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## *Evaluation of Esgard Coatings / Competitor Testing*

**Purpose:** To test the submitted samples from Esgard (PL-1 & PL-2) against Cortec's VpCI-368M and VpCI-369M and compare results using test methods ASTM D-1748 and ASTM B-117.

**Materials:** PL-1 and PL-2 (products of Esgard Protective Coatings)  
 Navguard Type II  
 VpCI-368M  
 VpCI-369M  
 1010 Cold Rolled Carbon Steel Panels

**Method:** ASTM D-1748  
 ASTM B-117

**Procedure:** The following procedure was followed:

- 1) The samples being tested were coated onto carbon steel panels and hung to dry.
- 2) One set of coated panels was placed in the humidity cabinet and the other set of coated panels was placed in the salt spray cabinet.
- 3) The panels were inspected on a regular basis to determine failure. Failure was determined by observing one spec of corrosion that is 1-3mm in diameter, or three specs of corrosion at least 1mm in diameter.
- 4) After 400 hours, the panels in the salt spray cabinet were taken out then hung to dry. They were then cleaned with VpCI-414 to remove the coating so that the corrosion underneath would be more visible. Pictures were then taken.
- 5) After 3170 hours, the panels in the humidity cabinet were taken out then wiped dry with a paper towel. Pictures were then taken.

**Results:** The following results were found from ASTM D-1748:

Sample ID	Time to Failure
PL-1	did not fail, >3170 hours
PL-2	1100 hours
Navguard Type II	did not fail, >3170 hours
VpCI-368M	did not fail, >3170 hours
VpCI-369M	did not fail, >3170 hours



**Results:** The following results were found from ASTM B-117:

Sample ID	Time to Failure
PL-1	350 hours
PL-2	50 hours
Navguard Type II	140 hours
VpCI-368M	400 hours
VpCI-369M	> 400 hours

**Conclusion:** When comparing the two submitted products (PL-1 & PL-2) to VpCI-368M and VpCI-369M, the data from ASTM B-117 indicates that Cortec's products outlast and perform better than the competitors products.

**Project #:** 06-192-1125

**ASTM B-117**  
**pictures**



**Esgard product PL-1**



**Esgard product PL-2**

**ASTM B-117**  
**pictures**



**VpCI-368M**



**VpCI-369M**

**ASTM D-1748**  
**pictures**



**Esgard product PL-1**



**Esgard product PL-2**

**ASTM D-1748**  
**pictures**



**VpCI-368M**



**VpCI-369M**