

March 1, 2024

The Tile Shop Attn: Wayne Druckenmiller 8515 Brown Street Ottawa Lake, Michigan 49267 USA

Dear Wayne Druckenmiller,

International Performance Assurance Laboratories has tested the samples you submitted. Test report IPAL-0802-23 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

INTERNATIONAL PERFORMANCE ASSURANCE LABORATORIES,

Damon McDowell

Laboratory Supervisor

D. J. M. Donell

Enclosures



IPAL TEST REPORT NUMBER: IPAL-0802-23 PAGE: 1 OF 3

TEST REQUESTED BY: The Tile Shop

TEST METHOD: ANSI A118.11 Specifications for EGP (Exterior Glue Plywood)

Modified Dry-set Mortar

This specification describes test methods and minimum requirements for EGP (Exterior Glue Plywood) modified dry-set mortars. The specification includes all the test methods and minimum requirements set forth by ANSI A118.4 with the exception of the four-week freeze/thaw shear strength tests. See ANSI A118.11 and A118.4 for full method descriptions.

TEST SUBJECT MATERIAL: Identified by client as: "Pro Bond"

TEST DATE: 12/6/2023 - 2/28/2024

TEST PROCEDURE NOTES:

- Sample prep*: The mortar was mixed at a liquid to powder ratio of 25.5:100 parts by weight per the client's instruction for A118.4 section 5.3. For the remaining test the mortar was mixed at 24:100 per the client's instructions.
- All samples were set up and cured according to ANSI A118.11 and A118.4.

TEST RESULTS:

Test Designation	Test Description	Evaluation	ANSI Specification
A118.4 5.3	Open Time		
	20 min at 28 days	125 PSI	\geq 75 psi (0.5MPa)
	Extended Open Time (optional)		
	30 min at 28 day	50 PSI	≥75 psi (0.5MPa)
A118.4 6.0	Sag (optional - non-sagging	0.00 in	\leq 0.02 in. (0.5mm)
	mortars only)		
Glazed Wall Tile Shear Bonds			
A118.4 7.1.2	7-day shears	576 PSI	> 300 PSI (2.07 MPa)
A118.4 7.1.3	7-day water immersion shears	490 PSI	> 200 PSI (1.38 MPa)
Porcelain Mosaic Shear Bonds			
A118.4 7.2.2	1-day shears	307 PSI	> 75 PSI (0.5 MPa)
A118.4 7.2.3	7-day shears	378 PSI	> 200 PSI (1.38 MPa)
A118.4 7.2.4	7-day water immersion shears	301 PSI	> 150 PSI (1.03 MPa)
A118.4 7.2.5	28-day shears	351 PSI	> 200 PSI (1.38 MPa)
A118.4 7.2.7	12-week shears	439 PSI	> 200 PSI (1.38 MPa)
Quarry Tile Shear Bonds			
A118.4 7.3.2	28-day shears	328 PSI	> 150 PSI (1.03 MPa)
Quarry to Plywood Shear Bonds			
A118.11 4.1.1	7-day shear strength	166 PSI	> 100 PSI (0.69 MPa)
A118.11 4.1.2	4-week shear strength	193 PSI	> 150 PSI (1.03 MPa)
A118.11 4.1.3	12-week shear strength	213 PSI	> 150 PSI (1.03 MPa)

^{*}COMMENTS: ANSI A118.4 and A118.11 states that the same mix ratio shall be used for all tests. Different mix ratios were used per the client's request.



100 Clemson Research Blvd., Anderson, SC USA 29625 P: +1 855-IPA-LABS E: testing@IPALaboratories.com www.IPALaboratories.com

PAGE: 2 OF 3

IPAL TEST REPORT NUMBER:

IPAL-0802-23

IMAGE OF PRODUCT TESTED:





100 Clemson Research Blvd., Anderson, SC USA 29625 P: +1 855-IPA-LABS E: testing@IPALaboratories.com www.IPALaboratories.com

PAGE: 3 OF 3

IPAL TEST REPORT NUMBER:

IPAL-0802-23

DISCLAIMER AND LIMITATION OF LIABILITY

This report is provided by Tile Council of North America, Inc. DBA International Product Assurance Laboratories ("IPA Laboratories") for the sole use of the client and no one else. It is intended for professional use by a knowledgeable professional. If published by the client, it must be published in full, including this disclaimer and limitation of liability.

This report is not an endorsement, recommendation, approval, certification, or criticism by IPA Laboratories of any particular product or its application. IPA Laboratories recommends that anyone considering the use or installation of a particular product consult with the manufacturer or an industry professional for advice specific to the person's needs and consider any applicable laws, statutes, codes, or regulations relevant to the particular product. IPA Laboratories does not know all the different manners and applications in which a client's particular product might be used, and, therefore, it disclaims any and all duty to provide warnings or to further investigate the suitability of the use of a particular product in a particular situation.

Unless otherwise expressly stated, IPA Laboratories tested the specific test subject material provided by the client and identified in the lab report, as indicated by the client. IPA Laboratories does not independently verify the information provided by the client, and it makes no representation that similar results would be achieved with other, untested materials, even if such other materials purportedly have the same product name, are purportedly of the same or similar type of product made by the client, or are purportedly from the same batch of product. Nor does IPA Laboratories state that the date in this report is representative of production occurring at the same time or at any other time. Only the manufacturer may make that claim, based on sampling and quality control parameters beyond the knowledge and control of IPA Laboratories. IPA Laboratories does not provide any supervision, review, management, or quality control of any manufacturer's production.

IPA Laboratories makes no representation that the client's products are uniform or identical to the test subject material, that the test subject material is suitable for any particular use, application, or installation, or that it will exhibit the same properties when installed or used in a particular manner. The data provided in this report results from standardized laboratory testing performed under laboratory conditions. As such it does not represent all conditions under which the products may be used or subjected. For testing on actual materials being used or considered for a job site, contact IPA Laboratories for sampling provisions and possible testing.

This report is intended solely to provide the results of the test procedure stated above as performed on the test subject material provided by the client and may not be relied on for any other purpose. IPA LABORATORIES MAKES NO OTHER REPRESENTATIONS OR WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED. ALL IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXPRESSLY DISCLAIMED. IN THE EVENT OF A DISPUTE CONCERNING THIS REPORT, THE EXCLUSIVE REMEDY FOR CLIENT SHALL BE FOR IPA LABORATORIES TO REPEAT THE TEST REQUESTED, BUT IN NO EVENT SHALL IPA LABORATORIES BE LIABLE FOR AN AMOUNT GREATER THAN THE AMOUNT IT RECEIVED FROM CLIENT FOR THE TEST. UNDER NO CIRCUMSTANCES WILL IPA LABORATORIES BE LIABLE TO CLIENT FOR ANY OTHER DAMAGES (NOR SHALL IT BE LIABLE TO ANY OTHER PERSON OR BUSINESS ENTITY FOR ANY DAMAGES), INCLUDING WITHOUT LIMITATION ANY AND ALL DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES, RESULTING, IN WHOLE OR IN PART, FROM ANY USE OF, REFERENCE TO, OR RELIANCE UPON THE REPORT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IPA LABORATORIES DISCLAIMS ALL LIABILITY TO ANY THIRD PARTY CONCERNING THIS REPORT. THE FOREGOING LIMITATION OF LIABILITY IS A FUNDAMENTAL ELEMENT OF IPA LABORATORIES' AGREEMENT TO CONDUCT AND PROVIDE THE REPORT.

J. f. M. Domell 3/1/2024

Damon McDowell
Laboratory Supervisor

