

FIRE PERFORMANCE

Objective: Fire performance testing of High Pressure Decorative Laminates (HPL) assesses reaction to fire characteristics including ignition resistance, flame spread, heat release, fire propagation, and smoke development to determine overall fire behaviour in building applications.

Validation: Testing is conducted in ISO/IEC 17025 accredited laboratories under ILAC recognition, in accordance with EN 13501, EN 13823, ISO 11925, BS 476 Part 6 & Part 7, UL 94, ASTM E84, and CE requirements for Constancy of Performance.

Results: The certified results classify the fire performance of HPL and confirm compliance with applicable international fire safety standards for safe interior and construction use.

CE Certificate – Constancy of Performance

Description: This certification confirms that the product consistently maintains its declared performance and complies with CE requirements.



Standard: Regulation (EU) No. 305/2011 – Construction Products Regulation (CPR)

Test Result: Performance classified and verified as per declared reaction to fire requirements under CE marking.

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/ce-certificate-constancy-of-performance.pdf>

Reaction to Fire

Description: Classification of HPL based on their reaction to fire performance, including flame spread, heat release, and smoke production when exposed to fire.



Standard: EN 13501

Test results: Classified as B-s1, d0 indicating very limited contribution to fire (Class B), very low smoke production (s1), and no flaming droplets or particles (d0).

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/en-13501-reaction-to-fire-test.pdf>

SBI Test (Single Burning Item)

Description: This test evaluates fire growth, heat release, and smoke production under a simulated real fire scenario.



Standard: EN 13823

Test results: Complies

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/en-13823-sbi-test.pdf>

Ignitability Test

Description: This test determines how easily HPL ignite when exposed to a small direct flame.

Standard: ISO 11925

Test results: Complies.

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/iso-11925-ignability-test.pdf>



Fire Propagation Index

Description: This test measures the contribution of HPL to fire growth by evaluating heat release and flame spread characteristics under standardized conditions.

Standard: BS 476, Part 6

Test results: Complies

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/bs-476-part-6-fire-propagation-index.pdf>



Surface Spread of Flame

Description: This test assesses how quickly flames spread across the surface of the material.

Standard: BS 476, PART-7

Test results: Class 1 — Complies.

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/bs-476-part-7-spread-of-flame.pdf>



Flame Spread Index and Smoke Development Index

Description: This test measures the rate of flame spread and the amount of smoke generated during fire exposure.

Standard: ASTM E84

Test results: FSI = 25; SDI = 150 — Complies.

Link to Download Results: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/astm-e84-flame-spread-smoke-development-index.pdf>



Vertical Burning Test

Description: This test evaluates the material's ability to self-extinguish and resist vertical flame spread.

Standard: UL 94

Test results: No flaming drips; self-extinguished within specified time limits —
Complies.

Link to Download Result: <https://www.virlaminate.com/assets/pdf/certifications/fire-performance/ul-94-vertical-burning-test.pdf>

