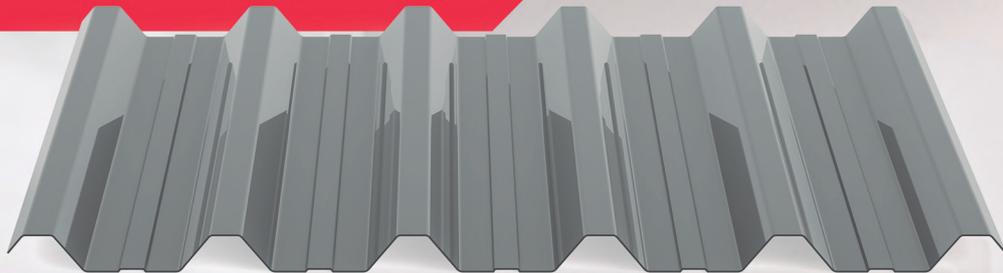
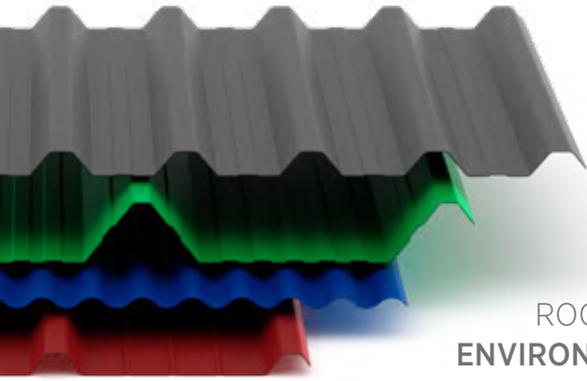


 **PLANEFIBRA[®]**

**CORROSION
RESISTANT ROOFING
PANELS**





PLANEFIBRA
**CORROSION
RESISTANCE**

ROOFS DESIGNED FOR **AGGRESSIVE ENVIRONMENTS OR PLACES WITH CORROSIVE PRODUCTS** REQUIRE PLANEFIBRA'S OPAQUE PANELS.

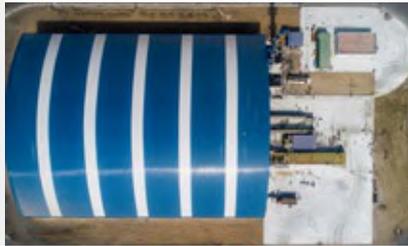
It is not a secret that corrosion is harmful for industrial environments, but when we talk about corrosion resistant solutions for roofing and siding, **PlaneFibra opaque panels** are ideal for industrial and commercial projects, such as warehouses, agribusiness and coastal installations, like maritime facilities, fishing docks, and port facilities.

SEGMENTS SUPPORTED

AGRIBUSINESS



INDUSTRIAL AREAS



PORT AREAS



COMPARATIVE TABLE FOR OPAQUE PANELS AND OTHER PRODUCTS IN THE MARKET

	FRP			GALVANIZED STEEL			FIBER-CEMENT	
	1.50 mm	2.00 mm	2.50 mm	0.43 mm	0.50 mm	0.65 mm	5.00 mm	6.00 mm
Thickness	1.50 mm	2.00 mm	2.50 mm	0.43 mm	0.50 mm	0.65 mm	5.00 mm	6.00 mm
Weight kg/m ²	2.59	3.45	4.31	3.90	4.50	5.90	16.00	18.00
Chemical Resistance	Resistant to neutral and alkaline chemical agents			X			Resistant to neutral and alkaline chemical agents	
Corrosion Resistance	Immune to oxidation and corrosion			X			Immune to oxidation and corrosion	
Water absorption	0 to 1%			Zero			25 to 30%	
Water absorption expansion	Zero			Zero			± 3.00 mm/m	

Weight: for FRP and galvanized steel, the 40/980 trapezoid panel was used. For Fiber-cement, the 6 mm waved panel was used as a reference.



PlaneFibra also offers safe and **efficient solutions with high resistance to the spreading of flames**, according to IT 10 (CLASS II-A) or in accordance with UL 94 | "Tests for Flammability of Plastic Materials for Parts in Devices and Applications". V-0 rating.



FRP PRODUCTS EVOLUTION

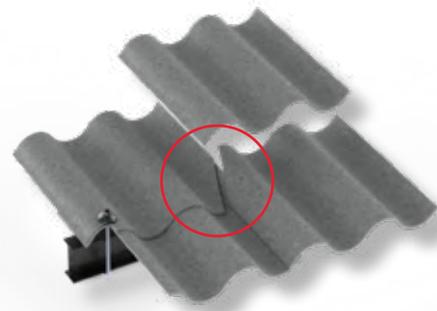
Planefibra is always on top of the **market needs and demands**. That's how we became a reference when it comes to **FRP (Fiberglass-reinforced polyester)**. We guarantee the **durability and quality** of the products developed with this material.

Planefibra opaque panels are an excellent corrosion resistant option to replace traditional roofs that use metal panels, Aluzinc, aluminum, fiber-cement and others.



BENEFITS OF PLANEFIBRA OPAQUE PANELS

- ✓ Excellent internal temperature control;
- ✓ Easy to clean;
- ✓ High chemical resistance;
- ✓ Made to order;
- ✓ Manufactured on the right color for your project, since pigmentation is done at the manufacturing process.



Avoid cuts where the panels overlap, as occurs with fiber-cement panels.

PHYSICAL/MECHANICAL PROPERTIES

PROPERTIES	TEST METHOD	MEASUREMENT UNIT	SPECIFICATION
Fiberglass content	NBR 13.275	% of mass	24 % (minimum)
Stretch	ASTM D 638	%	1 to 2
Tension resistance	ASTM D 638	Mpa	100 to 120
Tensile elastic modulus	ASTM D 638	Mpa	5,500 (minimum)
Bending resistance	ASTM D 790	Mpa	130 (minimum)
Bending elastic modulus	ASTM D 790	Mpa	5,000 (minimum)
Water absorption	ASTM D 570	% of mass	1 (maximum)
Barcol hardness	ASTM D 2583	0 to 100	40 to 50

THERMAL PROPERTIES

PROPERTIES	TEST METHOD	MEASUREMENT UNIT	SPECIFICATION
Light Transmission	ASTM E903	% of mass	0.00
Thermal transmittance (U coefficient)	NBR 15.220	W/m ² .K	4.47
Thermal Resistance (R coefficient)	NBR 15.220	m ² .K/W	0.01
Thermal capacity (TC)	NBR 15.220	Kj/(M ² .K)	3.31
Thermal conductivity (k)	NBR 15.220	W/m.K	0.17

Tests performed by LABEEE (Building Energy Efficiency Lab) of UFSC.

PERSONALIZED SERVICE

Above all, we are experts in this business.

After all, it is your project's roof that we are talking about.

Focused on the construction and industry sectors, through the vast experience acquired over the years and a team of specialized professionals, Planefibra always **develops its products to meet a demanding market in the roofing segment.**

We specialize in roofing products made of fiberglass-reinforced polyester, FRP, and it is our commitment to excel in panel manufacturing and in all the services we offer.

Our engineering and project departments offer technical support to our clients, so they could choose the best roofing or ventilation system alternatives for their projects.

OUR WORK METHOD

- ✓ Engineering department assistance as needed.
- ✓ After the digital projects are available, analyze them to determine the needs and application of products.
- ✓ Calculate the total cost of Planefibra products that will be used in the project.
- ✓ Prepare a lighting design and its consequent versatility (investment return, suitable products, exclusive solutions).
- ✓ Identify the right product for the roofing or ventilation system.
- ✓ Provide technical information on storage and material handling.
- ✓ Product certification and/or compliance with the applicable codes.
- ✓ Specified product assembling project in exclusive projects.



PLANEFIBRA, YOU CAN COUNT ON US!

- ✓ Production line with efficient methods and trained and experienced professionals.
- ✓ Special service and guaranteed scheduled delivery.
- ✓ High-quality material, focusing on more resistant and long-lasting products.
- ✓ Full compliance with the NBR 16753 code.
Our panels are the only ones on the market that have a polyester film with UV protection on both sides as a standard finish.
- ✓ Projects that seek a short-term return on your investment – Termoplan® Continuous Vaults.
- ✓ Natural lighting solutions for zipped metal roofs.
- ✓ Roofs designed for aggressive environments or places with corrosive products.
- ✓ Flame resistant products, tested in accordance with NBR 9442, ASTM E662 and IT 10/2011 - Class II-A | UL 94/97
- ✓ Ventilation systems / Industrial shutters.
- ✓ Your best option for road sign making, meeting the NBR 13.275:2013 code.
- ✓ Products offered in traditional colors, natural transparent and opaque white, as well as color pigmentation options, with the possibility of creating different shades to suit specific projects.
- ✓ We manufacture practically all models of panels in the market, whether you are replacing old roofs or making new building projects.

 **PLANEFIBRA®**

#PLANEFIBRA®

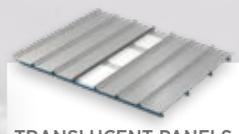
OUR PRODUCTS



TRANSLUCENT ROOFING PANELS



TERMOPLAN® CONTINUOUS VAULT



TRANSLUCENT PANELS FOR ZIPPED METAL ROOFING



CORROSION RESISTANT ROOFING PANELS



FRP PANEL/TRAY TO COMPOSE THERMOACOUSTIC PANELS



#RC FIRE RESISTANT



PANELS FOR PERGOLAS



VENTILATION SYSTEM / INDUSTRIAL SHUTTERS



VERTICAL ROAD SIGNS



planefibra.com.br

[@](#) | [f](#) | [in](#) | [@planefibra](#)

+55 (47) 3203-4700 . comercial@planefibra.com.br
Av. dos Imigrantes, 1770 . Bairro Brasília . CEP 89282-685
São Bento do Sul . SC