

Hygiene Systems

Catalogue 2023



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1. What is FRP?

Polyester Resin + Fibre Reinforcement

Fiberglass Reinforced Polymer (FRP), is a fibreglass reinforced composite within a plastic matrix. A wide variety of physical strengths, chemical and mechanical properties can be designed into FRP by configuring the reinforcement. For example, UV resistance, cleanability and durability can be optimised through the choice of plastic and matrix additives allowing. This makes FRP composites an ideal choice for achieving performance goals with minimal waste, weight and cost compared to traditional materials such as woods, metals or ceramics.

Why FRP?



LightWeight



Easy to Install



Fire Rated



Impact Resistant



Leak Resistant



Mold Resistant



Mildew Resistant



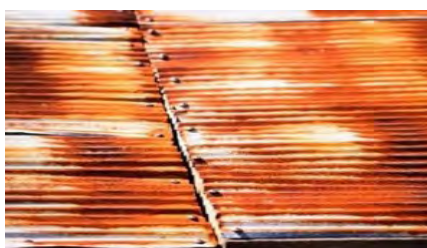
Moisture Resistant



Maintenance Free



Durable



Corrosion Resistant



Easy to clean

2. Crane Composites®

CRANE

Composites

About Crane Composites®

Since 1954, Crane Composites® have continued to pioneer numerous patented technologies for industrial and commercial product applications. They have built a proven reputation for industry leadership by partnering with customers and suppliers to deliver advanced, industry-leading solutions.

As the pioneer in FRP panels, Kemlite was established in 1954, and Crane Co. acquired the company in 1985. The Kemlite name was changed to Crane Composites in 2008 to reflect the company's ongoing new product innovations in numerous fields.

Building Products

Crane Composites wall and ceiling panels are widely used in the construction industry. These panels offer a number of significant features including resistance to mold, mildew bacteria, high impact strength, high moisture resistance, chemical resistance and stain resistance,



Recreational and Transport Vehicles

Crane Composites exterior and interior gel coated and fiberglass products, designed for the RV industry have a well earned reputation for combining high performance and style; making Crane Composites the worlds leading producer of fibreglass products for the RV industry. In this, FRP panels offer unmatched durability and long-lasting beauty.



3. Glasbord® with Surfaseal®

Panels With Surfaseal® Finish

For Internal Wall and Ceiling Cladding



Certifications



The Unique Glasbord® with Surfaseal®, Only found with Crane Composites®

Glasbord® with Surfaseal® is a unique solution that offers unsurpassed hygiene and high durability required in

critical areas that demand high-performance finishes. Our unique Surfaseal® film equips our wall panel with

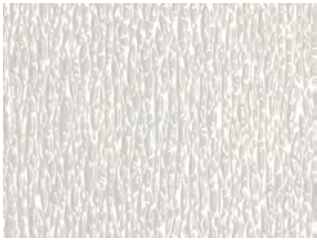
the best hygienic performance combined with highest stain, impact and scratch resistance.

The Surfaseal film finish, found only on Glasbord, provides a barrier that's highly resistant to impact and scratching. Because of our

unique process, the Surfaseal finish will not trap soil or bacteria on the panel.

Surface Finish

Pebbeled Embossed Texture



White | 85



Colonial White | 83



Ivory | 84



Soft Beige | 70



Silver | 66



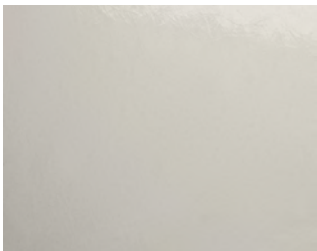
Pearl Gray | 48



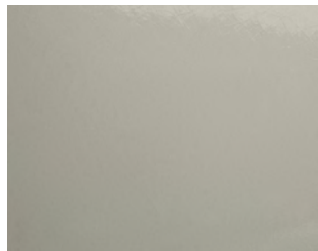
Black | 1201/97

Surface Finish

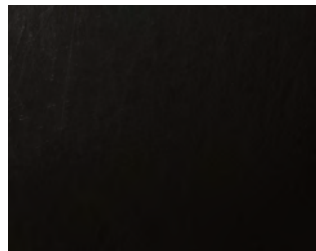
Smooth texture



Silver | 66



Pearl Gray | 48



Black | 1201/97

Product Specifications

Available Sizes:

- Cut to length
- 1.20 m x 2.44 m
- 1.20 m x 2.74 m
- 1.20 m x 3.05 m

Also available in coils up to 251-meter length and up to 2.5-meter width

Thicknesses:

- Embossed:**
 - 1.3mm
 - 1.5mm
 - 2.3mm
- Smooth:**
 - 1.9mm

Fire Ratings:

- Class C
- Class A (with approval from: Dubai Civil Defence, Abu Dhabi Civil Defence, Qatar Civil Defence)
- FM Approved

Our Glasbord® is coated with Surfaseal®

10x Easier to Clean
6x More Stain Resistant

	GLASBORD surfaseal	frp A	frp B	frp C	frp D
BEFORE STAINING 25x magnification					
AFTER STAINING 25x magnification					
AFTER STAINING 93x magnification					

Applications



Cold Stores



Kitchens



Bakeries



Dairy



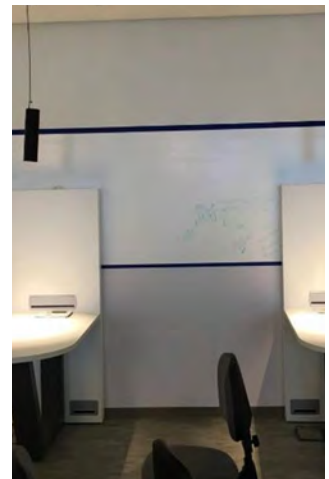
Sanitary



Supermarkets



Cleanrooms



Education



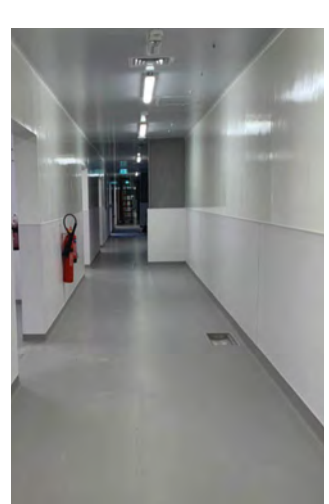
Indoor Farms



Refrigerated Boxes



Meat Plants



Back of House

4. Varietex®

Innovative Textured and Colored Panels

For Internal Wall and Ceiling Cladding



Take your surfaces to the next level with our range of high end finishes

Add depth and dimension to walls, with our unique textures including sandstone, linen, tile and beaded finishes. Beyond the beauty, Varietex offers all the same benefits of traditional FRP wall coverings. With the added bonus that grout lines are sealed, avoiding the grimy build up and deep cleaning associated with traditional tiles.

Available Sizes:

1.22 m x 2.44 m
1.22 m x 3.05 m

Fire Ratings:

Class C
Class A

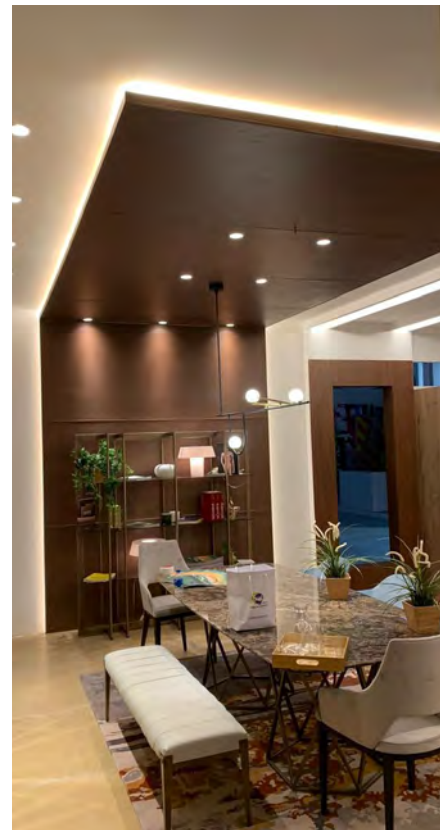
Thicknesses:

Linen/Sandstone:
2.3mm
Beaded:
1.9mm

5. Designs

Collections + Custom Imaged Panels

For Internal Wall and Ceiling Cladding



Your wall your way, no more need to sacrifice aesthetics for hygiene.

Crane composites can alter any existing pattern or create your own unique design from scratch breathing life into your spaces through incorporating logos and artwork with vibrant high resolution imagery and attention to detail

Available Sizes:

1.22 m x 2.44 m
1.22 m x 3.05 m

Thicknesses:

1.9mm

Fire Ratings:

Class C
Class A

2. Installation Methods

1. Hygibreak®

2. Thermobreak®

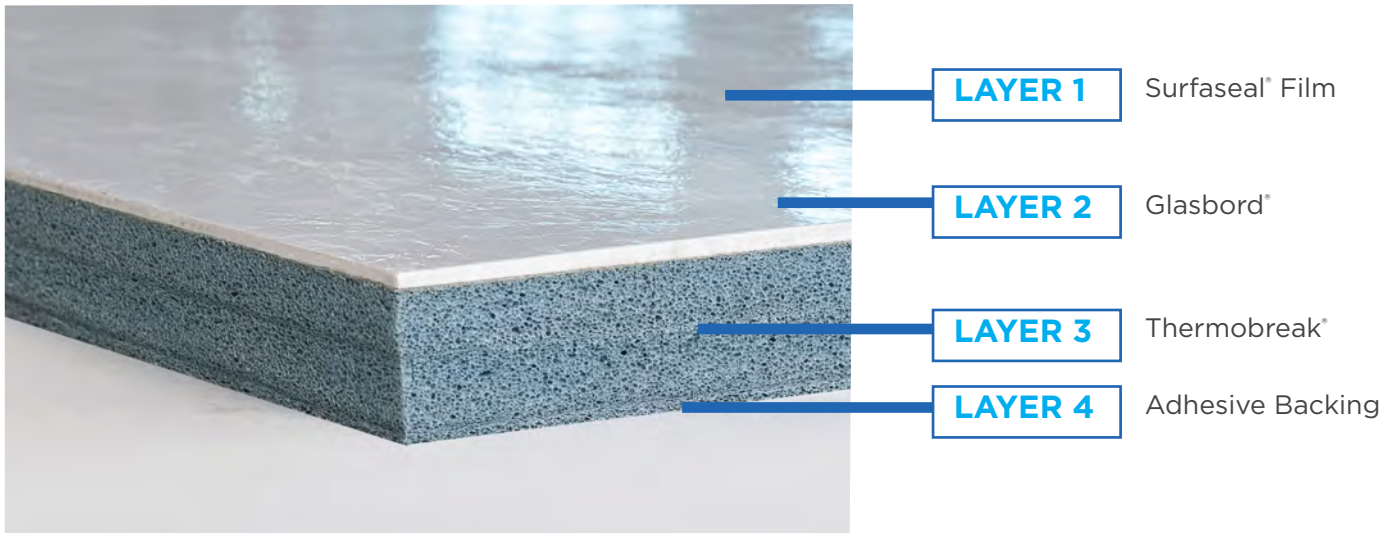
3. Laminated Panels

4. Traditional methods

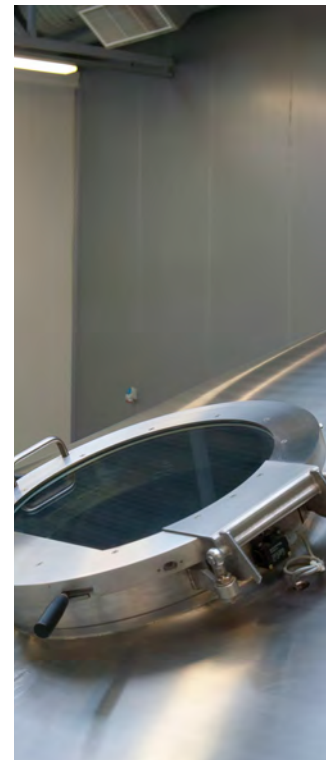
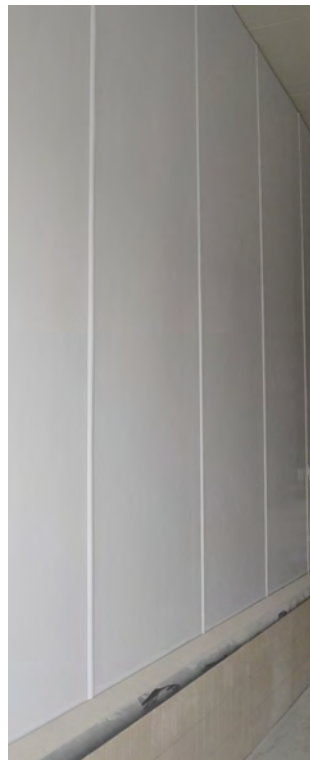
1. Hygibreak®

Self Adhesive Cladding System

For Internal Wall and Ceiling Cladding



Hygibreak® Self Adhesive Panels - The fastest installation method in any Hygienic Cladding.



Installation methodology

For Most Applications



Measure



Install Profile



Peel Backing



Stick



Seal & Screw



Cap

Benefits of Hygibreak®

Hygibreak® is a revolutionary installation method in the FRP Space. It is the first hygienic wall cladding of its kind providing efficient installation, minimising user errors and with exceptional surface adhesion.

- Faster installation means less time / Labor / Equipment on site (2x as fast as traditional installations)
- Adhesive backing shelf life is much longer than traditional Adhesive
- Does not require cooled storage
- Already applied to 100% of back of FRP panel - even spread is not an issue
- Requires a lower skill to install than traditional methods
- Panels come in Coils / Cut to length with Adhesive backing - minimizing adhesive wastage
- Foam Backing means minor imperfections in walls are bridged
- Large range of Adhearence surfaces compared to traditional adhesive
- Larger individual panels can be installed due to nature of installation
- Can be installed directly on Ceramic Tiles



Product Specifications

Available Sizes:

Cut to length

Single width of adhesive up to 1.50m, multiple adhesive strips can be used for larger widths.

Thicknesses:

3mm

1.5mm

Special applicaitons

12mm Aluminium Backing - Ceiling tiles

15mm Open Cell Sound Insulation

up to 50mm Insulated

Backing Material

Thermobreak® physically crosslinked Polyolefin foam and peelable self adhesive layer.

Material	Physically (irradiation) crosslinked closed cell Polyolefin foam
Density	25kg/m ³ (foam core only)
Thermal conductivity (ASTM C518)	0.032 W/mK (@23 C mean temp) 0.036 W/mK (@36 C mean temp)
Water vapour permeability	2.78 x 10 ⁻¹⁴ kg/Pa.s.m
Water absorbtion by volume	<1% v/v
Permeability resistance factor	u> 7000
Resistance to fungi (ASTM G21)	Zero Growth
Operating temperature range	-20 C - +55 C

All our Backings are 100%

THERMOBREAK[®]

Thermal Insulation

Why choose Thermobreak[®]

- Technically superior - very low thermal conductivity & negligible water vapour permeance
- Third party certified & tested
- Energy efficient
- Quality materials engineered to last
- Compliant to major fire, smoke and performance standards
- Proven reliability for over 30 years
- Fast and efficient to install and easy to cut with conventional equipment

2. Thermobreak®

Thermobreak® Backing

Thermobreak® is the leading and most innovative Polyolefin foam thermal insulation available to the HVAC and building industry worldwide. Thermobreak® performance is unsurpassed.

Thermobreak® thermal insulation is an all-in-one closed cell physically crosslinked Polyolefin foam that is manufactured in compliance to ASTM C1427 standard.

Thermobreak® is manufactured using proprietary physically crosslinked Polyolefin foam technology, invented and commercialised by the Sekisui Chemical group in Japan. The technology allows crosslinking of the Polyolefin without the use of chemical agents. Instead the Sekisui process utilises clean and precise crosslinking through irradiation (physical) means.

Sekisui has been manufacturing crosslinked Polyolefin foam since 1967. Today Sekisui foam division is the largest and leading crosslinked polyolefin foam manufacturer in the world.

Superior Performance For Energy Saving

Our unique physically crosslinked technology results in a smaller and more evenly distributed cell structure. Cell structure directly affects thermal conductivity and vapour permeability. Both are key factors in insulation performance.

Thermal Conductivity: 0.032 W/mK (23 C)

The lowest of any flexible insulation material.

Vapour permeability of almost Zero

Ensures the thermal conductivity remains relatively constant for an extended period of years thus significantly contributing to building sustainability and energy cost reduction.

Compliance to international Fire Standards

Thermobreak® has been tested and complies to international fire and smoke standards including:

- BRITISH (BS 476 CLASS 0)
- ASTM (ASTM E-84)
- UL 94 (HF-1)

Building Sustainability

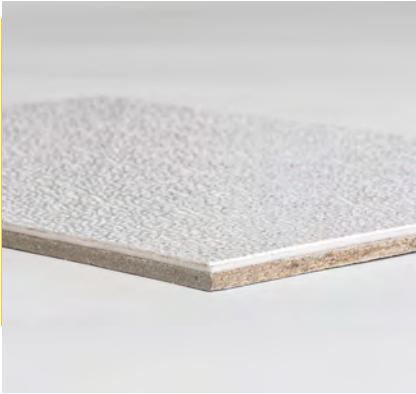
- Green star compliant (VOC)
- NO CFC's or HCFC's
- Zero Ozone depletion potential
- Low GWP
- Compliance to RoHS directive
- Compliance to REACH directive
- Resistance to Mould Growth
- Non-allergenic properties

3. Laminated Panels

Glasbord® with Surfaseal® can be laminated on a range of backings

Cement Board

Fibre Cement Board

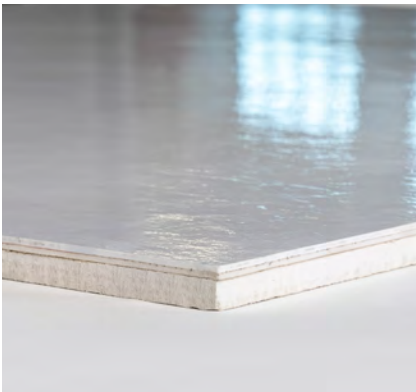


This application is a cost effective solution especially for locations where framing has been completed and a hygienic finish is required. simply screw / Rivet the panels in place. A sealant joint treatment is required.

Backing Thickness	Lamination Side	Fixing Method	Joint Treatment	Max Panel length
4.5mm,6mm,9mm	Single, Double	Screws, Rivets	Sealant	3.05m

Calcium Silicate Board

Promat® Promatect H® Calcium Silicate Board



This application is used where a fire rating is required. Please note that framing structure must also be compliant to acheive fire rating. Contact us for more information.

Backing Thickness	Lamination Side	Fixing Method	Joint Treatment	Max Panel length
9mm,12mm	Single, Double	Screws, Rivets	Sealant	3.05m

PIR Sandwich Panel

PIR backing for thermal insulation



PIR backing is a popular backing when space is obstructed by equipment and the panels are required to span over them (especially prevalent in ceilings). Furthermore the backing is useful when converting cold rooms to freezers, the PIR can be clad directly ontop renewing the surface while providing the required insulation.

Backing Thickness	Lamination Side	Fixing Method	Joint Treatment	Max Panel length
20mm, 100mm	Single, Double	Screws, Rivets	Profiles, Sealant	12m

4. Traditional Methods

Traditional Adhesive

For Porous & Non-Porous surfaces



Installation can be done using the traditional installation methodology. Adhesive is provided in pails and is applied on the back of the FRP surface at site and placed on the wall.

Different adhesives are required for porous & non porous substrates.

Ceiling Tiles

Tiles for Suspended Ceiling Applications



We can provide solutions for suspended ceiling applications using a range of backings. FRP suspended ceilings are an extremely cost effective installation while providing one of the highest levels of hygiene in all ceiling applications.

Item	Details
Backing Types	Hygibreak, Cement Board, Calcium Silicate Board, FRP alone*
Standard Sizing	60x60 , 60x120cm
Seating style	Nontegular
FRP Thickness recommended	1.5mm Embossed, 1.90mm Smooth

3. Profiles and Protections

Profiles and Protections

PVC

Our standard solution - suitable for most installations



We offer a range of solutions for traditional, Hygibreak and Laminate installations. PVC maintains high level of hygiene while protecting the back substrates. We can provide PVC with seals for the highest protection against water penetration.

Stainless Steel

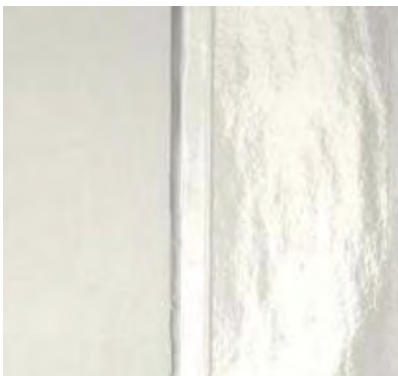
Architecturally finished for the best aesthetics



Our Stainless steel range comes in either brushed or polished finish at either 304 or 316 food grade.

Polyurethane Sealant

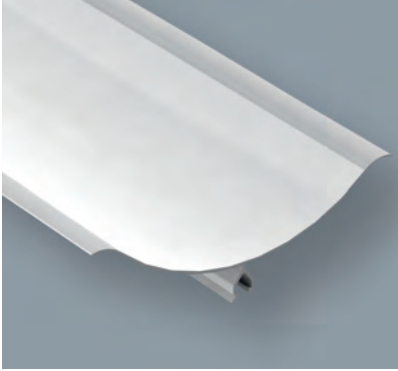
For low cost seamless installations



We can provide a PU sealant with hardener for applications where joints should be minimally visible.

Covings

Extremely hygeinic finishes



We can provide covings in a range of sizes from 4cm to 10cm to provide coverage for a range of applications and aesthetics.

Corner Pieces

For protection and strength



Outside corners are a crucial part of construction for both durability and safety. We have options ranging from PVC soft corners to Stainless steel heavy duty finishes.

Floor to Wall Skirting

For high protection against dirt build up



We offer a range of solutions from light to heavy duty depending on requirements. We can offer high strength solutions to protect from impact and damage.

Stainless steel Kerbs

For the heaviest duty required



For areas with continuous forklift use under high traffic, our range of concrete infill stainless steel kerbing will provide highest levels of protection.

Bollards

For protection of key assets



Our range of bollards available in heavy duty PVC and Stainless steel are the ideal solution when certain elements require additional protection eg. Sliding doors and sensitive equipment.

Bump Rails

For additional wall protections



Bump rails or guard rails are ideal when walls are under continuous impact of equipment. The large protective pads provide additional dampening of the impacts.