



Salt Fog Test Report

On

(Qty. 6) Flush Mount Anchor Flange and (Qty. 6) Hex Mount Anchor Flange

Customer Name: Nil Building Solutions

Customer P.O.: 053190

Date of Report: November 3, 2022

Test Report No.: R-17980

Test Start Date: October 23, 2022

Test Finish Date: October 28, 2022

Test Technician: S. Lanni

Lead Env. Test Technician: N. Mirabile

Approved By: N. Accardi

Report Prepared By: J. Kennedy

Government Source Inspection: Not Applicable



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Certification and Signatures

We certify that this report is a true report of the results obtained from the tests of the equipment stated and relates only to the equipment tested. We further certify that the measurements shown in this report were made in accordance with the procedures indicated and vouch for the qualifications of all Retlif Testing Laboratories personnel taking them.



Nicholas Mirabile
Assistant Environmental Laboratory Supervisor



Nicholas Accardi
Environmental Laboratory Supervisor

Non-Warranty Provision

The testing services have been performed, findings obtained and reports prepared in accordance with generally accepted laboratory principles and practices. This warranty is in lieu of all others, either expressed or implied.

Non-Endorsement

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It is not intended to constitute a recommendation, endorsement or certification of the product or material tested. This report must not be used by the client to claim product endorsement by ANSI National Accreditation Board (ANAB).



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Revision History

Revisions to this document are listed below; the latest revised document supersedes all previous issues of this document:

Revision	Date	Pages Affected
-	November 3, 2022	Original Release



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Test Program Summary

Test Report Number:	R-17980	
Customer:	Nill Building Solutions	
Address:	67 Mariner Drive	
	South Hampton, NY 11968	
Manufacturer:	Nill Building Solutions	
Test Sample:	(Qty. 6) Flush Mount Anchor Flange	(Qty. 6) Hex Mount Anchor Flange
Foreign Group Serial Numbers:	3, 4, 5	1, 2, 6
Domestic Group Serial Numbers:	8, 11, 12	7, 9, 10

Test Purpose

The purpose of this test program was to determine if the (Qty. 6) Flush Mount Anchor Flange and (Qty. 6) Hex Mount Anchor Flange could withstand the anticipated salt fog extremes in accordance with the method requirements of MIL-STD-810G.

Test Environment

All testing was performed at the Retlif Testing Laboratories, Ronkonkoma, New York facility. The test method was performed in the environment specified within the test standard.

Test Specification

Department of Defense, Test Method Standard, Document Number: MIL-STD-810G, Dated: 31 October 2008.

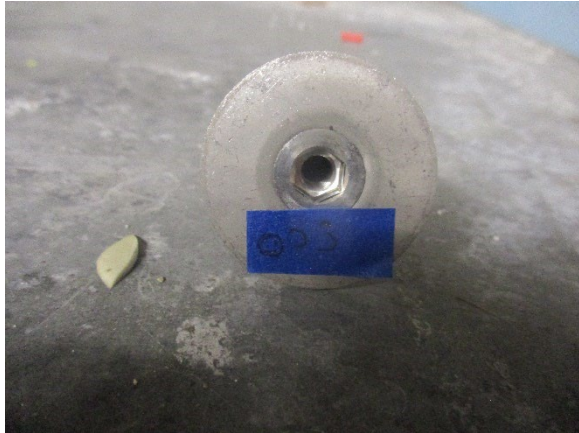


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EUT Identification Plates

The following photographs depict the ID Labels of the EUT:



Flush Mount Anchor Flange Serial Number: 3



Flush Mount Anchor Flange Serial Number: 4



Flush Mount Anchor Flange Serial Number: 5



Flush Mount Anchor Flange Serial Number: 8



Flush Mount Anchor Flange Serial Number: 11



Flush Mount Anchor Flange Serial Number: 12



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EUT Identification Plates (Con't.)



Hex Mount Anchor Flange Serial Number: 1



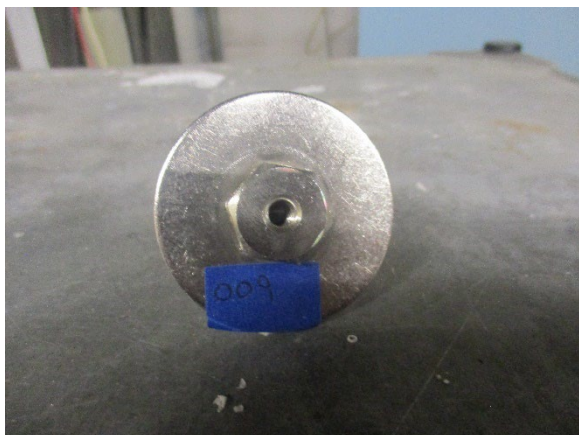
Hex Mount Anchor Flange Serial Number: 2



Hex Mount Anchor Flange Serial Number: 6



Hex Mount Anchor Flange Serial Number: 7



Hex Mount Anchor Flange Serial Number: 9



Hex Mount Anchor Flange Serial Number: 10



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Mode of Operation

During the performance of all testing specified herein, the equipment under test (EUT) was non-operating.

Acceptability Criteria

The following was considered EUT acceptability:

- No apparent physical damage
- The EUT must operate properly where intended

Modifications

No modifications were made to the EUT during the course of this testing program in order to demonstrate compliance with the specified requirements.



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Test Method and Results

The following test method was performed on the (Qty. 6) Flush Mount Anchor Flange and (Qty. 6) Hex Mount Anchor Flange as shown in Table 1.

Table 1 - Test Method and Results

Testing Dates	Test Method	Test Results
October 23 – 28, 2022	Salt Fog	Customer Determined



The test method listed above is included in Retlif Testing Laboratories ANSI National Accreditation Board (ANAB), ISO/IEC 17025 Scope of Accreditation, Certificate Number: L2320.



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**Salt Fog
Test Data**



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TEST DATA SHEET

Test Method	Salt Fog		
Customer	Nill Building Solutions		
Job Number	R-17980		
Test Sample	(Qty. 6) Flush Mount Anchor Flange	(Qty. 6) Hex Mount Anchor Flange	
Foreign Group Serial Numbers:	3, 4, 5	1, 2, 6	
Domestic Group Serial Numbers:	8, 11, 12	7, 9, 10	
Test Specification	MIL-STD-810G	Para: N/A	
Operating Mode	Non-Operating		
Technician	N. Mirabile, S. Lanni		
Date	10/23/22 Through 10/28/22		

Salt Spray Parameters

Percentage of Salt in Solution: 5%	Acceptable pH Range: 6.5 to 7.2	Fallout Rate: 1.0 to 3.0 ml/80cm²/hr	Water Type DI
Length of Exposure: 24 Hours	Drying Time: 24 Hours	Chamber Temperature: 35°C	Resistivity 1-18 MΩ

Measurement Data

Date	Time	PH	Temperature in °C	Percent Salt	Fallout Rate ml/(80)cm/hr			
					1	2	3	4
10/24/22	13:40	6.5	35	5.0	1.2	1.2	1.0	1.3
10/25/22	15:55	6.5	35	5.0	1.2	1.2	1.1	1.3
10/27/22	18:45	6.5	35	5.0	1.0	1.0	1.0	1.2

Test Log

10/23/22	9:44	Begin preconditioning of salt fog chamber.
		The temperature was increased to 35°C and the salt solution was sprayed.
	13:45	The EUT were placed into the Salt Fog chamber to precondition for 2 hours prior to the start of testing.
	15:45	Begin Salt Fog Test.
		Began 24- hour exposure period.
10/25/22	15:55	Began purge of Salt Fog chamber.
	16:15	The fallout rate, salinity and pH were measured, and the unit dried for 24 hours.
10/26/22	16:30	Began 2-hour precondition prior to second 24-hour exposure period.
	18:30	Began second 24- hour exposure period.
10/27/22	18:30	Began purge of Salt Fog chamber.
	18:45	The fallout rate, salinity and pH were measured, and the unit dried for 24 hours.
10/28/22		The EUT were returned to Nill Building Solutions for post-test inspection.
		Complete Salt Fog Test.

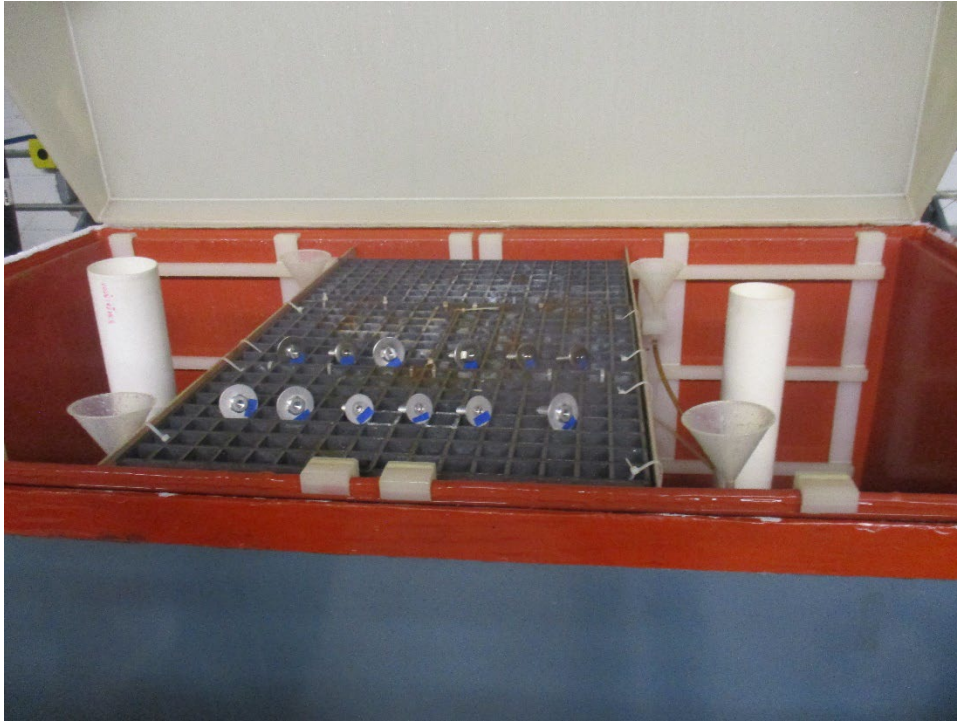
Results: There was no apparent visual damage noted as a result of this test. The EUT were returned to Nill Building Solutions for post-test inspection.



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**Test Photographs
Salt Fog**



Test Setup



Test Setup



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Equipment List Salt Fog

EN	Manufacturer	Model No.	Description	Serial No.	Due Date
1004	SINGLETON	SCCH 23	CHAMBER, SALT FOG, 73 cubic ft cap.	SCCH23-8651	9/30/2023
1478	OAKTON	PH 11 SERIES	METER, pH	794976	6/30/2023
1659	COLE-PARMER	pH BUFFER	pH BUFFER SOLUTION, pH 4	NSN	7/29/2023
1659A	COLE-PARMER	pH BUFFER	pH BUFFER SOLUTION, pH 7	NSN	12/16/2023
1659B	COLE-PARMER	pH BUFFER	pH BUFFER SOLUTION, pH 10	NSN	12/29/2023
1721	OMEGA	OM-CP- PRHTemp2000	HYGROMETER / BAROMETER, 5 - 30 PSI, 0 - 50 deg. C, 10 - 90 %RH	Q14766	4/30/2023
1777	FISHER SCIENTIFIC	11-542A	HYDROMETER, 1.0 - 1.225 Specific Gravity	11170472	8/31/2024



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