24 ga. painted steel with 24 ga. continuous cleats.	Nominal 6-inch front leg, 4-inch rear leg with a top width up to 16-inch.	140 (lbs/Ft.²)
Coping Nominal 6-inch front leg, 4-inch rear leg with a top width up to 16-inch. with 22 ga. continuous cleats.		140 (lbs/Ft.²)

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