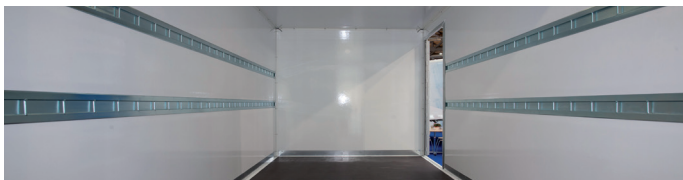


LAMILUX High Strength X-treme

innovative fiberglass solutions

Description

LAMILUX High Strength X-treme is a fiberglass product based on a high strength resin system and excellent glass content. It represents a newly developed material to achieve superior tensile and flexural moduli and strengths. Due to the high glass content the material exhibits low coefficients of thermal expansion. For exterior we recommend the use of a gelcoat application.



Commercial vehicles - interior



Sports industry

LAMILUX High Strength X-treme is available

- in thicknesses of 0.5 mm - 2.0 mm and in width of 2,50m
- with uni, bi (0°/90°, ±45°) and multiaxial fabric reinforcement
- in sheets or coils
- with smooth, corona treated or sanded reverse side
- with optional gelcoat for excellent UV-resistance
- in various colors: RAL, NCS or customized colors
- other thicknesses, dimensions and colors on request

Specific advantages

- superior tensile and flexural strength
- low thermal expansion coefficient
- consistently high quality thanks to continuous manufacturing process
- very good impact and light-weight potential

Application

- Light weight constructions
- Truck-flooring
- sports industry

Technical Values for LAMILUX High Strength X-treme

| Technical dates and mechanical properties LAMILUX High Strength X-treme | Test method | | Uniaxial fabric | Biaxial fabric |
|--|----------------------|-----------------------------|--|--|
| Thickness | Internal | | 1.4 mm | 1.3 mm |
| Weight | Internal | | 2700 g/m ² | 2400 g/m ² |
| Glass content | Internal | | 79 % | 71 % |
| Flexural strength | DIN EN ISO 14125 | longitudinal transversal | 1200 N/mm ² 110 N/mm ² | 400 N/mm ² 750 N/mm ² |
| Flexural modulus | DIN EN ISO 14125 | longitudinal transversal | 42200 N/mm ² 11000 N/mm ² | 14000 N/mm ² 21500 N/mm ² |
| Tensile strength | DIN EN ISO 527-4/2/2 | longitudinal transversal | 1100 N/mm ² 80 N/mm ² | 140 N/mm ² 410 N/mm ² |
| Tensile modulus | DIN EN ISO 527-4/2/2 | longitudinal transversal | 47500 N/mm ² 11000 N/mm ² | 14000 N/mm ² 2900N/mm 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 contaminants 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 sub-standard 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.

Minimum bend radius

LAMILUX recommends all radius bends be supported by a solid substrate and not exceed the maximum bend radius specified on the product technical data sheet.

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.

Nonwarranty

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.