

**LAMCO HPL METALLI (MTS-MTP)
(EN 438-8)**

Material consisting of layers of kraft paper impregnated with thermosetting resins and of a lacquered aluminium foil on the surface;
all is pressed and bonded together by means of high pressure ($P \geq 7\text{MPa}$) and heat ($T \geq 120^\circ\text{C}$).

PROPERTY	TEST METHOD (EN 438-2:2016)	PROPERTY OR ATTRIBUTE	UNIT	VALUE
Thickness (t)	EN 438-2.5	thickness	mm	$0,5 \leq t \leq 1,0 \pm 0,15$ $1,0 < t < 2,0 \pm 0,18$
Resistance to immersion in boiling water	EN 438-2.12	appearance	core delamination	pass no delamination of the core
Resistance to water vapour	EN 438-2.14	appearance	rating	≥ 3
Dimensional stability at elevated temperature	EN 438-2.17	cumulative dimensional change	% long.(L) % transv.(T)	$\leq 0,75$ $\leq 1,25$
Resistance to cracking	EN 438-2.23	appearance	rating	≥ 4
Resistance to scratching	EN 438-2.25	appearance	rating	≥ 1
Resistance to staining	EN 438/2.26	appearance groups 1,2 e 3	rating	≥ 4
Light fastness ⁽¹⁾	EN 438-2.27	contrast	grey scale rating	≥ 4
Formability (type MTP)	EN 438/2.32	radius	mm	*(see annex)
Density	ISO 1183	density	gr/cm ³	$\geq 1,35$

- (1) Extraneous darkening and/or photocromism are due to the shock effect of accelerated exposure and are not characteristics of natural exposure.
- vertical indoor applications only
- not advised in areas with high humidity rate
- pay attention to the direction of the finish

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ANNEX

Balancing. Because LAMCO^{HPL} METALLI has different physical characteristics from LAMCO^{HPL}, it is advisable for composite panels to use one material on both sides, to obtain a balanced panel . When using other materials as a balancer, including LAMCO^{HPL}, it will be necessary to carry out preliminary tests.

Gluing. It is possible to glue this material to the same cores commonly used for LAMCO^{HPL}, using the same types of glue. During the gluing operation in hot presses, a temperature of 60° C must not be exceeded. The recommended pressure is 1.5 - 2.0 kg/cm². A protective sheet between the press top and the metal surface must be used.

***Formability.** It is not possible to state precise instructions for every different postforming technology, so it is advisable to carry out preliminary bending tests. This will be helpful to determine the correct conditions of one's own bending machine in reference to the material being used. Generally, these laminates may be bend on stationary bending machines for HPL, with conventional rod at lower temperatures than those applied for LAMCO^{HPL} Postforming. The decorative surface must not come into contact with the heating rod; the same is valid for heating by infra-red rays. The advice concerning LAMCO^{HPL} Postforming have not to be considered as a reference for this particular material.