



CONSTRUCTION MATERIALS

TECHNOLOGIES

LABORATORY TEST RESULTS

Report for: Tilcor North America
 P.O. Box 5125
 Galt, CA 95632

Attention: Tony Tiapon

Sample ID(s): stone-coated metal	Manufacturer: Tilcor
Date(s) Received: See Sampling Section	Source: See Sampling Section
PRI-CMT Project No.: TLCR-008-02-01	Date(s) Tested: Aug. 7, 2015 – Sep. 25, 2015

Purpose: Evaluate comparative corrosion resistance of *Tilcor's stone-coated metal*. Corrosion resistance was assessed after 1,000h salt spray (fog) exposure in accordance with **ASTM B 117: Standard Practice for Operating Salt Spray (Fog) Apparatus**. The comparative control (i.e. benchmark) was ASTM A 653 hot-dipped galvanized steel G90.

Test Methods: Corrosion resistance testing was completed as described in ASTM B 117-11: *Standard Practice for Operating Salt Spray (Fog) Apparatus*. Test specimens were supported between 15° and 30° from vertical in rack support(s). Test specimens did not contact each other nor did solution from one specimen drip onto another. The salt utilized was 99.9% sodium chloride; salt solution was 5% by mass; salt solution concentration was verified by specific gravity hydrometer at standard laboratory conditions. Chamber temperature was maintained at 95±3°F; salt spray fall-out was collected and quantity of fog verified to be between 1.0 and 2.0 mL/h for a collected area of 80cm². PH of the collected fallout was measured and maintained between 6.5 and 7.2.

Sampling: The following materials were received by PRI.

<u>Product</u>	<u>Source</u>	<u>Date</u>	<u>Sampling</u>
Royal (stone-coated metal panel)	Auckland, New Zealand	Jul. 6, 2015	NA

Material(s) were provided to and received by PRI.

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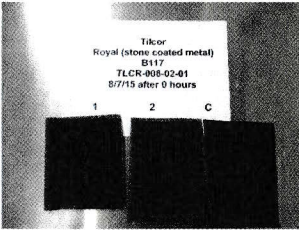
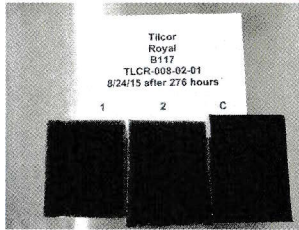
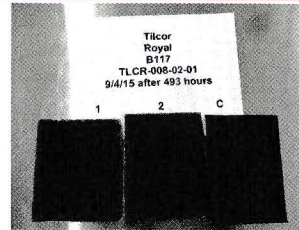

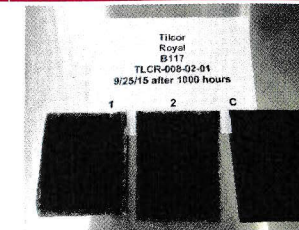
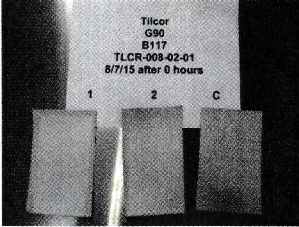
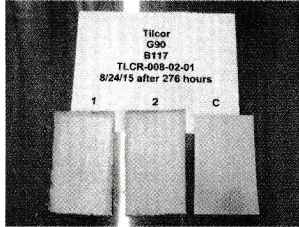
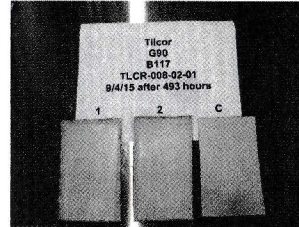
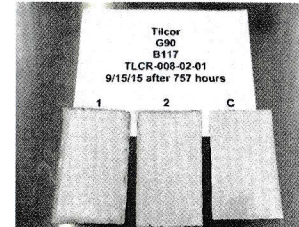
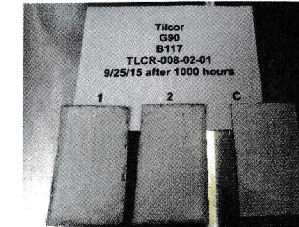
Results:

Salt Spray/Fog Exposure - ASTM B 117

Product	Panel Results									
	0h		260h		500h		761h		1,000h	
ID	D610 (% ¹)	D1654 (rating ²)	D610 (% ¹)	D1654 (rating ²)	D610 (% ¹)	D1654 (rating ²)	D610 (% ¹)	D1654 (rating ²)	D610 (% ¹)	D1654 (rating ²)
stone-coated metal	0.00	10	0.00	10	0.00	10	0.00	10	0.00	10
G90 Control	0.00	10	0.00	10	0.3	10	0.00	10	0.00	10

Note(s): 1- % assigned as outlined in ASTM D 610; lower number indicates better performance; 10% is utilized as a benchmark end point.
 2- rating assigned as outlined in ASTM D 1654; 10 to 0 scale with 10 assigned to no rust propagation and 0 assigned to 5/8" or more rust propagation.

Representative Photos:

Sample	Salt Spray/Fog Exposure				
	Start - 0h	276h	493h	757h	End - 1,000h
stone-coated metal					
G90 Control					

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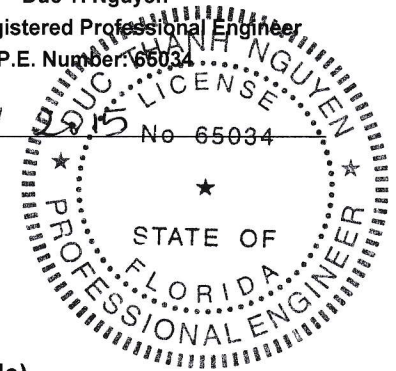
Statement of Attestation: The corrosion resistance of this material was assessed after 1,000h salt spray (fog) exposure in accordance with **ASTM B 117: Standard Practice for Operating Salt Spray (Fog) Apparatus**. The laboratory test results presented in this report are representative of the material supplied.

Signed: Brad Grzybowski
Brad Grzybowski
Managing Director

Date: 11/10/15

Signed: Duc T. Nguyen
Duc T. Nguyen
Florida Registered Professional Engineer
P.E. Number: 65034

Date: 11/11/15



Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	11/10/2015	4	NA

END OF REPORT

TLCR-008-02-01 PRI-CMT Accreditations: IAS TL-189; Miami-Dade 11-0429.05; Florida TST5878; Los Angeles TA24819; CRRC
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