





Introduction

Tilara Polyplast Pvt. Ltd., is amongst the largest manufacturers of extruded plastic sheets in Asia. Our manufacturing facilities are spread over more than 275000 square feet and equipped with advanced extrusion machines and processing control technology to deliver high quality extruded plastic sheets. Our range of products includes Polycarbonate Solid Sheets, Polycarbonate Multiwall Sheets, Acrylic Sheets and General-Purpose Polystyrene Sheets (GPPS). We also manufacture special profiles for polycarbonate sheets and their installation. We possess close to two decades of experience in the extrusion industry and our team comprises of qualified and experienced personnel who deliver consistently high-quality products every time.

We are located in one of India's most well organized and productive Industrial Zones, in Rajkot, Gujarat. Tilara Polyplast Pvt. Ltd. Is a Bureau of Indian Standards (BIS) approved manufacturing house, conforming to IS 14443:1997. We are also ISO 9001:2015 TUV SUD Certified Manufacturing Company along with CE, EN 16240: 2013 certification. The products manufactured in our facilities are constantly tested, batch-wise in our BIS Approved Laboratory to ensure that our products satisfy all necessary quality parameters.

Tilara Polyplast Pvt. Ltd., has been exporting all its products to 25 Countries. The company has also been certified as Government recognised star export house.

It is a constant endeavour at Tilara Polyplast Pvt. Ltd., to invest in technology, infrastructure and people to ensure that our products create an ecosystem that ensures the Growth, Gain & Goodwill of everyone associated.

In a world that's constantly facing challenges due to pollution, climate change and environmental deterioration, Tilara Polyplast Pvt. Ltd., is investing in technology to provide energy efficient and sustainable solutions that can drive growth in Industrial, Commercial and Residential applications, while substantially reducing energy consumption and consequently reducing their Carbon Footprints.

CORE MISSION:

To double up the Growth, Gain and Goodwill of all our employees, channel partners, customers and vendors.

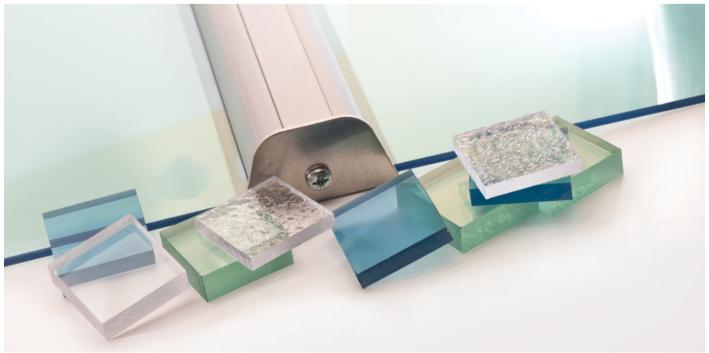
CORE VISION:

To Emerge as a Global Leader while ensuring that We are your International Partner for Growth, Gain & Goodwill

CORE VALUES:

To be consistent | To be transformative | To be respectful

















TILARA® Polycarbonate Solid Sheet & Roll
TILARA® Polycarbonate Multiwall Sheet
TILARA® Polycarbonate Profiled Sheet
TPPLGLAS® XT Acrylic Sheet
TILARA® GPPS Sheet
TILARA® GPPS Textured Sheet
TILARA® Light Diffuser Sheet

TILARA® Lighting Profiles





TILARA® Polycarbonate Solid Sheet & Roll

TILARA Solid Polycarbonate Sheets offer a wide range of properties that make them superior to other thermoplastic sheets or products and the material of choice for high performance roofing applications, glazing and fabricated solutions.

Tilara Solid Polycarbonate Sheets possess excellent impact resistance, transparency and temperature resistance to make it a versatile glazing material for Industrial & commercial applications. These sheets also have excellent fire-retardant properties and are classified a self-extinguishing material.

It's very high impact resistance strength ensures that Tilara Solid Polycarbonate sheets can be widely used for safety glazings and related applications. They can also be deployed in applications where they are subjected to high levels of vibrations and accidental impact. These include Noise Barriers along Highways, visual & noise barriers on bridges and on security barriers. Tilara Solid Polycarbonate Sheets are 250 times stronger than glass and 25 times more impact resistant than acrylic sheets.

Tilara Solid Polycarbonate Sheets can also be engineered to suit food grade applications and enhanced fire-retardant property in case of specific applications or requirements.

Tilara Embossed Polycarbonate Sheets: These sheets offer all the advantages of solid polycarbonate sheets with the additional feature of excellent light diffusion, making them the ideal choice for skylights, profiled sheets used in tandem with metal, asbestos cement, GI and other profiled roofing sheets for skylight applications and day-light cladding applications.

Tilara Diamond Polycarbonate Sheets: With a diamond like surface texture, these sheets are also manufactured in attractive colours to suit decorative applications, residential roofing and glazing structure coverings. These sheets are available in clear, bronze, blue, lake blue and green colours as a standard. Special colours can be developed and manufactured in case of large quantity requirements.

Tilara Solid & Embossed Polycarbonate Sheets are available in roll form in lower thicknesses and are extensively used for manufacturing profiled sheets and thermoformed / vacuum formed products.

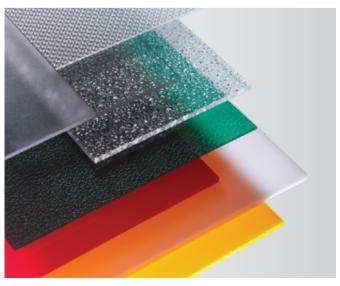
FEATURES

- Extreme impact strength
- High transparency
- Easy installation
- Sound insulation
- Weather & UV- resistance
- Virtually unbreakable
- Low moisture absorption
- Easily machined, fabricate & thermoform
- Half the weight of glass
- ECO friendly material

RELATED INDUSTRIES

- Building & Construction
- Printing & Fabrication
- Thermoforming & Machining
- Defence & Security Glazing
- Aerospace & Rail
- Signage & Advertising
- Mass Transportation & Automotive
- Lighting





TILARA® Polycarbonate Solid Sheet & Roll

GENERAL			
General Properties	Method	Units	Value
Density	ISO 1183	g/cm³	1.2
Light transmission (Depending on thickness)	ASTM D 1003	%	81 - 90
Refractive index	ISO 489		1,585
MECHANICAL			
General Properties	Method	Units	Value
Tensile Strength at yield	ISO 527-2	MPa	60
Tensile Modulus	ISO 527-2	MPa	2300
Elongation at break	ISO 527-2	%	>100
Elongation at yield		%	6
Flexural Modulus	ISO 178	MPa	2330
Charpy Un-notched	ISO 179	kJ/m2	Not Break
Izod Impact notched	ISO 180a	kJ/m2	>65
THERMAL			
General Properties	Method	Units	Value
Temp of deflection (HDT) Under load of 1.8MPa	ISO 75-1	°C	130
Vicat softening temp (50°C/h 50N)	ISO 306	°C	144
Thermal conductivity	DIN52612	W/m x °C	0.2
Coefficient of linear thermal expansion 0-50°C	ISO 11359	mm/(m x 1/°C)	0.070
GWFI (Glow-Wire Flammability index)	IEC60695-2	°C	900
ELECTRICAL			
General Properties	Method	Units	Value
Volume Resistivity	IES 60093	Ω x cm	3 x 10 ¹⁴
Surface Resistivity, dry	IEC 60093	Ω	6 x 10 ¹⁵
Dissipation Factor 1Mhz	IEC 60250		0.009
Dissipation Factor 100Hz	IEC 60250		0.0006

AVAILABLE IN

COLORS

Clear, Opal, Bronze, Green, Blue, Metallic Grey, Pencil Grey, Greenish Blue

DIMENSIONS

Width: up to 2100mm Thickness: 1mm to 12mm

TYPE

Options: Embossed texture, Diamond texture, single sided UV protection & Both sided UV Protection

Specials: Special transparent, translucent & opaque options are available on request









TILARA Polycarbonate Multiwall Sheet

Tilara Multiwall Polycarbonate Sheets are a highly engineered and evolved products, making them extremely versatile and perfectly suited to a very wide range of end-uses. The advantageous weight to performance ratio, ensures that Multiwall Sheets deliver excellent results at very economical values.

Tilara Multiwall Polycarbonate Sheets have 2UV Co-extruded protection to ensure exceptional UV Resistance. The hollow structure, combined with flexibility and excellent impact resistance ensure that these sheets can be deployed in a wide range of applications. Tilara Multiwall Polycarbonate Sheets are also an engineering designers' dream glazing material as they allow for very high levels of improvisation in their installation, light transmission control, thermal insulation and aesthetic appeal. The range of colours in which these sheets are available, adds another dimension to the visual appeal of Tilara Multiwall Polycarbonate Sheets, once they are installed.

Sunlight offers a boundless source of energy that can be harnessed to reduce our dependence on artificial sources of light & energy. However, the UV spectrum of sunlight is harmful to human beings, man-made things used by humans on a day-today basis, plants and animals. Tilara Multiwall Polycarbonate Sheets allows us the liberty to harness sunlight without the harmful effects of Ultra-Violet radiation. UV filtered sunlight has been acknowledged by experts as the easiest way to improve human life, enhance performance and lead to healthier people.

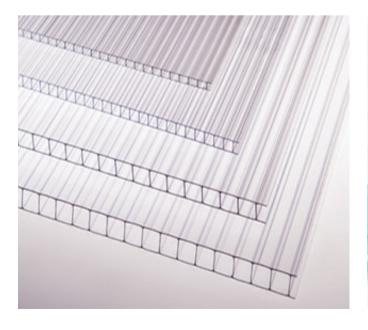
Tilara Multiwall Polycarbonate Sheets are not just a roofing or glazing material. They are a new way of looking up to your roof with the assurance of health & happiness.

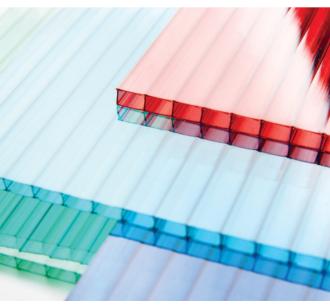
MAIN BENEFITS

- High thermal insulation
- High impact resistance
- High sound insulation
- High fire ratings
- Optical properties
- Excellent structural durability
- Excellent resistance to chemicals
- Easy to handle and install
- Weather and UV resistant
- Long life span

TYPICAL APPLICATIONS

- · Architectural roofing and glazing
- Skylights and sidelights
- Conservatory roofing
- Covered walkways
- Illuminated signage and displays
- Decorative partitions
- Sound barrier walls
- Greenhouse and garden center roofing
- Sunshades for stadiums and bus shelters





TILARA® Polycarbonate Multiwall Sheet

PRODUCT CHARACTERISTICS

SPECIFICATION

GENERAL			STRUCTURE	MINIMUM BENDING	U.VALUE	LT(%)	
TEST ITEM	TEST METHOD	UNIT	RESULT		RADIUS (MM)	(W/m2k)	CLEAR
Impact Resistance Izod Impact (Notched)			Twin Wall Version		700	3.9	80
'Raw material - Resin Specification	ASTM D 256 Pendulum :	J/m 90		Twin Wall Version	1050	3.6	78
Sheet Curve Radius Limitation Thickness = 6mm > 1050mm Thickness = 10mm > 1750mm	7.5 Joule				1400	3.4	76
Specific Gravity Density, D23C	ASTM D 792	Sp gr 23/23C	12		1750	3.2	73
Flammability Horizontal Burn (Flame Spread)	ASTM D 635	mm/ minute	< 25	RDC 5-Wall Version	3505	2.7	69
Test F	Report		P05440				

AVAILABLE IN

Thickness: 4mm, 6mm, 8 mm, 10mm, 16mm

Colour: Clear, Brown, Metallic Grey, Opal White, Blue, Greenish Blue, Green

Standard size: 2100 x 11800, 2100 x 5800, 1220 x 11800, 1220 x 5800 (customize size also available)













TILARA Polycarbonate Profile Sheet

TILARA PROFILED POLYCARBONATE SHEETS FALL UNDER TWO BASIC CATEGORIES. THEY ARE:

- I) Extruded Polycarbonate Profile Sheets
- II) Cold Profiled Polycarbonate Sheets

Extruded Polycarbonate Profile Sheets are given their distinctive shapes or profiles at the time of being manufactured itself with the help of a set of integrated rollers which are engineered to impart the required shape at the time of extrusion itself.

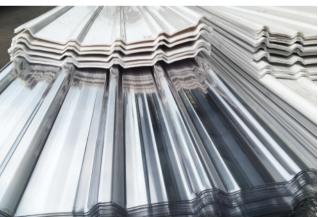
Extruded Polycarbonate Profile Sheets have certain distinct advantages when compared with profiled sheets manufactured by any other off-line manufacturing technique.

THE DISTINCT ADVANTAGES OF EXTRUDED POLYCARBONATE PROFILE SHEETS ARE:

- The Sheets are stress free and extremely stable
- Greater details in profile are possible which include baby ribs & ant—capillary grooves
- Sheets can be manufactured to tailored lengths thereby reducing overlaps
- The sheets tend to retain their profile dimensions even when subjected to load
- The dimensions are consistent and ensure perfect nesting every time

However, the rollers that impart the permanent shapes to Extruded Polycarbonate Profile Sheets require large capital investment. Thus, a commitment to purchase from the Customers are required to develop these rollers as and when required.







TILARA® Polycarbonate Profile Sheet

THE ADVANTAGES OF COLD PROFILED POLYCARBONATE SHEETS ARE:

- They do not require any specific die and hence most basic profiles can be manufactured
- Cold profiling method can be used to make profiles in tailor-made widths (Strip / Tube Lights)
- Tilara Cold Profiled Polycarbonate Sheets offer 10 Years Conditional warranty after being profiled
- Small quantity orders can be processed quickly and conveniently

Tilara Profiled Polycarbonate Sheets can be made from Solid Clear & Embossed Polycarbonate Sheets and offer a wide range of natural lighting options.

APPLICATIONS

- Industrial Skylights & Daylight Panels
- Daylight Panels for Pre-Engineered Buildings
- Skylight & Cladding Panels for Warehouses & Godowns
- All types of daylight applications in structures where profiled roofing sheets are used

Tilara Profiled Polycarbonate Sheets have been found to deliver energy savings in terms of reduction in electricity consumption. The average payback period is estimated to be between 10 to 12 months. Tilara Profiled Polycarbonate Sheets carry a 10 Years Conditional Warranty. Your assurance of savings for years to come. Plus, your contribution towards a Greener Planet Earth!!

AVAILABLE IN

Thickness: 0.8mm to 3mm

Colour: Clear, Opal, Bronze, Green, Blue, Grey &

Greenish Blue

Width: Customizable

TYPE

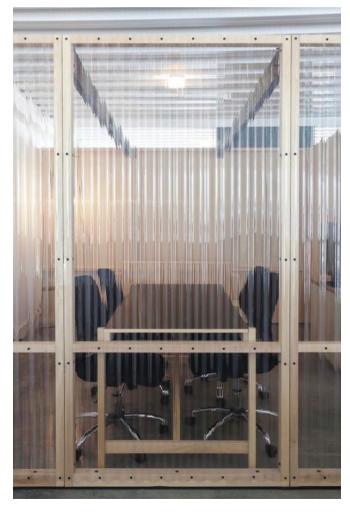
Options: Embossed texture, Diamond texture, single sided UV protection & Both sided

UV Protection

Specials: Special transparent, translucent & opaque options are available on request









TPPLGLAS® XT Acrylic Sheet

TPPLGLAS XT Acrylic Sheet manufactured by **Tilara Polyplast Pvt. Ltd.** is a thermoplastic sheet that is an alternative of Polycarbonate when extreme strength is not compulsory.

It is often preferred because of its moderate properties, easy handling, fabrication and other processing. TPPLGLAS XT Acrylic Sheet has better scratch resistance properties than other conventional sheet.

TPPLGLAS XT Acrylic Sheet manufactured by modified grade MMA resin which has higher scratch resistance with best impact resistance, weather resistance and thermal resistance. As per it's better weather and UV resistance, it's also perfect for outdoor application. It has transmittance up to 92% of visible light and give best reflection from each of its surface. Our moderate extrusion technology process maintains product quality like transparency, color, accurate thickness and other object.

TPPLGLAS XT Acrylic Sheet can be glue easily by using many different organic based adhesive. Being transparent, Color and durable, it is a multifaceted material and used in various segment and applications such as sound barrier walls, Bathtubs, Security barrier, Shatter resistance panels for building window, Furniture, Lighting, Sign-Display, advertising and many other.

TPPLGLAS XT Acrylic Sheet is odorless that can be easily thermoform, blow, bend, print and laser without any excruciation.

APPLICATIONS

- Exhibition booths
- Interior and exterior lighting
- Cosmetics
- Museum casings
- Noise-reducing walls
- Signage and advertising
- Aquarium
- · Gift Article and Trophy

KEY FEATURES

- Excellent thickness tolerance
- Optical clarity
- Lightweight
- · High gloss surface on both sides
- Hard wearing
- Weather resistant
- Easy to bend and shape
- Economical
- · Suitable for vacuum forming







TPPLGLAS® XT Acrylic Sheet

GENERAL				
General Properties	Conditions	Test Method	Unit	Value
Density		ISO 1183	gr/cm3	1,19
Water Absorption (24h)	23°C / 50% RH (24h)	ISO 62	%	0,3
Moulding Shrinkage		ASTM D-955	%	0, 2-0, 6
MECHANICAL				
General Properties	Conditions	Test Method	Unit	Value
Tensile Strength at Break	23°C	ISO 527-2	MPa	83
Econgation at break	23°C	ISO 527-2	%	7
Tensile Modulus	23°C	ISO 527-2	MPa	3200
Flexural Strength at Break	23°C	ISO 178	MPa	120
Flexural Modulus	23°C	ISO 178	MPa	3300
Charpy Impact Strength with Notched	23°C	ISO 179-1eA	kj/m2	2
Izod Impact Strength		ISO 178	kj/m22, 1	
Rockwell Hardness M Scale		ISO 2039-2	M-scale92	
THERMAL				
General Properties	Conditions	Test Method	Unit	Value
Vicat Temperature	50 N	ISO 306	°C	105
Deflection temperature under load	1,8 MPa	ISO 75	°C	100
Coefficient of linear expansion		ISO 11359-2	mm/m °C	0,07
THERMAL				
General Properties	Conditions	Test Method	Unit	Value
Dielectric Strength		DIN53481	kV/mm	20
Dielectric Constant	1 KHz	DIN 53843		3,1

AVAILABLE IN

Thickness: 2mm to 12mm

Colour : Clear, 0-40, White & Black (customise are available on request)

Width: Upto 2100mm









TILARA GPPS/ Plastic Sheet possess excellent Transparency & Compactness. Having Crystal Clear appearance on Transparent Sheet, light weight & easy to install. GPPS Sheets are Cost effective, Shatter resistant, transmits 90 % of light and can be cut into ideal shapes for varied applications.

Available in Transparent, Semi - Transparent, Colours in Huge range / specific colour can be on request and range of Embossed design on Surface.

TILARA GPPS Sheets are safe guarded with Supreme Quality Protection Masking Kraft Paper & Poly Ethylene Film which acts as damage proof while on transit or material handling.

TILARA GPPS Textured Sheet: Different Texture Finish on Surface of the Sheet caters to a wide range of application like Partitions, Ceiling, Window Panel, Door Panel, Printing & many more. GPPS Textured Sheet is intended primarily for areas such as interior fittings for decoration, display and point-of-sale, visual merchandising, store design and where safety requires the light-weight and shatter resistance of GPPS plastic sheet.

Our R&D & Qualified Engineers have lead us achieve Un-matched Quality, Dimension Stability, High- durability, water resistant & possess capability in enhancing luminance.











TILARA® GPPS Sheet (PS)

TEST PROPERTIES						
TEST ITEM	TEST METHOD		UNIT	VALUE		
Specific gravity	ASTM D792	JIS K7112 A (Method)		1.04		
Vicat Softening Temperature	ASTM D1525	JIS K7206 (B50)	°C	95		
Izod Impact Strength	ASTM D256	JIS 7110	KJ/m2	1.9		
Flexural Modulus	ASTM D790	JIS 7171	MPa	88		
Tensile Strength	ASTM D638	JIS 67162	%	2.2		
Heat Deflection Temperature at 0.45 Mpa	ASTM D648		%	97		

COLORS

Off White -040, Milky White, Smoke, Black, Green, Green Trans, Red, Red Trans, Blue, Blue Trans., Orange, Orange Trans, Yellow, Yellow Trans and Customise.

SURFACE TEXTURE

3D Checks, Bubbles, Sea Gul, Ice Crush, Star, Rift, Karakachi, Matt, Prismatic

Surface Protection: Kraft Masking Paper or PE Masking

DIMENSIONS

Thickness: 0.8 mm~18 mm Standard Size

Length: 8 x 4, 6 x 4, 4 x 3 (ft) **Width:** 915 mm - 1220 mm

APPLICATIONS

- Kitchen Cabinets
- Shower Doors
- Exhibition Stand
- Home Decor
- Photo Frame
- Display

- Fluorescent Light Panels
- Partition
- Wall Decoration
- Ceilings
- Sign Board
- Name Plates













ON BEHALF OF ENTIRE **TILARA TEAM**, WE WELCOME YOU TO OUR JOURNEY OF GROWTH, GAIN AND GOODWILL





















linktr.ee/tilarapolyplast



Polycarbonate Solid Sheet & Roll **Polycarbonate Multiwall Sheet Polycarbonate Profiled Sheet Polystyrene/GPPS Sheet**

XT Acrylic Sheet





Survey No. 26, Tilara Road, At. Shapar, Dist. Rajkot - 360 024, Gujarat, India.