



**FIBREGLASS REINFORCED
LAMINATES**





Carate Brianza (Milan) - Italy - Headquarters



FIBREGLASS LAMINATES IN ROLLS AND SHEETS SINCE 1962

For over 60 years, Brianza Plastica has been a leading European manufacturer of fibreglass laminates used in a wide variety of sectors, ranging from construction and agriculture to transport and specialised applications.

Drawing on the extensive expertise acquired over the years, and responding to increasing demand for high-quality laminates in the commercial and recreational vehicle sectors, Brianza Plastica inaugurated a **discontinuous cold lamination process** for **Elycold** production at its new Rovigo factory in 2006.

In 2008, at its headquarters in Carate Brianza, the company introduced the production of **Elyplan**, a high-quality laminate manufactured using a **continuous hot lamination process**.

This continuous product continues to offer an excellent performance-to-price ratio, making **Elyplan** an ideal alternative to products made using discontinuous cold lamination.

Following the acquisition of a new complex in Ostellato in 2009, Brianza Plastica expanded its production capacity. The success of this new facility led to further investments in the development of products for the temperature-controlled transport sector.

San Martino di Venezze (Rovigo) - Italy - Site 1



San Martino di Venezze (Rovigo) - Italy - Site 2



Ostellato (Ferrara) - Italy



Elkhart (Indiana) - USA



ENVIRONMENTAL SUSTAINABILITY

Manufacturing with respect for people and the environment

- In 2020, the Company adopted the UNI EN ISO 14006 guidelines on Eco Design.
- The Company has equipped its manufacturing facilities with powerful extraction systems that purify the indoor working environment by conveying the solvents generated during production to highly advanced abatement systems.
- In 2020, the Company partnered with a leading waste management specialist to add value to the end-of-life cycle of its fibreglass waste and manufacturing residues. Thanks to this collaboration, almost all of the waste coming from the production processes is redirected for use in cement factories and steelworks as Refuse-Derived Fuel (RDF).

Brianza USA Corporation was established in January 2014 in Elkhart, Indiana (USA). Equipped with a dedicated warehouse and distribution centre, the site supplies manufacturers of recreational vehicles (motorhomes and caravans) and motor vehicles (trucks and buses) across the United States.

In the summer of 2016, a third production site for **discontinuous laminates** was established in Rovigo, together with a new continuous production line in Carate Brianza.

These investments increased the company's production capacity by 40%, ensuring Brianza Plastica was fully prepared to meet future market demands.

At the beginning of 2019, the **new chemical laboratory was opened**, nearly tripling the surface area of the previous facility. This expansion significantly upgraded the equipment used to conduct most of the chemical and physical tests on both raw materials and finished products.

Today, Brianza Plastica supplies fibreglass laminates from both its cold and hot lamination lines, which are able to meet all market requirements.

With its four production sites dedicated to fibreglass laminates, the Group is well positioned to offer a comprehensive service to the sector.

RESEARCH & DEVELOPMENT

Brianza Plastica's laboratory dedicated to research & development and quality control activities

Brianza Plastica's commitment to innovation and sustainability is reflected in its continuous investment in product quality and testing processes. At the company headquarters, a modern laboratory equipped with state-of-the-art instrumentation performs dedicated testing and chemical analyses on both incoming raw materials and finished products.

Drawing on its extensive expertise in the production of polystyrene (XPS) insulating panels and supported by an in-house laboratory, the company offers testing and verification services on behalf of its customers. These evaluations can be performed on complete sandwich panels as well as on their individual constituent components.

This capability ensures high-quality standards, reliable performance, and qualified technical support throughout product development and validation.



Dynamometer



Xenotest



Viscometer



Optical microscope



Scan the QR code
to watch the
HTEC PILL videos



NO BAC

Continuous anti-bacterial protection

The **NO BAC** technology developed by Brianza Plastica **eliminates 99,9% of bacteria on the GRP laminate surface**, preventing colonisation and providing additional protection in any environment.

Permanently integrated into the laminate during production, the antibacterial technology is evenly distributed across the surface and remains active throughout its entire life cycle.

Ideal for environments with strict hygiene standards, such as food storage facilities, cleanrooms, laboratories, refrigerated transport, schools, medical clinics, kitchens, bathrooms, spas, gyms and shopping centres.

Based on silver ions, the antibacterial technology inhibits bacterial reproduction by attacking DNA. **It eliminates 99.9% of bacteria within 24 hours (UNI EN ISO 22196:2007)**, operating continuously 365 days a year.



LoVOC

Lower emissions, better solution

Brianza Plastica's **LoVOC** laminates provide an innovative solution to comply with the latest European regulations on the **reduction of Volatile Organic Compound (VOC)** emissions, while meeting growing market demand for sustainable materials. These low-VOC flat laminates actively reduce emissions both during the production of refrigerated vehicles and within the finished product.

Developed by Brianza Plastica using an innovative resin formulation after years of research and development, these products enable manufacturers to take a step forward, creating healthier working environments with a ready-to-use solution that fully complies with current regulations.

The **LoVOC version** is available for Elyplan Std, Elyplan Extra-Glass, Elyplan Design Style and Elyplan Design Touch products.

Scan the QR code
to learn more
about LoVOC



APPLICATION FIELDS

TRANSPORT



» RECREATIONAL VEHICLES

Outstanding quality, lightweight properties, aesthetic appeal, and a wide range of finishes make Elycold and Elyplan fibreglass laminates the ideal choice for the recreational vehicle (RV) industry. Engineered to withstand extreme weather conditions, they offer excellent hail resistance and long-lasting UV protection that prevents yellowing, preserving the vehicle's appearance over time.

» COMMERCIAL VEHICLES

Combining excellent resistance and dimensional stability with low weight and easy workability, Brianza Plastica's fibreglass laminates are perfect for the walls, roofs, and flooring of commercial, temperature-controlled, and delivery vehicles. They are suitable for both internal and external cladding applications.



» PUBLIC TRANSPORT

Elycold and Elyplan are widely used for sidewalls, roofs, doors, and flooring, including anti-slip surfaces for entrance steps and luggage compartments in public buses and coaches. They are the ideal solution for these applications, offering high impact strength, reliability, rigidity, and can be custom-matched to any RAL colour to meet specific design requirements.

» TANK CONTAINER VEHICLES

High flexibility, low weight, exceptional impact strength, and resistance to chemicals and weathering make Elycold and Elyplan fibreglass laminates an excellent choice for cladding tanks of all sizes. Furthermore, their weight reduction lowers operating costs, while their long-term durability reduces maintenance and repair costs.



BUILDING

» MOBILE HOMES AND PREFABRICATED BUILDINGS

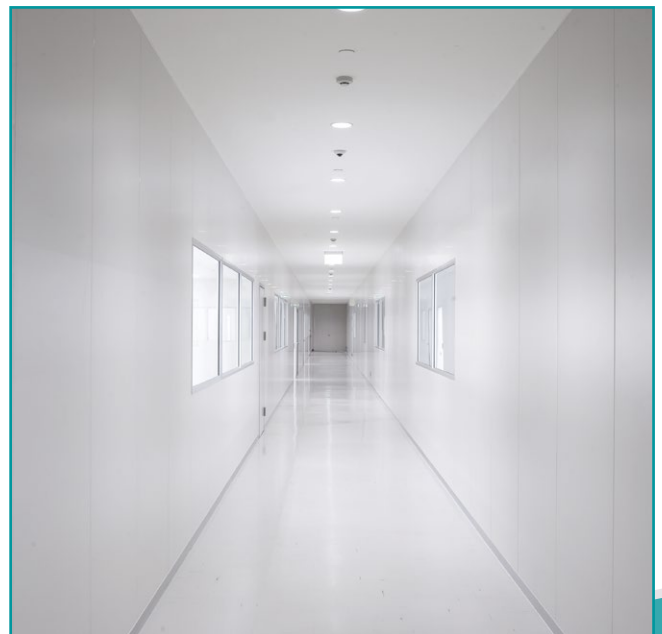
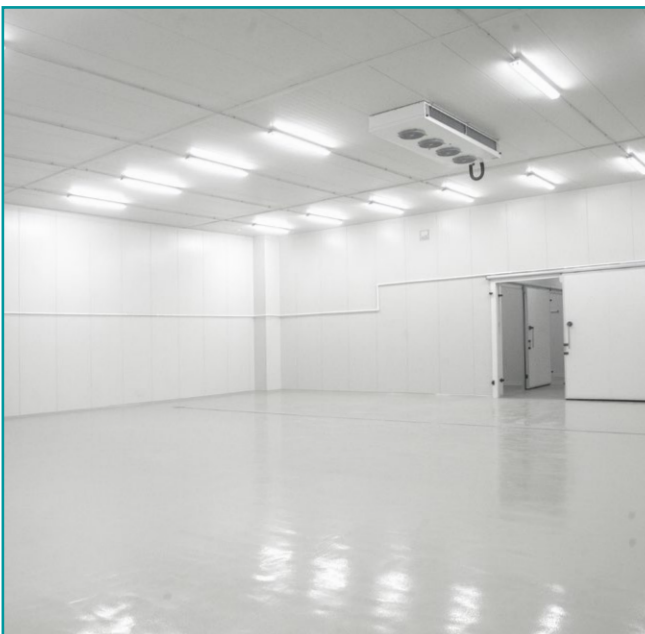
Low weight, dimensional stability, low thermal conductivity, and excellent resistance to UV radiation, chemicals, and weathering make Brianza Plastica's fibreglass laminates ideal for mobile homes and prefabricated houses. To enhance both interior and exterior spaces, the company developed the Elyplan Design range, which features modern colours, decorative finishes and textured effects for highly customised contemporary living spaces.



» COLD ROOMS AND CLEANROOMS

Elycold and Elyplan fibreglass laminates are an ideal solution for cladding the walls and ceilings of cold rooms and cleanrooms, ensuring hygiene, durability, and high performance in controlled environments. The NO BAC version, featuring silver-ion nanotechnology, eliminates 99.9% of bacteria within 24 hours to help maintain a continuously hygienic and sanitised environment.

Scan the QR code
to learn more about
Cold Rooms and
Cleanrooms



GRP LAMINATES

Founded in 1962, Brianza Plastica has built a reputation for quality, innovation, and dedicated customer service. With **four production plants dedicated entirely to fibreglass laminates and all located in Italy**, the company relies on both continuous and discontinuous manufacturing processes, allowing it to deliver a wide range of solutions.

Over the years, GRP laminates have increasingly replaced traditional materials like aluminium, thanks to their superior performance characteristics. These composites are **lighter, more flexible, and highly resistant to both corrosion and hail damage-properties** that translate into improved fuel efficiency, increased payload capacity, and reduced maintenance costs.

Brianza Plastica's product portfolio is divided into two main families: **Elycold** and **Elyplan**.



Easy
repairability



Easy to
clean



Hail
resistance



High
durability



Impact
strength



Lightness



Low thermal
expansion
coefficient



Quick
installation



Scratching
resistance



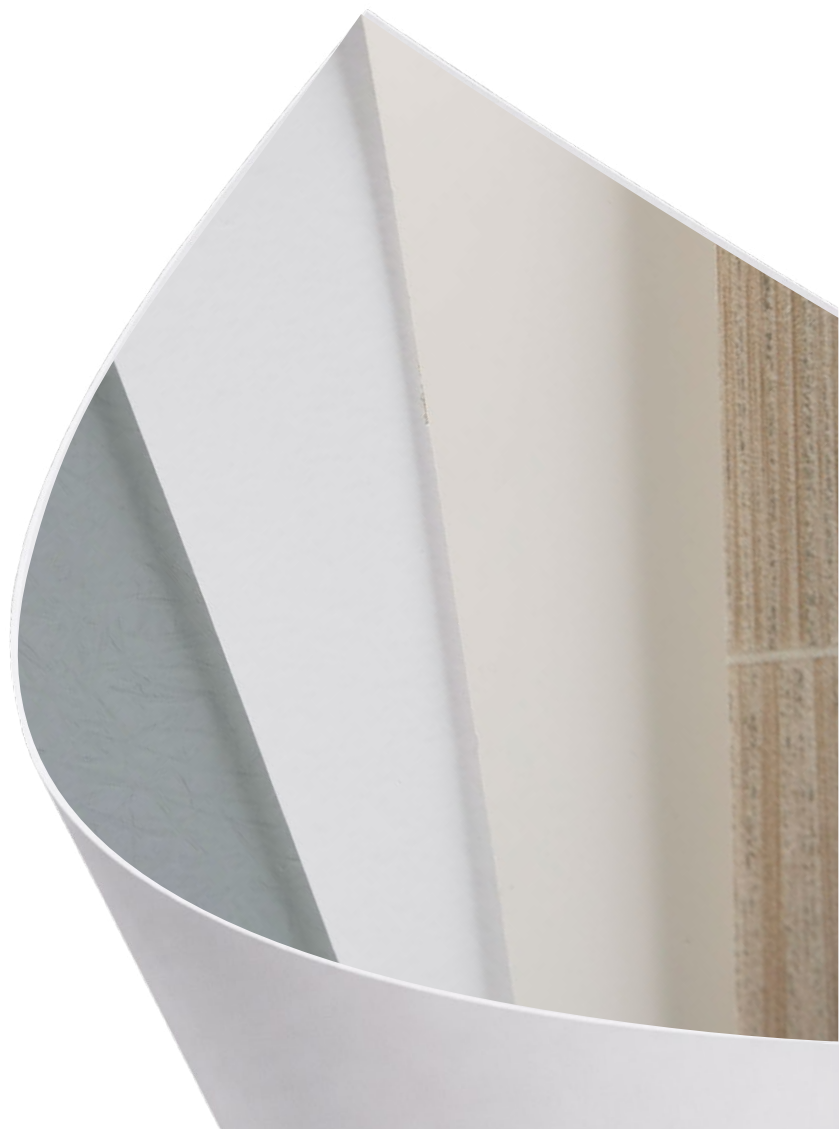
Strong
corrosion
resistance



UV
resistance



Waterproofing





ELYCOLD & ELYPLAN RANGES

ELYCOLD®

GRP rolls and sheets produced by **discontinuous** lamination

ELYCOLD®
STD

ELYCOLD®
EXTRA-GLASS

ELYCOLD®
LITE

ELYCOLD®
VELO

ELYPLAN®
SUPER

ELYPLAN®
SUPER HF

ELYPLAN®
STD

ELYPLAN®
ANTI-SLIP

ELYPLAN®

GRP rolls and sheets produced by **continuous** lamination

ELYPLAN®
EXTRA-GLASS

ELYPLAN®
DESIGN

ELYPLAN®
FIRE-PERF

ELYPLAN®
EMBOSSED



Rolls and sheets with or without gelcoat produced by discontinuous lamination.

Elycold is a high-quality fibreglass laminate produced discontinuously with a polymerisation process at ambient temperature that ensures **excellent flatness** and an **extraordinary smooth finish**.

Over the years, this composite material has replaced aluminium in the production of sandwich panels for refrigerated, commercial and recreational vehicles (caravans and motorhomes), providing manufacturers with **excellent long-term properties** and **UV protection**.

PROPERTIES

- Low shrinkage
- Full coverage of the underlying fibreglass
- Lightness
- High impact resistance
- High resistance to UV rays and chemical agents
- Impermeability to water vapour and condensation

PRODUCT DIMENSIONS

ROLLS / SHEETS

THICKNESS: from 1.0 mm to 3.6 mm

DIMENSION: max. width 3,400 mm
length 60 m

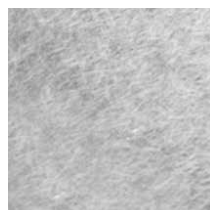


ELYCOLD GLASS COMPOSITION



Chopped strand mat

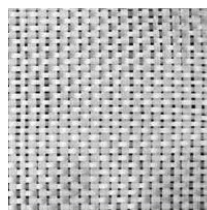
Particular mat composed of chopped fibres. The mat provides the laminate with its essential physical properties, while ensuring a perfectly smooth finish on the outer surface. By using different weights of mat, the material can be tailored to satisfy diverse market requirements.



Tissue

A thin layer of fibreglass designed to enhance the aesthetic quality of the material.

Available only for Elycold Velo.



Woven roving

A layer of woven fibreglass used to increase the strength of the laminate. Brianza Plastica mainly uses two different types of woven roving:

- 300 g/m²: recommended for applications requiring good mechanical strength;
- 500 g/m²: recommended for applications requiring high mechanical strength.

FINISHING

Outer side finishing

- **Gelcoat protection** - 100% isophthalic resin, UV-resistant, available in a glossy or satin finish.
- **Film protection** - To prevent damage during handling and transport.
- **Colours** - Available in a wide range of standard RAL and NCS colours, with custom colour-matching available on request.

Inner side finishing

- **Grooved film** - A specialised, dust-free sanded surface that improves bonding performance.
- **Mechanically sanded** - Mechanical sanding designed to provide a high-grip bonding surface.
- **Rough** - The fibreglass is visible on the surface; this solution is ideal for wet-lay resin bonding applications.
- **Smooth** - Untreated finish for applications that do not require specialised bonding properties.



See page 14 for bonding suggestions.



Rolls and sheets with or without gelcoat produced by continuous lamination.

Elyplan is a high-quality GRP laminate produced by **continuous lamination** using state-of-the-art machinery, which ensures the highest possible polymerisation of the composite material. This process yields a **perfectly flat product** with very tight dimensional tolerances, offering excellent quality at a competitive price.

Using the finest raw materials and a gelcoat made from highly elastic isophthalic resins, Elyplan ensures **high resistance to yellowing**, as well as **impermeability to water vapour** and **condensation**.

The flexibility of the systems allows customers to choose the exact laminate that fits their needs, whether for temperature-controlled transport, vans, wall restoration, coolers and specialised applications.

PROPERTIES

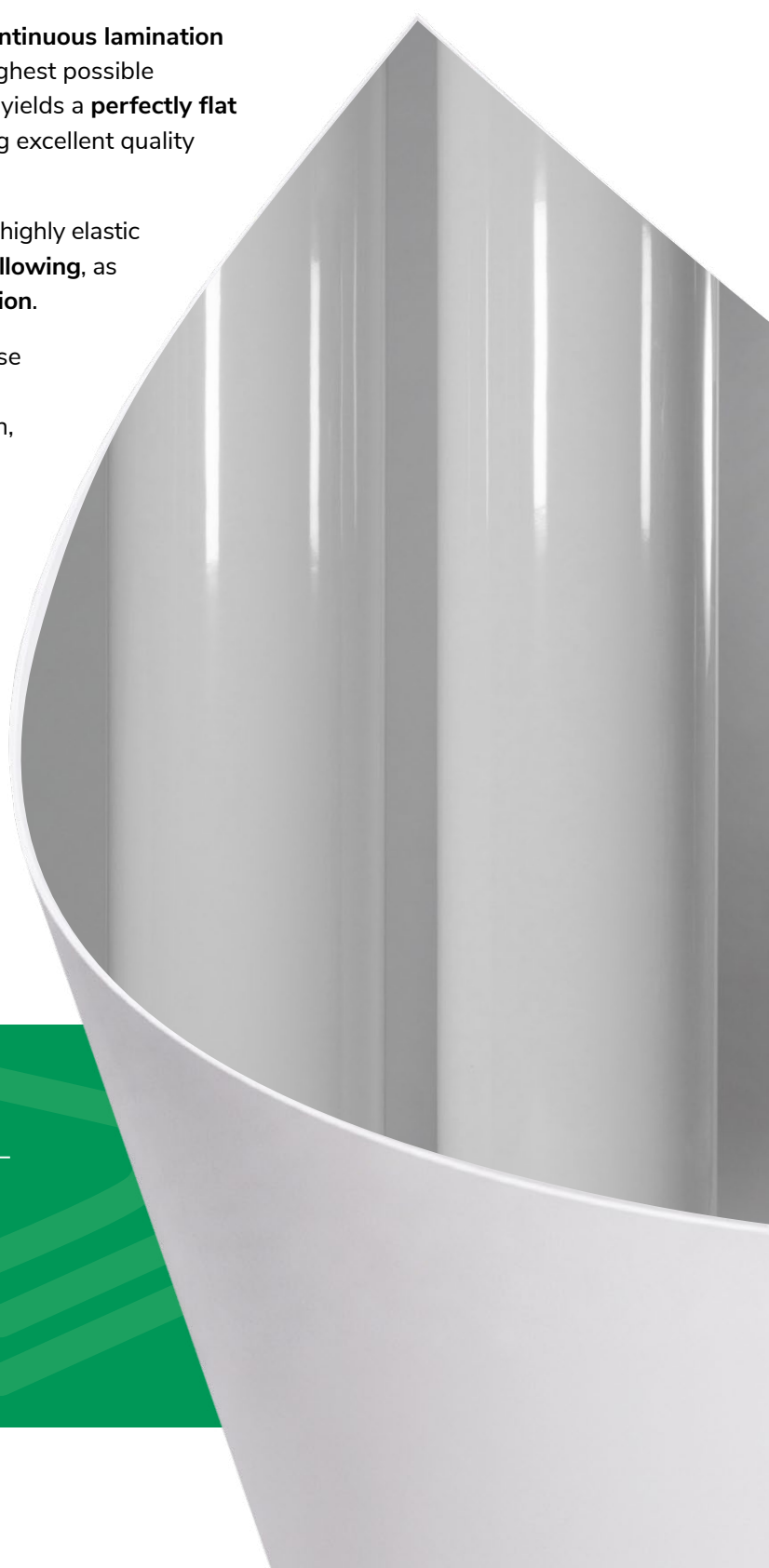
- High resistance to yellowing
- Impermeability to water vapour and condensation
- High resistance to corrosive elements
- High mechanical strength

PRODUCT DIMENSIONS

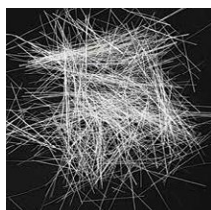
ROLLS / SHEETS

THICKNESS: from 0.8 mm to 3 mm

DIMENSION: max. width 3,200 mm
length on request



ELYPLAN GLASS COMPOSITION



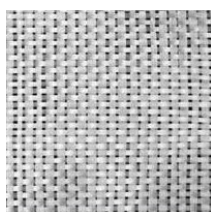
Roving

Fibreglass cut to a length of 5 cm and evenly distributed throughout the laminate.



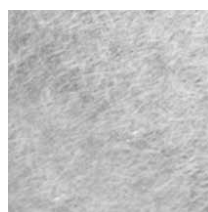
Chopped strand mat

Particular mat composed of chopped fibres. The mat gives all the physical characteristics to the laminate while ensuring a perfectly smooth profile on the outer surface.



Woven roving

90° woven biaxial fabric used to enhance the mechanical properties and strength of the laminate.



Tissue

A thin layer of fibreglass designed to enhance the aesthetic quality of the material.

FINISHING

Outer side finishing

- **Gelcoat protection** - 100% isophthalic resin, UV-resistant, available in a glossy or satin finish.
- **Film protection** - To prevent damage during handling and transport.
- **Colours** - Available in a wide range of standard RAL and NCS colours, with custom colour-matching available on request.



Inner side finishing

- **Corona treatment** - This treatment utilises a high-voltage, high-frequency, low-current electrical discharge to increase surface energy and enhance surface wetting. The resulting surface is smooth, creating an ideal substrate for high-strength bonding with mono- or bi-component polyurethane adhesives.
- **Mechanically sanded** - Mechanical sanding designed to provide a high-grip bonding surface.
- **Smooth** - Untreated finish for applications that do not require specialised bonding properties.

See page 14 for bonding suggestions.

BONDING SUGGESTIONS



Brianza Plastica offers **5 solutions** for different bonding methods.

The combinations below serve as a general guide.
We recommend conducting trials prior to full-scale use.

INNER SIDE	TYPE OF LAMINATE	BONDING WITH RESINS	BONDING WITH GLUE
SMOOTH	Elyplan - Elycold	NO	YES
CORONA TREATMENT	Elyplan	NO	YES
MECHANICALLY SANDED	Elyplan - Elycold	YES	YES
GROOVED FILM	Elycold	NO	YES

GENERAL CHARACTERISTICS

RESINS

Brianza Plastica uses the best available resins on the market. Pairing orthophthalic resins for the core with an isophthalic resin for the gelcoat creates a more flexible and highly resistant laminate.

IDENTIFICATION AND TRACEABILITY

To ensure complete product identification and traceability, a unique serialised barcode identification tag is affixed to every shipping pallet, as well as individually to each roll.



Polystyrene and wood cradles

PACKAGING

The Elycold rolls are securely housed in expanded polystyrene cradles reinforced with wood, or in steel cradles.

In addition to standard palletised transport, the Elyplan rolls can be shipped unpalletised, resting securely on wooden supports integrated directly within the delivery vehicle.

To ensure maximum protection, the Elycold and Elyplan sheets are transported on custom-made pallets featuring a continuous wooden surface. Each pallet is closed using fixing straps and cardboard.



Steel cradle (to return)



Made-to-measure standard pallets with a continuous wooden surface



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ISO 9001:2015
CERTIFIED QUALITY
MANAGEMENT SYSTEM



UNI EN ISO 9001:2015
Certificate No. 106
o. u. Carate Brianza