

ENGINEERING

ERVICE

Corrosion & Metallurgical Testing Laboratories

12315 Chimney Rock, Houston TX 77035 • (713) 721-3274 Fax (713) 721-8021 e - mail : corrmet @ corrmet.com web site: www.corrmet .com

TEST REPORT

SALT SPRAY (FOG) TEST ASTM B-117

Geopolymer Solutions, LLC 11200 Cox Road Conroe, Texas 77385 Attn: Mr. Rod Zubkod December 4, 2018 **Report No.: C18-334.2**

Test Samples: <u>Four steel panels covered with insulation material</u> (Cold Fusion Concrete FP250) on one surface.

Size of Sample:	8"x 3"x 1/4"	Test Duration:	2000 Hours
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Test Started: <u>10-1-2018</u> **Test Completed:** <u>12-4-2018</u> .

Test Cabinet Temperature: <u>96</u>°F

Humidifying Tower Temperature:	<u>112</u> °F	Air Pressure:	15	psig
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Solution Concentration: 5% NaCl Solution pH: 7

Volume of Salt Solution Collected: <u>1.5</u> ml/hr.

Remarks:

The following samples were submitted:

Insulated panel Marked #1 having 3/8" of insulation thickness (Scribed an X thru insulation)

Insulated panel Marked # 2 having 5/8" of insulation thickness

Insulated panel Marked #3 having 3/4" of insulation thickness (Scribed an X thru insulation)

Insulated panel Marked #4 having 1-1/2" of insulation thickness



Observations:

After completion of 2000 hours of salt spray exposure test, all four insulated steel panels were evaluated for presence of spot rusting, and corrosion attack to the metal substrate protected by insulation. A small area of insulation from each sample was removed to inspect the condition of the metal substrate. Visual examination revealed that the metal substrate under the insulation was virtually free from any spot rusting or corrosion damage due to salt spray exposure testing. Furthermore, it appears that the protection of the metal substrate under the insulation is independent of insulation thickness.

Respectfully Submitted, Corrmet Engineering Services

RUIZ

Robert Zand, P.E.

Halter Ser

Matthew R. Zand Corrosion Technologist



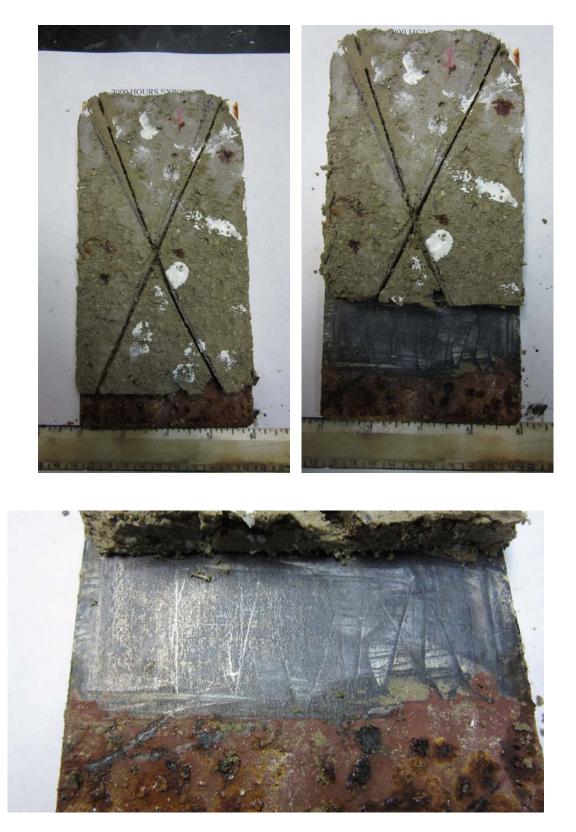
Insulated metal panels before exposure



Insulated metal panels after 250 hours of exposure

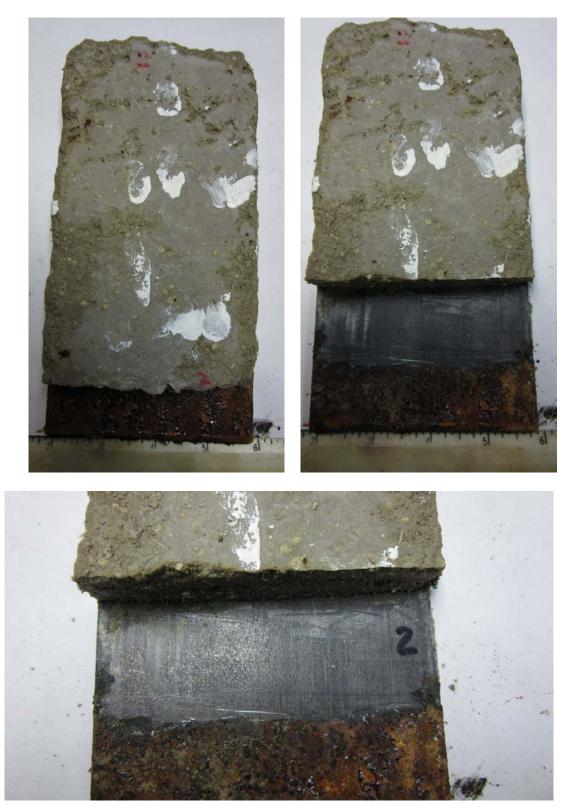


Insulated metal panels after 500 hours of exposure



Insulated metal panels after 2000 hours of exposure

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Insulated metal panels after 2000 hours of exposure

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Insulated metal panels after 2000 hours of exposure



Insulated metal panels after 2000 hours of exposure