



LAMILUX High Impact

innovative fiberglass solutions

Description

With the fiber reinforced composite LAMILUXplan High Impact, it has been possible to combine the most compelling product advantages of three major construction materials in commercial vehicle design. It has the impact resistance and surface appearance of polished metal facings (such as aluminum, for example) while at the same time possessing the low thermal conductivity and elastic deformability of thermoplastic materials and having the high resistance to UV, weathering and corrosion and the rigidity, stability and low specific mass per unit area of thermosetting polymers. LAMILUXplan High Impact at the same time compensates for the disadvantages of the materials, such as the susceptibility of metals to corrosion and the poor paintability of thermoplastics.









Commercial vehicles - Side walls

LAMILUX High Impact is available

- in thicknesses of 0.8 mm 1.6 mm and in width up to 3.20 m
- in sheets or coils
- with smooth, corona treated or sanded reverse side
- in serveral colors: RAL, NCS or customized colors
- · other thicknesses, colors and dimensions on request

Specific advantages

- combines the strengths of several constructions materials; metals, thermoplastics and duroplastics
- high impact strength at low weight
- superior tensile and flexural strength and e-moduli
- excellent UV- and weathering stability
- no splintering caused by overstress

Application

- light weight constructions
- construction panels
- vehicle constructions
- building industry

Technical Values for LAMILUX High Impact 1.4 mm

Technical dates and mechanical properties LAMILUX Anti Slip	Test method	
Thickness	Internal	1.4 mm
Weight	Internal	2250 g/m ²
Glass content	Internal	48-52 %
Flexural strength	DIN EN ISO 14125/WKII	305 N/mm ²
Flexural e-modulus	DIN EN ISO 14125/WKII	8550 N/mm ²
Tensile strength	DIN EN ISO 527-4/2/2	240 N/mm ²
Tensile e-modulus	DIN EN ISO 527-4/2/2	14700 N/mm ²
Impact strength	Charpy ISO 179/2n	82 KJ/m ²

Please note the following product use information:

Products manufactured by LAMILUX will provide a clean, aesthetically-pleasing finished installation. However, by nature, fiberglass reinforced plastic panels may occasionally have small areas that are aesthetically unacceptable for use. Panels should be inspected on-site prior to installation or lamination and original LAMILUX skid tag/ticket number removed and retained. If any portion of material will not provide an acceptable appearance, LAMILUX should be notified at once. Please report the non-conforming product utilizing the retained skid tag/ticket number. Upon verification of unacceptability, LAMILUX will replace or refund the purchase price of the non-conforming product.

Storage requirements

Keep contents dry. Store indoors in a well ventilated area. Exposure to moisture will cause discoloration and lead to poor adhesive bonding

Lamination

LAMILUX recommends that the moisture content of lauan substrate be not greater than 12% at the time of lamination and that the glue coverage between the LAMILUX panel and the substrate be 100% coverage at the weight and thickness recommended by the adhesive manufacturer. Prior to lamination, the frp panel must be free of dust moisture, particulates, or backside contaminates to ensure 100% bond. The quality of the substrate surface must also be free of dust or particulates prior to lamination. LAMILUX will not be responsible for any loss resulting from substrated lamination processes.

Testing has indicated that non-lauan substrates, such as layered paper based products, do not perform well and may cause failure between the panel and the substrate.

After lamination, the substrate must not be subjected to water intrusion or leakage as this may cause delamination and/or gel-coat blistering, which will not be covered under warranty.

Sidewall construction without substrates

LAMILUX should be consulted before specifying and installing any substrate-free product.

maximum bend radius specified on the product technical data sheet

Minimum bend radius

LAMILUX recommends all radius bends be supported by a solid substrate and not exceed the

Dark colors

Dark colors, whether gel-coated or painted, will affect panel performance. Dark colored panels should be tested for performance under all appropriate conditions to make sure such colors will meet the requirements of the application. Dark colors may cause excessive heat build-up on the panel resulting in possible sidewall rippling, delamination, cracking, or decal failure.

Applying decals and paint finishes

Be aware that the application of certain paint or decal film color, normally those with a darker appearance, may cause excessive heat build-up on the panel resulting in possible sidewall rippling, delamination or cracking. Dark colored panels should be tested under all appropriate conditions to make sure such colors will meet the requirements of the application. The use of a heat gun to apply or remove decals is not recommended as it will cause cracking of the gel-coat finish and will void this warranty.

Color change

All products, when exposed to weathering and sunlight, change color over time as part of the aging process.

Staining statement

Some staining/discoloration may occur to frp liner panels after they have been in service for several years. This is a normal wear condition. As long as acceptable cleaning methods are used, the surface should remain sanitary and acceptable.

Nonwarrant

We believe all information given is accurate. It is offered in good faith, but without guarantee. Since conditions of use are beyond our control, all risks are assumed by the user. Nothing herein shall be construed as a recommendation for uses that infringe on valid patents or as extending a license under valid patents.

Declaration of agreement Rev. 03/2012