

SCHEDA INFORMATIVA PRODOTTO
INFORMATIVE TECHNICAL SHEET
PRINT HPL LABGRADE

Materiale autoportante costituito da strati di carta kraft impregnata con resine termoindurenti e da uno o più strati superficiali di carta decorativa impregnata con resine aminoplastiche, pressati a 9 MPa e a 150 °C. La superficie non è tossica, è chimicamente inerte e fisiologicamente sicura, provata per contatto con gli alimenti. Per la sua alta resistenza agli agenti chimici, è particolarmente adatto per l'impiego in laboratori fisici e chimici, fotografici, cosmetici, elettronici, nucleari, per scuole e per cucine industriali.

Self-supporting material consisting of layers of kraft paper impregnated with thermosetting resins and layers of decorative paper impregnated with aminoplastic resins; all bonded together by means of high pressure (9 MPa) and heat (150 °C). The surface is non-toxic, chemically inert and physiologically safe. It is approved for use in contact with foodstuffs. For its outstanding resistance to chemicals, it is particularly suitable for applications in chemistry, physics, photographics, cosmetics, electronics and nuclear laboratories, for schools and industrial kitchens.

CARATTERISTICA PROPERTY	METODO DI PROVA TEST METHOD (EN 438: 2005)	CRITERIO DI VALUTAZIONE PROPERTY or ATTRIBUTE	UNITA' DI MISURA UNIT	VALORE VALUES
Spessore <i>Thickness</i>	EN 438-2.5	spessore <i>thickness</i>	mm	$2,0 \leq s < 3,0$ $\pm 0,20$ $3,0 \leq s < 5,0$ $\pm 0,30$ $5,0 \leq s < 8,0$ $\pm 0,40$ $8,0 \leq s < 12,0$ $\pm 0,50$ $12,0 \leq s < 16,0$ $\pm 0,60$ $16,0 \leq s < 20,0$ $\pm 0,70$ $20,0 \leq s \leq 25,0$ $\pm 0,80$
Tolleranza di planarità <i>Flatness</i>	EN 438-2.9	deformazione <i>deviation</i>	mm/m	1 lato decorativo $s = 3,0$ ≤ 50 2 lati decorativi $6,0 \leq s < 10,0$ $\leq 5,0$ $10,0 \leq s$ $\leq 3,0$
Resistenza all'abrasione <i>Resistance to surface wear</i>	EN 438-2.10	res. all'abrasione <i>wear resistance</i>	giri <i>revs</i>	$IP \geq 150$ $A \geq 350$
Res. all'immersione in acqua bollente <i>Resistance to immersion in boiling water</i>	EN 438-2.12	aumento massa <i>mass increase</i>	%	$2 \leq t < 5$ ≤ 5 $5 \leq t$ ≤ 2
		aumento spessore <i>thickness increase</i>	%	$2 \leq t < 5$ ≤ 6 $5 < t$ < 2
		aspetto <i>appearance</i>	grado <i>rating</i>	≥ 4
Resistenza al calore secco (180° C) <i>Resistance to dry heat</i>	EN 438-2.16	aspetto <i>appearance</i>	grado <i>rating</i>	≥ 4
Resistenza al calore umido (100° C) <i>Resistance to wet heat</i>	EN 12721	aspetto <i>appearance</i>	grado <i>rating</i>	≥ 4
Stabilità dimensionale alle temperature elevate <i>Stability at elevated temperature</i>	EN 438-2.17	variazione dimensionale cumulativa <i>cumulative dimensional change</i>	% long. long. % trasv. transv.	$s = 3$ $\leq 0,40$ $\leq 0,80$
			% long. long. % trasv. transv.	$s \geq 6$ $\leq 0,30$ $\leq 0,60$
Res. all'urto con sfera di grande diametro <i>Res. to impact by large diameter ball</i>	EN 438-2.21	altezza di caduta <i>drop height</i>	mm	$s = 3$ ≥ 1.400 $s \geq 6$ ≥ 1.800
		diametro impronta <i>indentation diameter</i>	mm	≤ 10
Resistenza al graffio <i>Resistance to scratching</i>	EN 438-2.25	forza <i>force</i>	grado <i>rating</i>	≥ 3

Solidità dei colori alla luce <i>Lightfastness</i>	EN 438-2.27	contrasto <i>contrast</i>	grado scala grigi <i>grey scale rating</i>	≥ 4
Resistenza alle bruciature di sigaretta <i>Resistance to cigarette burns</i>	EN 438-2.30	aspetto <i>appearance</i>	grado <i>rating</i>	≥ 3
Resistenza al vapore d'acqua <i>Resistance to water vapour</i>	EN 438-2.14	aspetto <i>appearance</i>	grado <i>rating</i>	≥ 4
Resistenza elettrica <i>Electrical resistance</i>	EN 61340-4-1	RV (23° C / 50% RH)	Ohm	1x10 ⁹ - 1x10 ¹¹
Conduttività termica <i>Thermal conductivity</i>	DIN 52 612	-	W/m . ° K	0,25
Coefficiente dilatazione termica lineare <i>Coefficient of linear thermal expansion</i>	ASTM D 696	-	° C -1	L = 1,6 x 10 ⁻⁵ ca. T = 3,5 x 10 ⁻⁵ ca.
Resistenza a trazione <i>Tensile strength</i>	EN ISO 527-2	forza <i>stress</i>	Mpa	L ≥ 100 T ≥ 70
Resistenza a flessione <i>Flexural strength</i>	EN ISO 178	forza <i>stress</i>	Mpa	L ≥ 100 T ≥ 90
Modulo di elasticità a flessione (E) <i>Flexural modulus (E)</i>	EN ISO 178	forza <i>stress</i>	Mpa	L ≥ 10.000 T ≥ 9.000
Densità <i>Density</i>	ISO 1183	densità <i>density</i>	gr/cm ³	≥ 1,35
Resistenza ai prodotti chimici <i>Resistance to chemical products</i>	vedere lista dépliant Labgrade <i>cfr list in Labgrade brochure</i>			

Note: Il Print HPL Labgrade è trasparente ai raggi X e non subisce apprezzabili variazioni all'esposizione dei raggi UV e IR per applicazioni sanitarie e ospedaliere.

Note: Print HPL Labgrade is transparent to X rays and does not undergoes significant variations if exposed to UV and IR rays in sanitary and hospital applications.

COMPORTAMENTO AL FUOCO FIRE PERFORMANCE

METODO DI PROVA <i>TEST METHOD</i>	NORMA <i>STANDARD</i>	CLASSIFICAZIONE <i>CLASSIFICATION</i>	
		CGF	CGS
Piccola fiamma e pannello radiante <i>Small flame and radiant panel</i>	UNI 8457 - UNI 9174 UNI 9177	classe 1	classe 2
Propagazione di fiamma <i>Spread of flame</i>	BS 476-7	classe 1 <i>class 1</i>	classe 2 <i>class 2</i>
Brandschacht	DIN 4102-1	B1	B2
Epiradiatore <i>Epiradiateur</i>	NF P 92-501	M1	min M3
Densità e tossicità fumi <i>Smoke density and toxicity</i>	NF F 16-101	min F2	min F2
Reazione al fuoco <i>Reaction to fire</i>	EN 13501-1	B-s2,d0 (≥ 6 mm) min C-s2,d0 (< 6 mm)	min D,s2-d0

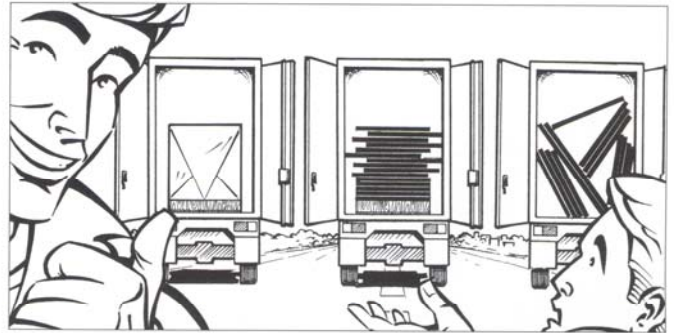
Nota: Si consiglia di contattare il produttore per dettagli sui rapporti delle prove di comportamento al fuoco e sui certificati ottenuti e per informazioni sui metodo di prova di comportamento al fuoco e relative specifiche

The laminate manufacturer should be contacted for details of fire test reports and certifications held, and for information on fire test methods and specifications.

SPECIAL CARE FOR COMPACT LAMINATE

TRANSPORTATION OF MATERIAL

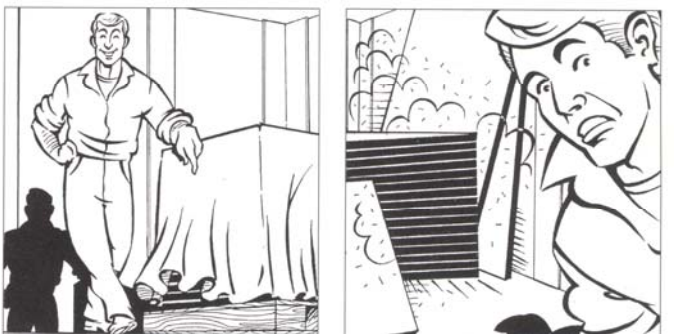
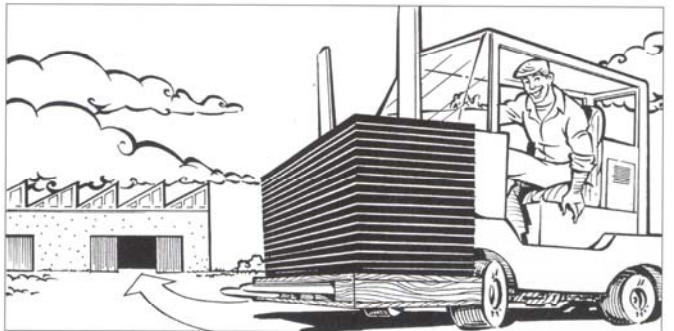
- Always transport the panels on flat, stable pallets and secure the panels so that they do not slip.
- Make sure that the panels do not slide over each other during loading and unloading operations. Lift them by hand or by means of a suction cup hoisting device.
- Dirt, foreign bodies and sharp edges rubbing against the surfaces can cause damage.



STORAGE OF MATERIAL

Material that is stored in the wrong position may be deformed, even permanently.

- Store the panels in a closed place where normal climatic conditions are guaranteed (temperature between 10° and 30° C and 40 - 65 % RH).
- Stack the panels on top of each other on a flat base: never stand the panels on edge. Cover the uppermost panels with a slab or sheet of polythene.
- The protective film, if applied, must be removed simultaneously from the surfaces.



CONDITIONING AND USE

Before machining, the panels should be treated in the conditioning bay for at least 10 days. Machining operations (i.e. cutting, drilling, routing, etc.) should be done on the back (not at sight) side of the panel, in order to avoid using the most at risk side as a surface. For further instructions, please refer to the brochure, technical documents and specific informative sheets.

