





CRT LABORATORIES, INC. 1680 North Main Street, Orange, CA 92867

Tel.: (714) 283-2032

www.crtlabs.com • e-mail: crtlabs@crtlabs.com

ASTM Physical & Mechanical • Chemical-Thermal Analysis • IAPMO Cell Class Geosynthetic Materials • Plumbing & Faucet Assemblies • Resin & Finished Product Testing FOR: Reliance Worldwide Corporation 14284 Danielson Street Poway, CA 92064

Tel: (760) 705-1235 / Fax: (760) N/A

ATTN: Ryan Miller

21219 DATE: Oct. 15, 2020

BACKGROUND:

The client submitted three (3) samples for testing. The samples arrived on 09/29/2020 via customer delivery. Visual inspection was performed on 09/29/2020 and no product defects were noted. All samples submitted for load testing in accordance with WW-H-171-E ANSI/MSS SP-58. Testing in accordance with customer instructions, P.O. No. 4500129066, and signed CRT quotation dated 09/30/2020. The following additional information is provided:

CRT order entry log date: 09/30/2020 / Report due date: 10/16/2020

PRODUCT ID:

Three (3) samples of Water Dam Test Configurations, identified as;

1) INJ-WP-HFEXT81/ 2) INJ-WP-HFEXT101 3) INJ-WP-HFEXT121

ASSIGNED TESTING: Set-up & perform testing in accordance with client test objective & requirements

provided (WW-H-171-E ANSI/MSS SP-58)

TEST METHOD:

WW-H-171-E ANSI/MSS SP-58

Load Test @ 23°C - 4 specimens to be tested. Maximum load to be reached in

 ≤ 1 minute

TEST RESULTS:

The results of testing are reported on tables 1-3, attached.

CONCLUSION:

The above samples comply with WW-H-171-E ANSI/MSS SP-58 Load

Test... Complies.

Specimen Retain Bin: BB (Samples were discarded after testing per client instructions)

Signed on behalf of:

CRT LABORATORIES, INC.

IAPMO R&T ISO 9001:15 Certified - Registered / ISO/IEC 17025:05 Recognized Co.

Ken A. Le Jeune CEO / Laboratory Director

Raul Gonzalez Laboratory Technician







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LWR NO.: 21219 DATE: Oct. 15, 2020

TABLE 1

SCOPE: Load testing @ 73°F

SAMPLE ID: Water Dam Test Configurations, INJ-WP-HFEXT81/

TEST SAMPLE	APPLIED LOAD (LBS)	TIME TO REACH APPLIED LOAD (S)	TEST RESULT (PASS/FAIL)
8-1	1,351	32	Pass. No failure, damage or deformation
8-2	1,353	32	Pass. No failure, damage or deformation
8-3	1,351	31	Page No feilure damage or deformation
8-4	1,352	32	Pass. No failure, damage or deformation Pass. No failure, damage or deformation

REQUIREMENTS: Load test @ 73°F (1260lb + 126lb). Maximum load to be reached in ≤ 1 minute

...Complies



Sample before loaded



Sample after loaded. No failure, damage or deformation







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TABLE 2

SCOPE: Load testing @ 73°F

SAMPLE ID: Water Dam Test Configurations, INJ-WP-HFEXT101

APPLIED LOAD (LBS)	TIME TO REACH APPLIED LOAD (S)	TEST RESULT (PASS/FAIL)
	31	Pass. No failure, damage or deformation
2,003	32	Pass. No failure, damage or deformation
2,003	31	Pass No failure damage of deformation
2,002	31	Pass. No failure, damage or deformation Pass. No failure, damage or deformation
	2,002 2,003	LOAD (LBS) APPLIED LOAD (S) 2,002 31 2,003 32 2,003 31 2,002 31

REQUIREMENTS: Load test @ 73°F (1912lb + 191lb). Maximum load to be reached in ≤ 1 minute

... Complies



Sample before loaded



Sample after loaded. No failure, damage or deformation







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TABLE 3

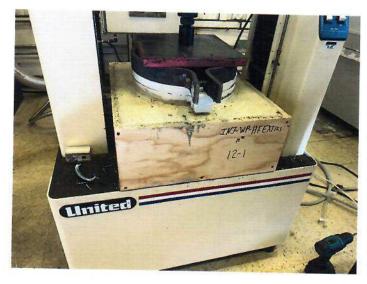
SCOPE: Load testing @ 73°F

SAMPLE ID: Water Dam Test Configurations, INJ-WP-HFEXT121

TEST SAMPLE	APPLIED LOAD (LBS)	TIME TO REACH APPLIED LOAD (S)	TEST RESULT (PASS/FAIL)
12-1	2,855	32	Pass. No failure, damage or deformation
12-2	2,850	31	Pass No failure demand 1 C
12-3	2,852	31	Pass. No failure, damage or deformation
12-4	2,857	32	Pass. No failure, damage or deformation
and the second second	_,	32	Pass. No failure, damage or deformation

REQUIREMENTS: Load test @ 73°F (2652lb + 265lb). Maximum load to be reached in ≤ 1 minute

... Complies







Sample after loaded. No failure, damage or deformation