

## TECHNICAL DATA

### VITROFLEX MULTIWALL PC

The VITROFLEX MULTIWALL PC is a lightweight polycarbonate sheet with a hollow and grooved inner structure. It has a high resistance to impacts and a high transmission of light, together with better insulation depending on the product chosen.

The VITROFLEX MULTIWALL PC comes in different thicknesses, cell structures, variety of colors and can also be produced in different densities suitable for each project.

#### ADVANTAGES VITROFLEX MULTIWALL PC

- High light transmission.
- Possibility of installation with curvature.
- UV protection on one or two sides.
- Lightweight - Handling and simple assembly.
- Good rigidity

#### TYPES AND FORMATS


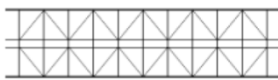
The VITROFLEX MULTIWALL PC in all its range of structures and thicknesses can be produced in colors, being the standard products of stock the colorless and the opal in the majority of thicknesses and structures. For bronze and other colors consult. In addition to the smooth surface structure, it is possible to opt for a hammered light diffuser finish, upon request. It has a layer of protection against UV rays of high quality on one side as standard. Optionally you can ask for two faces. There is also the solar control option, which reduces the passage of heat and infrared radiation.

#### APPLICATION

- Roofs
- Greenhouses.
- Skylights.
- Garages.
- Stadiums and atriums.
- Swimming pools.
- Interior divisions.
- Protection panels.
- Furniture.
- Sings
- Stands.
- Ceilings.
- Subway stations.
- Elevator cabins.
- Advertising posters.

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## STANDARD STRUCTURES VITROFLEX MULTIWALL PC

| Product                                | Estructure                                                                        | Widthmm | Length mm    | Thickness mm | Step mm | (g/m <sup>2</sup> ) |
|----------------------------------------|-----------------------------------------------------------------------------------|---------|--------------|--------------|---------|---------------------|
| VITROFLEX<br>MULTIWALL PC<br>2 WALLS   |  | 2100    | 3000<br>6000 | 4            | 6       | 800                 |
|                                        |                                                                                   | 2100    | 3000<br>6000 | 6            |         | 1300                |
|                                        |                                                                                   | 2100    | 3000<br>6000 | 8            | 10      | 1500                |
|                                        |                                                                                   | 2100    | 3000<br>6000 | 10           |         | 1700                |
| VITROFLEX<br>MULTIWALL PC<br>6 WALLS X |  | 2100    | 3000<br>6000 | 16           | 10      | 2500                |

On request special weights can be manufactured.

Additionally under minimum order.

## OTHER STRUCTURES VITROFLEX MULTIWALL PC

| Product                          | Structure                                                                           | Width mm     | Length mm    | Thickness standard mm | Step mm | (g/m <sup>2</sup> )  |
|----------------------------------|-------------------------------------------------------------------------------------|--------------|--------------|-----------------------|---------|----------------------|
| VITROFLEX MULTIWALL PC 2 WALLS   |    | 1250<br>2100 | 6000<br>7000 | 6                     | 10      | 1200<br>1300         |
|                                  |                                                                                     |              |              | 8                     |         | 1500                 |
|                                  |                                                                                     |              |              | 10                    |         | 1500<br>1700         |
| VITROFLEX MULTIWALLPC 3 WALLS    |    | 1250<br>2100 | 6000<br>7000 | 16                    | 20      | 2500<br>2700         |
| VITROFLEX MULTIWALL PC 7 WALLS   |    | 1250<br>2100 | 6000<br>7000 | 16                    | 16      | 2500<br>2600<br>2700 |
|                                  |                                                                                     |              |              | 20                    |         | 2800<br>3000         |
| VITROFLEX MULTIWALLPC 5 WALLS X  |  | 1250<br>2100 | 6000<br>7000 | 10                    | 10      | 1500<br>1600<br>1700 |
|                                  |                                                                                     |              |              | 16                    |         | 2500<br>2700         |
|                                  |                                                                                     |              |              | 20                    |         | 2800<br>3000         |
|                                  |                                                                                     |              |              | 25                    |         | 3400                 |
| VITROFLEX MULTIWALL PC 6 WALLS X |  | 1250<br>2100 | 6000<br>7000 | 8                     | 10      | 1400<br>1500         |
|                                  |                                                                                     |              |              | 10                    |         | 1500<br>1700         |
|                                  |                                                                                     |              |              | 16                    |         | 2500<br>2600<br>2700 |
| VITROFLEX MULTIWALL PC LIGHT     |  | 1250<br>2100 | 6000<br>7000 | 25                    | 20      | 3200<br>3400         |
|                                  |                                                                                     |              |              | 32                    |         | 3600<br>3700         |

## TECHNICAL SPECIFICATIONS - VITROFLEX MULTIWALL PC

| Properties                                        | Value   | Units                              | Standard   |
|---------------------------------------------------|---------|------------------------------------|------------|
| <b>Physical properties</b>                        |         |                                    |            |
| Density                                           | 1,20    | g/cm <sup>3</sup>                  | ISO 1183   |
| Water absorption 24h 23°C, 50% RH                 | 0,15    | %                                  | ISO 62     |
| Refraction index (20 ° C)                         | 1.586   | %                                  | ISO 489    |
| <b>Mechanical properties</b>                      |         |                                    |            |
| Tensile strength                                  | 63(70)  | N/mm <sup>2</sup>                  | ISO 527    |
| Traction elasticity module                        | 2300    | N/mm <sup>2</sup>                  | ISO 527    |
| Elongation at break                               | 6 (110) | %                                  | ISO 527    |
| Impact strength. Charpy method                    | NB      | kJ/m <sup>2</sup>                  | ISO179/2D  |
| Rockwell hardness                                 | M70     | R-scale                            | ISO 2039-2 |
| Flexural strength                                 | 2300    | MPa                                | ISO 178    |
| <b>Thermal properties</b>                         |         |                                    |            |
| Linear thermal expansion coefficient (23-80°C)    | 0.70    | 10 <sup>-4</sup> x K <sup>-1</sup> |            |
| VICAT softening temperature                       | 149     | °C                                 | ISO 306    |
| Bending temperature under load (Method A, 1.8MPa) | 132     | °C                                 | ISO 75     |
| Specific heat capacity, Cp                        | 1,17    | kJ / kg.K                          |            |
| Thermal conductivity                              | 0,21    | W / m.K                            | DIN 52612  |
| <b>Fire properties</b>                            |         |                                    |            |
| Construction (EU)                                 | Bs2d0   |                                    | ISO13501-1 |

The properties described here are typical values of the material. Polimer Tecnic is not responsible for the materials of a specific consignment to exactly match the given values, being able to carry out tests of that heading. The above information is based on our experience and is given in good faith. Due to some installation and processing factors that are beyond our knowledge and control, no guarantee is given regarding such information.

