

International Product Assurance Laboratories (formerly TCNA Product Performance Testing Laboratory) 100 Clemson Research Blvd., Anderson, SC USA 29625 P: +1855-IPA-LABS E: Testing@IPALaboratories.com www.ipalaboratories.com

TILE TESTING - ORDER FORM

CONTACT				DAT	TE		
COMPANY							
ADDRESS (report	s mailed to ¹)						
CITY				STATE / PROV	/INCE		
POSTAL CODE		COUNT	TRY				
PHONE		FAX					
EMAIL							
SAMPLE ID (name of tested material to appear in report)				PRODUCT LOT NUMBER (if available)			
PRODUCT COLOR				DATE OF MANUFACTURE (if available)			
DATE SAMPLE WAS TAKEN AND LOCATION (Leave blank if unknown)							
ADDITIONAL CO	MMENTS						
PLEASE SELECT AN ORDER PROCESSING OPTION							
If no option is checked, the order will be processed according to the regular turn-around option. Expedited testing is offered on a time-available basis.							
Regular Turn-Around							
Start within 3-5 business days (50% surcharge)							
Start within 24 business hours (100% surcharge)							
NOTE: Samples are discarded upon completion of testing. If you would like the samples returned, please note that in the comments section above. Client is responsible for all shipping charges.							
An SDS is required for all materials submitted to the lab for testing. Testing will not begin until the SDS sheet is provided.						he	

¹Test reports are sent electronically to the email address indicated on this form. A hard copy is only provided upon request for an additional charge of USD 30.00 (postage included for mailing within the US only). Requests for updated, corrected, or re-issued reports or requests for additional hard copies of a test report will be billed at USD 60.00 per report.

ASTM C	370	Moisture Expansion	5 tiles – 1" x 4"	USD 430.00
ASTM C	C372*	Linear Thermal Expansion T from 86°F (30°C) to 212°F (100°C)	1 tile – any size	USD 340.00
ASTM C	C372*	Linear Thermal Expansion T from $-4^{\circ}\text{F} (-20^{\circ}\text{C})$ to 212°F (100°C)	1 tile – any size	USD 630.00
ASTM C	C373**	Water Absorption	5 whole tiles	USD 315.00
ASTM C	C424	Crazing Resistance Test performed as per ANSI A137.1 at 150-psi steam pressure for one cycle.	10 whole tiles. Contact the lab prior to the start of testing if a different testing procedure is desired.	USD 375.00
ASTM C	C482	Bond Strength	5 whole tiles	USD 485.00
ASTM (Modifie	C482 ed)	Bond Strength Tiles are bonded to a concrete substrate (or other substrate if specified by client) with thin-set mortar or other adhesive.	4 tiles per cure parameter – whole tiles – The client is responsible for sending or specifying what thin-set or adhesive to use. Any purchased materials will be re-billed to the client. Specify the thin-set or adhesive and curing time in the comments section on page 1.	USD 300.00
ASTM C	C484	Thermal Shock Resistance	5 whole tiles	USD 375.00
ASTM C	C499,	Warpage, Facial and Thickness Dimensions, and Wedging	10 whole tiles – For tiles with any side larger than 24" contact the lab for quotation. Also, please provide the nominal size.	USD 850.00
ASTM C	C501	Taber Abraser	4 tiles – 4" x 4"	USD 545.00
ASTM C	C609	Measurement of Light Reflectance Value and Small Color Differences	5 tiles – 4" x 4"	USD 545.00
ASTM C	C627	Robinson Floor	16 sq. ft. /all materials, except substrate. Please contact the lab for the additional form required for this test.	USD 2,120.00
☐ ASTM C		B 11 01 11	40 1 1 1	
	C648	Breaking Strength	10 whole tiles	USD 375.00
ASTM C		Chemical Resistance	10 whole tiles 15 tiles – 2" x 2"	USD 375.00
_	6650			
ASTM C	C1505	Chemical Resistance	15 tiles – 2" x 2"	USD 375.00
ASTM C	C1505 C895*	Chemical Resistance Modulus of Rupture Lead and Cadmium Extracted from Glazed	15 tiles – 2" x 2" 10 whole tiles	USD 375.00 USD 375.00
ASTM C	2650 21505 2895* 21026	Chemical Resistance Modulus of Rupture Lead and Cadmium Extracted from Glazed Ceramic Tile	15 tiles – 2" x 2" 10 whole tiles 6 whole tiles	USD 375.00 USD 375.00 USD 805.00
ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C Grawn AS	2650 21505 2895* 21026 21027 21028 (with- TM method— for comparison	Chemical Resistance Modulus of Rupture Lead and Cadmium Extracted from Glazed Ceramic Tile Freeze-Thaw (up to 300 cycles)	15 tiles – 2" x 2" 10 whole tiles 6 whole tiles 5 whole tiles	USD 375.00 USD 375.00 USD 805.00 USD 850.00
ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C Grawn AS available f	2650 21505 2895* 21026 21027 21028 (with- TM method— for comparison al data)	Chemical Resistance Modulus of Rupture Lead and Cadmium Extracted from Glazed Ceramic Tile Freeze-Thaw (up to 300 cycles) Surface Abrasion	15 tiles – 2" x 2" 10 whole tiles 6 whole tiles 5 whole tiles 16 tiles – 4" x 4"	USD 375.00 USD 375.00 USD 805.00 USD 850.00 USD 485.00
ASTM C drawn AS available to historica	2650 21505 2895* 21026 21027 21028 (with- TM method— for comparison al data) 21243	Chemical Resistance Modulus of Rupture Lead and Cadmium Extracted from Glazed Ceramic Tile Freeze-Thaw (up to 300 cycles) Surface Abrasion Static Coefficient of Friction (wet-dry)	15 tiles – 2" x 2" 10 whole tiles 6 whole tiles 5 whole tiles 16 tiles – 4" x 4" 3 tiles – 6" x 6" or larger	USD 375.00 USD 375.00 USD 805.00 USD 850.00 USD 485.00 USD 460.00
ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C ASTM C	2650 21505 2895* 21026 21027 21028 (with- TM method— for comparison al data) 21243 21378	Chemical Resistance Modulus of Rupture Lead and Cadmium Extracted from Glazed Ceramic Tile Freeze-Thaw (up to 300 cycles) Surface Abrasion Static Coefficient of Friction (wet-dry) Deep Abrasion	15 tiles – 2" x 2" 10 whole tiles 6 whole tiles 5 whole tiles 16 tiles – 4" x 4" 3 tiles – 6" x 6" or larger 5 tiles – 4" x 4"	USD 375.00 USD 375.00 USD 805.00 USD 850.00 USD 485.00 USD 460.00 USD 340.00

^{*}Tests marked with one asterisk may be outsourced to another laboratory. Please contact the lab for further information.
**If interested in this test for Porcelain Certification, you must fill out the Certified Porcelain Tile Testing form instead of this one.

ASTM G21	Resistance of Synthetic Polymeric Materials to Fungi	Contact the lab for sampling information.	USD 1,715.00
ANSI A326.3	Dynamic Coefficient of Friction (DCOF-wet only)	3 tiles – 10" x 10" or larger	USD 315.00
ANSI A326.3	Dynamic Coefficient of Friction (DCOF-dry only)	3 tiles – 10" x 10" or larger	USD 315.00
ANSI A326.3	Dynamic Coefficient of Friction (DCOF-wet & dry)	3 tiles – 10" x 10" or larger	USD 565.00
ASTM E1980	Solar Reflectance Index (SRI)	1 tile – 4" x 4" or larger	USD 650.00
DIN EN 16165 (formerly DIN 51130)	German Ramp Test (R Classification)	6 sq. ft. of tile	USD 515.00
ISO 10545-2	Warpage, Facial and Thickness Dimensions, and Wedging	10 whole tiles – For tiles with any side larger than 24", contact the lab for quotation. Also, please provide work size and thickness.	USD 850.00
ISO 10545-3	Water Absorption	5 whole tiles — Each test specimen must be at least 50 grams. If individual tiles are less than 50 grams, please provide enough tiles to create five, 50 gram samples made of multiple pieces of tile.	USD 315.00
ISO 10545-4	M.O.R. and Breaking Strength	10 whole tiles	USD 375.00
ISO 10545-5	Determination of Impact Resistance by Measurement of Coefficient of Restitution	5 tiles – 3" x 3"	USD 430.00
ISO 10545-6	Deep Abrasion Resistance	5 tiles – 4" x 4"	USD 340.00
ISO 10545-7	Surface Abrasion Resistance	16 tiles – 4" x 4"	USD 485.00
ISO 10545-8*	Linear Thermal Expansion	2 tiles	USD 375.00
ISO 10545-9	Thermal Shock Resistance	5 whole tiles	USD 375.00
ISO 10545-10	Moisture Expansion	5 tiles – 1" x 4"	USD 450.00
ISO 10545-11	Crazing Resistance	5 whole tiles	USD 375.00
ISO 10545-13	Chemical Resistance	24 tiles – 2" x 2"	USD 375.00
ISO 10545-14	Stain Resistance	5 whole tiles	USD 340.00

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PAYMENT INFORMATION

Payment is required in advance unless prior arrangements have been made.

PLEASE SELECT A PAYMENT METHOD							
ACH or Wire Transfer (Please contact accounting@IPALaboratories.com for bank information.)							
Check	Enclosed						
Credit	t Card						
CARI	TYPE	MASTERCARD	VISA	\	☐ AM	IERICAN EXF	PRESS
COMPANY	Y NAME						
BILLING A	ADDRESS						
CARD#				EXP. DATE	E	С	vv
CARDHOI	_DER'S NAME					AMOUNT	г
I authorize International Product Assurance Laboratories to charge the agreed amount listed above to my credit card provided herein. I agree that I will pay for this purchase in accordance with the issuing bank cardholder agreement. Cardholder please sign and date below:							
SIGNATU	RE				DATE		
SHIP MATERIALS TO:							
International Product Assurance Laboratories							

USA

100 Clemson Research Blvd.

Anderson, SC 29625



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International Product Assurance Laboratories TERMS & CONDITIONS FOR LABORATORY TESTING

These terms and conditions ("Terms & Conditions") apply to laboratory services ("Services") performed by Tile Council of North America, Inc. DBA International Product Assurance Laboratories ("IPA Laboratories") for its client ("Client").

- IPA Laboratories Services: A Client requesting Services should make a written order ("Order") using a testing form provided by IPA Laboratories or through such other written communication permitted by IPA Laboratories for this purpose. If IPA Laboratories accepts the Order, IPA Laboratories agrees to perform the Services and provide any corresponding deliverables, such as test reports, subject to these Terms & Conditions. These Terms & Conditions and any associated Order may be referred to as the "Agreement."
- 2. Payment: Client agrees to pay for IPA Laboratories' Services for the fees stated on the Order or as otherwise agreed in writing by the parties, including any associated costs, taxes, or other amounts. IPA Laboratories may require prepayment prior to performing the Services or providing any corresponding deliverables. Unless otherwise specified in writing, Client shall pay IPA Laboratories' invoice in U.S. Dollars and within 30 days of the date of IPA Laboratories' invoice(s). All invoices shall be subject to a monthly late charge of 1.5% per month beginning 30 days from the date of invoice, or the maximum amount allowed by law, whichever is lower, until paid in full. If Client fails to timely pay invoices or remit required payments, IPA Laboratories may cease providing Services, terminate this Agreement, and withhold providing to Client any deliverables. Client also agrees to pay all costs of collection of any amounts due, including IPA Laboratories' reasonable attorney fees.
- 3. Testing Materials: Client is responsible for sending to IPA Laboratories all properly-identified materials as requested by IPA Laboratories for completion of the Services. Client is responsible for shipping, including payment of any costs, duties, or tariffs and completion of any Customs-related documentation. Client understands that the materials may be damaged or destroyed in or after testing and that IPA Laboratories is under no obligation to return or retain them unless otherwise agreed in writing, though IPA Laboratories may, at its own discretion, retain the materials for its internal purposes. Client will inform IPA Laboratories of any applicable import/export restrictions, and Client will not provide any materials containing infectious agents, illegal, hazardous, or toxic substances or materials that are illegal to transport. If IPA Laboratories is required and able to source materials for performing the Services, including installation materials, it will do so as a convenience, charging Client for the cost plus a 20% convenience fee.
- 4. Timing: IPA Laboratories will perform the Services according to the time frames set forth in the Order or as otherwise agreed in writing. IPA Laboratories reserves the right to decline performing Services more quickly than its schedule can reasonably permit and the right to charge increased pricing for rush Orders.
- 5. Reports: The Services and reports provided by IPA Laboratories in connection with the Services shall be for the sole use of the Client and no one else, and are intended solely to provide the results of the specified test procedures as performed on the test subject material provided by the Client. Test reports may not be relied on for any other purpose. Client agrees that IPA Laboratories may include disclaimers on test reports confirming this understanding and other limitations of the testing. If Client publishes any report, it will publish the report in full, including any associated disclaimers and limitations of liability. If Client requests specific forms, types or amounts of reports be prepared that are outside of IPA Laboratories' typical practices, IPA Laboratories reserves the right to decline such requests and/or to increase the cost of the Services. IPA Laboratories is under no obligation to re-issue reports or update information in them, but may agree to do so upon Client's written request, acceptance of additional terms, and payment of any associated fee. Re-issued or updated reports may reflect the reasons for the update.
- 6. Subcontracting: IPA Laboratories reserves the right to involve and/or subcontract with other laboratories for some or all of the Services with reasonable prior notice to Client.
- 7. Cancellation: Either party may cancel the Services for any reason, or for no reason, including that IPA Laboratories may decline to provide Services if it believes performing the requested Services could damage test equipment, harm personnel, or violate IPA Laboratories' policies or any applicable law. If Client cancels the Services for any reason, or if IPA Laboratories cancels the Services due to Client's breach of this Agreement, Client shall be responsible for IPA Laboratories' fees and costs incurred through the time of cancellation using IPA Laboratories' prevailing rates. If Client has pre-paid for Services, IPA Laboratories will apply the pre-payment toward such fees and costs incurred and will hold any remaining balance as a credit toward further services or refund it, at the Client's
- 8. <u>Force Majeure:</u> Except for payment obligations, neither party shall be in breach of its obligations nor liable for delay in performing, or failure to perform, if such delay or failure results from events, circumstances or causes beyond its reasonable control (including a failure of Client to provide necessary materials, information, or cooperation, any industrial dispute affecting any third party, governmental regulations, fire, flood, disaster, civil riot, war, or pandemic). In such circumstances the affected party shall be entitled to a reasonable extension of the time for performing such obligations.
- 9. Confidentiality. In connection with the Services, a party (the "Disclosing Party") may disclose Confidential Information to another party (the "Recipient"). In the event of such disclosure, Recipient shall use the Confidential Information solely for purposes of performing the Services and, except as permitted by these Terms & Conditions and any corresponding Order, shall not disclose Confidential Information to any third parties (except that IPA Laboratories may make limited disclosures to subcontractors as may be necessary for their involvement in providing the Services, but will make reasonable efforts to minimize the disclosure and will take reasonable steps to confirm the subcontractors' obligations to maintain the confidentiality of the information). Recipient shall protect Confidential Information from unauthorized use or disclosure using a reasonable degree of care. "Confidential Information" means all non-public proprietary and confidential information of Disclosing Party that is clearly identified as confidential; provided, however, that Confidential Information does not include any information that: (a) is or becomes generally available to the public often han as a result of Recipient's material breach of these Terms & Conditions and any corresponding Order; (b) is obtained by Recipient on a non-confidential basis from a third party that, to Recipient's knowledge, was not contractually restricted from disclosing such information; (c) was in Recipient's possession prior to Disclosing Party's disclosure hereunder; or (d) was or is independently developed by Recipient without using any Confidential Information. Notwithstanding the foregoing, IPA Laboratories will not divulge details concerning the testing Services of Client to third parties (excepting subcontractors involved in providing the Services as set forth above) without obtaining Client's consent).
- 10. Record Retention & Requests: Unless otherwise agreed in advance in writing by the Parties, or as may be required by policies IPA Laboratories adopts in connection with standards and accreditation organizations, IPA Laboratories is under no obligation to retain Client information or reports after the Services have been completed. IPA Laboratories may retain documentation at its own discretion, including for regulatory purposes and to document work performed. In the event IPA Laboratories receives a request for production of information related to the Services, IPA Laboratories may, prior to and as a condition of production, direct the requesting party to obtain Client's permission or seek out Client's permission itself, unless IPA Laboratories reasonably and in good faith determines that disclosure is required without such permission. IPA Laboratories may make such productions without insisting on issuance of a formal subpoena or litigation request if, in IPA Laboratories' judgment, production would otherwise be required and proceeding in this manner is more cost-effective and reasonable from a business standpoint.
- 11. Relationship of the Parties: Nothing in this Agreement shall be construed to create a joint venture or partnership between the parties hereto, or a fiduciary, employee/employer, or agency relationship. No one other than IPA Laboratories or the Client (or their successors and permitted assignees) shall have any right to enforce this Agreement. Unless otherwise agreed in writing, IPA Laboratories retains all rights of ownership over concepts, ideas, inventions, or other intellectual property created by IPA Laboratories in connection with its performing of the Services.
- 12. Client Representations: Client represents that it has the authority to request the Services, provide IPA Laboratories with the materials to be tested, and be bound by these Terms & Conditions, and that no other licenses, permits, or permissions are required for IPA Laboratories to perform the Services.
- 13. Limited Warranty: IPA Laboratories warrants that it will perform the requested Services and provide the associated deliverables, including reports of any test procedures performed. However, IPA Laboratories makes no representation that any reports or other deliverables prepared will be accepted by any government, agency, or regulatory body. THESE TERMS & CONDITIONS SET OUT THE FULL EXTENT OF IPA LABORATORIES' OBLIGATIONS TO CLIENT. EXCEPT FOR THE LIMITED WARRANTY SPECIFIED HEREIN, ANY SERVICES, TESTING, RESULTS, REPORTS, DATA, AND DELIVERABLES ARE PROVIDED TO CLIENT "AS IS" WITHOUT ANY OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTY SPECIFIED HEREIN, ANY SERVICES, TESTING, RESULTS, REPORTS, DATA, AND DELIVERABLES ARE PROVIDED TO CLIENT "AS IS" WITHOUT ANY OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CLIENT'S SOLE REMEDY FOR A BREACH OF THIS WARRANTY SHALL BE TO HAVE IPA LABORATORIES SE-PERFORM THE SERVICES. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE LIMITED EXPRESS WARRANTY SET FORTH ABOVE FAILS OF ITS ESSENTIAL PURPOSE. IPA LABORATORIES' AGGREGATE LIABILITY IN RESPECT OF ANY CLAIMS ARISING OUT OF THIS AGREEMENT OR IPA LABORATORIES' SERVICES, WHETHER IN CONTRACT OR TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL IN NO CIRCUMSTANCES EXCEED THE AMOUNT CLIENT PAID TO IPA LABORATORIES FOR THE PARTICULAR SERVICES AT ISSUE. IN NO EVENT SHALL IPA LABORATORIES BE LIABLE TO CLIENT FOR ANY OTHER DAMAGES, INCLUDING ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES RESULTING, IN WHOLE OR IN PART, FROM ANY USE OF, REFERENCE TO, OR RELIANCE UPON IPA LABORATORIES' SERVICES OF THE POSSIBLITY OF SUCH DAMAGES, NOR SHALL IPA LABORATORIES RELATING TO OR ARISING FROM THIS AGREEMENT AND THE SERVICES BEING PROVIDED, EVEN IF ADVISED OF THE POSSIBLITY OF SUCH DAMAGES, NOR SHALL IPA LA
- 14. Indemnification: Client agrees to indemnify and hold harmless IPA Laboratories and its affiliates, their successors and assigns and each of their respective members, directors, officers, employees and agents (the "Indemnified Parties") against any and all losses, claims, actions, suits, demands, judgments, settlements, liabilities, damages and expenses (including attorneys' fees and costs) arising out of or claimed to have been caused directly or indirectly by (a) the Client's products, including their use or installation (b) the Client's (including its employees' or independent contractors') misuse of the Services, including misuse of any report or deliverable generated from the Services, or (c) the Client's actual or alleged breach of this Agreement.
- 15. Choice of Law: Disputes: This Agreement shall be governed by and construed in accordance with the laws of the State of South Carolina, United States of America, without reference to its choice of law rules. To the extent any party commences an action arising out of or related to this Agreement, the parties hereby consent to the exclusive jurisdiction of the federal and state courts of Anderson County, South Carolina for such actions, and Client hereby consents to personal jurisdiction and venue in such courts.
- 16. Notices: Any written notices required by these Terms & Conditions shall be sent to the parties at their respective contact information specified in the Order.
- 17. Entire Agreement: This Agreement represents the entire agreement between the Parties concerning the matter referenced herein and supersedes any prior written agreement between the Parties that conflicts. Any terms or conditions appearing on any Client documents or communications that differ from those contained herein shall be void and of no force or effect.
- 18. <u>Severability: Non-Waiver:</u> Should any provision of this Agreement be held invalid or unenforceable by any court of competent jurisdiction, the Parties desire that it be modified by the court to conform as closely as possible to its original intent without being invalid or unenforceable, and that in such form it be enforced. Invalidity or unenforceability of a provision herein shall not affect the validity or enforceability of any other provision herein. Failure to enforce any part of this Agreement by IPA Laboratories shall not be deemed a waiver of IPA Laboratories' right to enforce that provision in the future nor shall it be deemed a waiver of the entire Agreement or of any part thereof.
- 19. <u>Language:</u> These Terms & Conditions are provided in the English language, which shall govern its interpretation. If Client chooses to have the Terms & Conditions translated into another language for Client's own uses, Client shall ensure the translation is true and accurate. In any event, such translation shall be for convenience only and shall not control.