



October 20, 2025

Arto Brick
Attn: Julie Grajeda
15209 S Broadway St.
Gardena, CA 90248
USA

Dear Julie Grajeda,

International Performance Assurance Laboratories has tested the samples you submitted. Test report IPAL-0531-25 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

INTERNATIONAL PERFORMANCE ASSURANCE LABORATORIES,

Damon McDowell
Laboratory Supervisor
Enclosures



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TEST REQUESTED BY: Arto Brick

TEST METHOD: ASTM C482-20: “Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement”

Informal Test Method Description: This test method covers the determination of the ability of glazed ceramic wall tile, ceramic mosaic tile, quarry tile, and pavers to be bonded to portland cement paste. This test method includes both face-mounted and back-mounted tile. This test method consists of bonding tile under controlled conditions to a pure portland cement paste bond coat, supported by a cement mortar bed.

This summary is provided for the reader’s convenience and is not a complete description of the method. See ASTM C482 for all method details and information.

TEST SUBJECT MATERIAL: Identified by client as: “**Arto Concrete Tile 8x8 Artillo Early Gray Standard**”
Approximate Size as Received: 8" x 8"

TEST DATE: 9/12/2025

TEST PROCEDURE:

- Sample prep: Samples cut to 4" x 4" for testing.
- **The ASTM C482 test method was modified per the client’s request***. The client requested to test the bond strength of tile to a concrete substrate using thin-set mortar.
- Four (4) bond strength specimens were created by bonding the tile specimens to 1-³/₄ x 7-³/₄ x 11-³/₄-inch concrete block with Laticrete 253 Gold and a 3/8" x 3/8" U-notched trowel. The thin-set mortar was buttered on the back of the tiles, per the client’s request.
- The specimens were cured for twenty-four (24) hours before testing. The specimens were loaded in shear at a rate of 200 psi/min.

TEST RESULTS:

	Bond Strength (psi)	Mode of Failure
Specimen 1	129 psi	Cohesive failure within the thin-set
Specimen 2	164 psi	Cohesive failure within the thin-set
Specimen 3	141 psi	Cohesive failure within the thin-set
Specimen 4	170 psi	Cohesive failure within the thin-set
Average	151 psi	

***COMMENTS:** The ASTM C482 test method was modified per the client’s request. The method states to bond the tile to Portland cement mortar block using a Portland cement paste. The modifications are described above.





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IMAGE OF PRODUCT TESTED:





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10/20/2025

Damon McDowell
Laboratory Supervisor

