

Revision# 1





| Testing Laboratory: | Momentum Technologies Laboratories, Inc. |
|---------------------|--|
|                     | 1507 Boettler Rd.                        |
|                     | Uniontown OH 44685                       |
|                     | Ph: 330-595-4293                         |
|                     | Fax: 330-5954142                         |
| Customer:           |  |
|                     | Innovative Waterproofing Solutions       |
|                     | Nikolis Dannunzio                        |
|                     | 48315 Gratiot Ave.                       |
|                     | Chesterfield MI 48051                    |
|                     |  |
| Project #:          | JX21H9A                                  |
| Quote #:            | 2019-313                                 |
| Date of Report:     | Thursday, June 4, 2020                   |

PO#:

Abstract: Analysis of one (1) product in accordance with AC-29 ACCEPTANCE CRITERIA FOR COLD, LIQUID-APPLIED, BELOW-GRADE, EXTERIOR DAMPPROOFING AND WATERPROOFING MATERIALS

1010

| MTI#       | Description of Material                   | Receiving Date |
|------------|---|----------------|
| MTI-200395 | 1 five gallon sample labeled: Water Proof | 8/22/2019      |





 Project #:
 JX21H9A

 Quote #:
 2019-313

 Date:
 6/4/2020

 PO#:
 1010

 Revision#
 1

Test #: 1

Method AC-29

| Test/Description: | Resistance to Decay Weight Loss per ASTM E154/E154M-08a(2019) sect.13  |  |  |
|-------------------|--|--|--|
|                   | Test specimens are weighed to a constant mass before soil burial. After the soil burial and incubation period the specimens are cleaned of soil and weighed to a constant mass. The weight loss is determined by the differnce in these two weights. |  |  |
| Result:           | No Weight Loss   |  |  |
| Requirement       | Maximum 10% weight loss  |  |  |
| Conclusion:       | Pass   |  |  |





| Project #: | JX21H9A  |
|------------|----------|
| Quote #:   | 2019-313 |
| Date:      | 6/4/2020 |
| PO#:       | 1010     |
| Revision#  | 1        |

| Test #:              | 2     |  |
|----------------------|-------|--|
| Method               | AC-29 |  |
| Method<br>Test/Descr | AC-29 | Water Vapor Permeance per ASTM E96/E96M-16<br>Desiccant Method, procedure A (Upright)<br>The test dish is filled with desiccant within 1/4 in. [6 mm] of the specimen leaving enough room for shaking of the<br>desiccant. The specimen is attached to the dish and placed in the controlled test chamber. Periodic weighings are<br>taken to provide 8 to 10 data points.<br>Individual Results<br>Specimen 1: Permeance- 0.87 ng/Pa.s.m <sup>2</sup> Perms- 0.015<br>Specimen 2: Permeance- 0.98 ng/Pa.s.m <sup>2</sup> Perms- 0.017<br>Specimen 3: Permeance- 1.0 ng/Pa.s.m <sup>2</sup> Perms- 0.017 |
|                      |       |  |
| Result:              |       | Average: Permeance- 0.95 ng/Pa.s.m <sup>2</sup> Perms- 0.017   |
| Requireme            | nt    | Maximum 1 perm   |
| Conclusior           | n:    | Pass   |





3

Test #:

| Project #: | JX21H9A  |
|------------|----------|
| Quote #:   | 2019-313 |
| Date:      | 6/4/2020 |
| PO#:       | 1010     |
| Revision#  | 1        |
|            |          |

| Resistance to Deca<br>The test dish is fille<br>desiccant. The spec<br>taken to provide 8 t   | ay Water Vapor Permeance per ASTM E96/E96M-16 Desiccant Method, procedure A (Upright)<br>d with desiccant within 1/4 in. [6 mm] of the specimen leaving enough room for shaking of the<br>cimen is attached to the dish and placed in the controlled test chamber. Periodic weighings are<br>to 10 data points. |  |
|---|---|--|
| Individual Results<br>Specimen 1: Permeance- 1.85 ng/Pa.s.m <sup>2</sup> Perms- 0.032<br>Specimen 2: Permeance- 1.97 ng/Pa.s.m <sup>2</sup> Perms- 0.035<br>Specimen 3: Permeance- 1.47 ng/Pa.s.m <sup>2</sup> Perms- 0.026 |   |  |
| Gram s  | 221.5<br>221<br>205<br>200<br>219.5<br>219<br>218.5<br>218<br>218.5<br>218<br>217.5<br>217<br>  |  |
| -<br>Average: Permean   | nce- 1.76 ng/Pa.s.m² Perms- 0.031   |  |
| Maximum 1 pern  | n   |  |
| Pass  |   |  |
|   | Resistance to Deca<br>The test dish is fille<br>desiccant. The spe<br>taken to provide 8 to<br>Individual Results<br>Specimen 1: Perme<br>Specimen 2: Perme<br>Specimen 3: Perm<br>-<br>Average: Permear<br>Maximum 1 perm<br>Pass  |  |





| Project #: | JX21H9A  |
|------------|----------|
| Quote #:   | 2019-313 |
| Date:      | 6/4/2020 |
| PO#:       | 1010     |
| Revision#  | 1        |

| Test #: 4   |  |  |
|---|--|--|
| Method AC   | 29   |  |
| Test/Descriptic                                       | n: Resistance to Water per ASTM D2939-03   |  |
|   | Panels are prepared in accordance with section 13.2. Panels are dried in a forced draft oven conforming to Specification E145, Type II B for 24 hr at 60±3°C (140±5°F). Panels are then placed in distilled water at 24±3°C (75±5°F) for 24 h. |  |
| Result: No Blistering or reemulsification             |  |  |
| Requirement   | quirement No Blistering or reemulsification  |  |
| Conclusion:   | Pass   |  |
| Test #: 5   |  |  |
| Method AC   | 29   |  |
| Test/Descriptic                                       | n: Remain in place during application per ASTM C836/C836M-18   |  |
|   | Specimen prepared by applying two coats. The first coat was applied at 30 wet mils and the specimen was placed upright for 1 hour. A second 30 wet mil coat was applied and the specimen was placed upright for 24 hours.                      |  |
|   | Individual film thickness measurements:<br>1- 0.0370 in.<br>2 -0.0370 in.<br>3- 0.0420 in.<br>4 - 0.0375 in  |  |
|   | 5- 0.0440 in.  |  |
| Result:   | Average: 0.0395 in.  |  |
| Requirement As recommended by Manufacturer+ /- 5 mils |  |  |
|   | 0.0400 Dry   |  |
| Conclusion:   | Pass   |  |





| JX21H9A  |
|----------|
| 2019-313 |
| 6/4/2020 |
| 1010     |
| 1        |
|          |

| Test #: 6        |  |  |
|------------------|--|--|
| Method AC-       | 29   |  |
| Test/Descriptio  | Adhesion strength per ASTM C836/C836M-18         Test specimens are prepared by brush coating 60 wet mils onto mortar substrates and imbedding colth strips per ASTM C794-18. After 7 days the cloth strips are coated again. Cure conditions: 14 days at standard conditions, followed by 7 days at 70±2°C (158±3.6°F), followed by 7 days in distilled water conditioned to 23±2°C (73±4°F).         Individual Results         Specimen 1: 3.45 lbf/in         Specimen 2: 4.19 lbf/in         Specimen 3: 2.90 lbf/in  |  |
| Result:          | Average (Ibf/in): 3.51 Ibf/in  |  |
| Requirement      | 1 lbf/in. on surfaces desired  |  |
| Conclusion: Pass |  |  |
| Test #: 7        |  |  |
| Method AC-       | 29   |  |
| Test/Descriptio  | <ul> <li>Resistance to Decay Hydrostatic Pressure over Cracks per ASTME154/E154M-08a(2019) sect.13. Testing per ASTM C1306/C1306M-08(2016)e1 (required for Waterproofing only)</li> <li>Films are applied to mortar substrates with a 1/8 in. crack prior to burial. After incubation, specimens are cleaned of soil prior to testing.</li> <li>Rapid test:<br/>Thickness-0.0621", Fail at 11.5 psi (&lt;1 hour).</li> <li>Long term test:</li> <li>1. Thickness-0.0628", Fail at 9.0 psi (&lt;1 hour to failure).</li> <li>2. Thickness-0.0636", Fail at 9.0 psi (&lt;1 hour to failure).</li> <li>3. Thickness-0.0641", Fail at 9.0 psi (&lt;1 hour to failure).</li> <li>Average: 9.0 psi (&lt;1 hour to failure).</li> </ul> |  |
| Result:          | 4.5 psi  |  |
| Requirement      | Report 50% of lowest value achieved  |  |
| Conclusion:      | N/A  |  |





| Project #: | JX21H9A  |
|------------|----------|
| Quote #:   | 2019-313 |
| Date:      | 6/4/2020 |
| PO#:       | 1010     |
| Revision#  | 1        |

| Test #: 8         |  |  |  |  |  |
|-------------------|--|--|--|--|--|
| Method AC-29      |  |  |  |  |  |
| Test/Description: | Low Temperature Crackbridging per ASTM C836/C836M-18 (required for Waterproofing only)   |  |  |  |  |
|                   | Specimens are prepared per ASTM C1305/C1305M-16 and conditioned at 14 days at room temperature, followed by seven days in a circulating hot air oven at 70±2°C [158±3.6°F]. The lowest test temperature at which 5 specimens pass to cycles is determined. |  |  |  |  |
| Result:           | 5 of 5 specimens pass at 30°F. No observable changes.  |  |  |  |  |
| Requirement       | No cracking, splitting, pinholes, or loss of adhesion  |  |  |  |  |
| Conclusion:       | Pass   |  |  |  |  |
| Test #: 9         |  |  |  |  |  |
| Method AC-29      |  |  |  |  |  |
| Test/Description: | Extensibility after Heat Aging per ASTM C836/C836M-18 (required for Waterproofing only)  |  |  |  |  |
|                   | Specimens are prepared per ASTM C1522-05(2013) and cured for 14 days at standard conditions follwed by 14 days in a forced-draft oven at $70\pm2^{\circ}$ C (158± 3.6°F).  |  |  |  |  |
|                   | Film thickness: First wet coating applied at 90 wet mils and cure at standard conditions for 24 hrs. Second wet coating applied to achieve below dry coating thickness.  |  |  |  |  |
|                   | Specimen 1- 63.5 mils  |  |  |  |  |
|                   | Specimen 2- 64.5 mils<br>Specimen 3- 62.0 mils   |  |  |  |  |
| Result:           | 1/4 inch no cracking   |  |  |  |  |
| Requirement       | 1/4 inch no cracking   |  |  |  |  |
| Conclusion:       | Pass   |  |  |  |  |



|                     | DMENTUM<br>HNOLOGIES<br>BORATORIES<br>RESU  | F<br>Sion<br>F   | Project #:<br>Quote #:<br>Date:<br>PO#:<br>Revision#  | JX21H9A<br>2019-313<br>6/4/2020<br>1010<br>1                          |  |
|---------------------|---|--|---|---|--|
| Conclusion:         | Water Proof meets the require<br>ASTM E154, Section 13 (Wei<br>Dry films of 60±5 mil thicknes<br>mils and measured for thickne<br>applied ater 24 hours based of<br>conditioned at standard labora<br>futher testing.   | ements of AC29 as tested<br>ight Loss, Water Vapor Per<br>s are created by applying t<br>ess after24 hours. The sec<br>on this measurment to prov<br>atory conditions and weigh  | above.<br>meance, and Hydrostatic<br>wo coats. The 1st coat wa<br>ond wet mil thickness coa<br>ide the final dry mil thickr<br>ed periodicaly to a consta   | pressure<br>as applied<br>at is detern<br>ness. A film<br>nt weight p | ove cracks):<br>at 60 wet<br>nined and<br>is are<br>prior to any |
|                     |   | Testing Dates  |   |   |  |
|                     | 11/   | /8/2019 - 6/4/202  | 20  |   |  |
|                     | Tested By:  | Revie  | ewed By:  |   |  |
| La                  | Jerry Spinelli<br>aboratory Technician  |  | Rodney<br>Managi  | Armstron<br>ng Directo  | ig<br>or   |
|                     |   | Revision Log   |   |   |  |
|                     | Revision #  | Date   | Revision  |   |  |
|                     | 1   | 6/4/2020   | Contact Information I   | Jpdated   |  |
| Form Revision# 0- 1 | The information presented in this<br>Laboratories, Inc. (MT Labs) and<br>can be made since MT Labs has:<br>MT Labs assumes no liability for i<br>WARRANTIES EXPRESSED OR<br>OTHERWISE. MT Labs SHALL N<br>DAMAGES. No statement contair<br>existing patents or as an endorse<br>BE REPRODUCED, EXCEPT IN<br>0/28/2019 | publication is based upon the research of N<br>is to the best of its knowledge accurate. Ho<br>no control over the conditions under which<br>ts use, or the failure of products described I<br>IMPLIED, OF MERCHANTABILITY, FITNE<br>VOT BE LIABLE FOR SPECIAL, INCIDENT<br>hed herein shall be construed as a recomm<br>ment of products of specific manufacturers.<br>FULL WITHOUT THE WRITTEN APPROV. | Momentum Technologies<br>owever, no guarantee of its accuracy<br>its products may be used by others.<br>herein. MT Labs MAKES NO<br>ESS, PATENT INFRINGEMENT, OR<br>FAL AND/OR CONSEQUENTIAL<br>endation or inducement to infringe<br>ALL TEST REPORTS SHALL NOT<br>AL OF MT Labs |   |  |

Member

ING RACTORS

CRRC