

# **Composite Panel Association (CPA)**

11/15/23

## **Data collection of TFL properties needed to develop a voluntary North American TFL standard.**

### **Section 1 – Thermally Fused Laminate (TFL) Project description**

The purpose of the project is to establish a recognized voluntary North American voluntary for TFL panels which provides a common basis for understanding throughout the industry and among and between those producing, specifying and using TFL panels.

CPA is requesting TFL producers, laminators and finished product manufacturers test their TFL panels in accordance with the five test methods listed in Section 4 and share the results with Gary Heroux at [gheroux@cpamail.org](mailto:gheroux@cpamail.org) by the end of February 2024.

Note that CPA has made modifications to the ISO 4585 standard for wear resistance, scratch resistance, cleanability and stain resistance and large ball impact. The light resistance method was not modified. CPA has developed a MS Excel spread delineating the changes made to the ISO 4586 protocols. This spreadsheet shall be followed by all technicians conducting the testing.

Starting immediately, CPA will pay for testing at any of the three qualified laboratories listed in Section 3. Other options include using an in-house laboratory or using the services of an independent laboratory with the client paying for the testing.

Note that all test results shared with CPA will be sanitized and handled in a confidential manner to provide anonymity.

It is important to obtain a good cross section representation of the many types of TFL in the marketplace today. Therefore, we ask that you provide a detailed description of the TFL panel as outlined in Section 5.

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## **Section 3 – Testing Laboratories**

The following testing laboratories have demonstrated proficiency with the CPA modified test methods. CPA will pay the laboratories below to conduct TFL testing for the five test methods listed in Section 4.

Test reports will be provided to the client and CPA. A photograph of the test specimen is required for test report.

### **Architectural Woodwork Institute (AWI)**

Contact Hunter Morrison at [hunter@awinet.org](mailto:hunter@awinet.org)

AWI provides only Large Ball Impact testing.

### **Hodges Wood Products Lab (North Carolina State University)**

Contact Lyndsey Campbell at [wp\\_techservices@ncsu.edu](mailto:wp_techservices@ncsu.edu)

Hodges provides testing to all five test methods.

### **Taber Industries**

Complete the “Test Request Form” starting on page 5 and send to Ethan Swarts at [Swarts\\_E@taberindustries.com](mailto:Swarts_E@taberindustries.com)

Taber provides Wear Resistance and Scratch Resistance testing.

## **Section 4 – Test Methods**

### **Cleanability/Stain Resistance – CPA Modified**

International Standard ISO 4586-2:2018-07 seventh edition, *High-pressure decorative laminates (HPL, HPDL) — Sheets based on thermosetting resins (usually called laminates) — Part 2: Determination of properties* shall be followed for Cleanability/Stain Resistance, Section 31, along with CPA modifications delineated in the accompanying MS Excel spreadsheet.

### **Large Ball Impact – CPA Modified**

International Standard ISO 4586-2:2018-07 seventh edition, *High-pressure decorative laminates (HPL, HPDL) — Sheets based on thermosetting resins (usually called laminates) — Part 2: Determination of properties* shall be followed for Large Ball Impact, Section 25, along with CPA modifications delineated in the accompanying MS Excel spreadsheet.

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## Light Resistance – ISO Standard – no modifications

International Standard ISO 4586-2:2018-07 seventh edition, *High-pressure decorative laminates (HPL, HPDL) – Sheets based on thermosetting resins (usually called laminates) – Part 2: Determination of properties* shall be followed for Light Resistance Lightfastness (xenon arc)(Method B) test method in accordance with Section 33 without any modifications.

## Scratch Resistance – CPA Modified

International Standard ISO 4586-2:2018-07 seventh edition, *High-pressure decorative laminates (HPL, HPDL) – Sheets based on thermosetting resins (usually called laminates) – Part 2: Determination of properties* shall be followed for resistance to scratching, Section 29, along with CPA modifications delineated in the accompanying MS Excel spreadsheet.

## Wear Resistance – CPA Modified

International Standard ISO 4586-2:2018-07 seventh edition, *High-pressure decorative laminates (HPL, HPDL) – Sheets based on thermosetting resins (usually called laminates) – Part 2: Determination of properties* shall be followed for resistance to wear, Section 11, along with CPA modifications delineated in the accompanying MS Excel spreadsheet.

## Section 5 - Description and specifications of test material

Please provide a written description of the TFL panel including as many characteristics of the list below as possible.

Color – example, solid white, printed décor “oak wood grain”

Paper – expressed in grams per square meter (gsm)

Substrate board type – example, particleboard or MDF

Texture:

- Smooth <40 um
- Wood grain  $\geq 40$ um to  $\leq 79$  um
- Deep >80 um

Gloss – measured in gloss unit (GU)

- Super matte <10 gloss points
- Medium  $\geq 10$  to  $\leq 40$  gloss points
- High >40 gloss points

TFL panel thickness – measured in inches or millimeters

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## **Section 6 – Test Specimen Dimensions and Quantity**

Consult with the testing laboratory to determine the required quantity of testing material to be shipped.

For example purposes:

- Large ball impact only
  - 4 samples of 12" x 12" or 2 samples of 24" x 24"

Questions about the TFL data collection project should be addressed to Gary Heroux at [gheroux@cpamail.org](mailto:gheroux@cpamail.org).

# TEST REQUEST FORM

Please type or print in BLOCK LETTERS

Company \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Contact Person \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ Email \_\_\_\_\_

**SAMPLE INFORMATION:** (Indicate correct side to test)

Description \_\_\_\_\_

Item Reference \_\_\_\_\_ Lot Number(s) \_\_\_\_\_

Remarks \_\_\_\_\_

**INSTRUCTIONS:** (To be completed by Client)

Date Submitted: \_\_\_\_\_

Type of Services Requested:

☐ Product Testing☐ Round-Robin Testing☐ Comparison Testing☐ Test Specification Development☐ Customer Complaint (specify)☐ Other (specify) \_\_\_\_\_

Test(s) Required \_\_\_\_\_

Follow Test Standard / Method: \_\_\_\_\_ (If client test specification, please attach copy)

Remarks \_\_\_\_\_

☐ Call to discuss applicable tests☐ Quotation requested prior to testingReturn sample ☐ No ☐ Yes, please use my shipping account number \_\_\_\_\_

NOTE: If no account number is provided, samples will be returned UPS Ground PP&amp;A. FedEx shipments will be FedEx Express Saver unless otherwise specified. FedEx Ground is not available.

☐ Expedited Service\* (5 Business days from Receipt of sample, 50% premium)

\* NOTE: Special requests may require additional time

We request the above testing and/or services and agree to pay all charges at time of service unless otherwise agreed upon by Taber Industries. This test request is subject to the Conditions of Testing.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Please include a completed test request form with each package of samples and send to:



**TABER Industries**  
455 Bryant Street  
North Tonawanda, New York 14120  
Tel: (716) 694-4000 Fax (716) 694-1450  
Email: sales@taberindustries.com

**Lab Use Only – Review of Request**

- ☐ Are requirements defined, documented and understood?
- ☐ Does the lab have the capability and resources to meet the requirements?
- ☐ Was the appropriate method selected and is it capable of meeting the clients' requirements?

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

## IMPORTANT INFORMATION

- 1). Testing charges are estimated on current pricing and time to complete tests. For training and / or observed testing, the minimum hourly fee is \$150.
- 2). It is not recommended to base decisions on the result of a single test. The average of 3 to 5 tests made on specimens from different areas of the same sample provides a greater confidence in the results. Surface imperfections may influence test results. Be certain to select material that is free of creases, dents and other surface defects.
- 3). Specimens should be received in "ready-to-test" condition as noted above. A specimen preparation charge will apply to any sample that requires additional preparation.
- 4). Specimens must be plainly identified (e.g. identifier; side to be tested; machine direction; etc.).
- 5) Specimens that consist of a rough surface (e.g. non-skid) may incur an additional charge to cover the cost of Genuine Taber wheels.
- 6). Protect specimens during transportation by carefully packing each specimen so it will not be compromised. For flat materials, be certain the specimen surface is not able to 'rub' against another surface during transportation.
- 7). If unable to specify details of instrument set-up, submit sufficient information regarding service requirements of the material to enable our laboratory to determine the most satisfactory test set-up. In such instances, extra sample material must be furnished.
- 8). Data supplied regarding a material's composition, treatment and use will be considered proprietary information and regarded as confidential.
- 9). SDS must be supplied for approval prior to submitting sample material. Materials that are hazardous or cannot be disposed of through normal means may be rejected.

## CONDITIONS OF TESTING

1. All orders for tests are subject to acceptance by Taber Industries (Company), and no order will constitute a binding obligation of the Company until such order is accepted by it, as evidenced by the issuance of a written report ("Test Report") by the Company.
2. All export orders are subject to a \$50.00 Documentation / Processing charge.
3. Use of the Company's corporate name, trademarks and copyrights for advertising or other purposes is not permitted without the Company's prior written authorization. These include, but are not limited to, Taber, Calibrase, Calibrade, Wearaser.
4. The Client will inform Company in advance of all known hazards and dangers, actual or potential, associated with any order or samples.
5. The Company will provide services using reasonable care and skill and in accordance with Client's specific instructions. The Company represents that the Test Report will be free of error or omission caused by the negligence of the Company. Should the Client claim that the Test Report is inaccurate, incomplete or misleading or that additional or different testing is required, the Client will submit a written claim to the Company within 60 days after the date of issuance of the Test Report. The Company, at its option, may either (a) re-perform the deficient test, without charge to Client, or (b) refund to Client, without interest, the fee paid to the Company for such Test Report.
6. The Test Report will set forth the results of the tests performed by the Company. The information stated in the Test Report is derived from the results of inspection or testing procedures carried based upon the written instructions of client, and/or any technical standards, trade practices, or other circumstances which should in our opinion be taken into account. The Test Report will set forth the findings of the Company solely with respect to the test specimens evaluated, and do not express any opinion upon the lot from which the samples were drawn. The Test Report will reflect the findings of the Company at the time of testing only, and the Company shall have no obligation to update the Test Report after its issuance.
7. The Test Report is intended for the exclusive use of Client and shall not be published, used for advertising purposes, copied or replicated for distribution to any other person or entity or otherwise publicly disclosed without the prior written consent of the Company.
8. Client will be billed a handling and freight fee if samples are requested to be returned. The Company may, in its sole discretion, destroy materials which were furnished to the Company for testing and which were not utilized in the course of testing. Storage of samples at the Client's request shall incur a storage charge payable by Client.
9. Payment terms are Net 30 days with credit approval. Clients requesting terms must wait until credit is approved / denied before test request is considered.

10. EXCEPT TO THE EXTENT OF THE LIMITED WARRANTY SET FORTH HEREIN, NO WARRANTY OR GUARANTEE EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, IS MADE. IN NO EVENT WHATSOEVER SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES IN CONNECTION WITH OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER, INCLUDING WITHOUT LIMITATION LOSS OF OR DAMAGE TO PROPERTY, LOSS OF INCOME, PROFIT OR USE, OR CLAIMS OR DEMANDS MADE AGAINST CLIENT OR ANY OTHER PERSON BY ANY THIRD PARTY IN CONNECTION WITH OR ARISING OUT OF THE SERVICES PROVIDED BY THE COMPANY HEREUNDER. NOTWITHSTANDING ANY PROVISION TO THE CONTRARY CONTAINED HEREIN, UNDER NO CIRCUMSTANCES WHATSOEVER SHALL THE LIABILITY OF THE COMPANY IN RESPECT OF ANY CLAIM FOR LOSS, DAMAGE OR EXPENSE, OF WHATEVER NATURE OR MAGNITUDE, AND HOWEVER ARISING, EXCEED AN AMOUNT EQUAL TO THE AMOUNT IN FEES PAID TO THE COMPANY FOR THE SPECIFIC SERVICES WHICH GAVE RISE TO SUCH CLAIM.

11. The Company shall not be liable for any loss or damage whatsoever resulting from the failure of the Company to provide its services within any time period for completion estimated by the Company. If Client anticipates using the Test Report in any legal proceeding, arbitration, dispute resolution forum or other proceeding, it shall so notify the Company prior to submitting the sample for testing. The Company shall not be liable for any loss or damage resulting from any delay or failure in performance of its obligations hereunder resulting directly or indirectly from any cause that is beyond the control of the Company, including, but not limited to, fire, flood, tornado, hurricane or other acts of God, war, casualty, accident, embargo, governmental actions, orders of courts or tribunals, non-performance of third parties, strike, lock-out, or other difficulties with employees, inability to obtain labor, material, equipment or services through the Company's usual sources or delays of carriers. If any such event occurs, the Company may immediately cancel or suspend its performance hereunder without incurring any liability whatsoever to Client.

12. In the event any unforeseen problems or expenses arise in the carrying out the services, the Company shall inform Client and shall be entitled to charge additional fees to cover extra time and cost necessarily incurred to complete the services.

13. Conditions of Testing shall be governed by, and construed in accordance with, the laws of the Commonwealth of New York. Any proceeding related to the subject matter hereof shall be brought, if at all, in the courts of the Commonwealth of New York.