



ST 550 P – The webbing type with plain weave and high tensile strength, made of pure texturized glass yarn. This is basic glass tape for general heat insulation and for reinforcing and coating other soft insulations. The tape is available with additional feature as coating reflective alufoil, red silicon elastomer also with metal wire reinforcement.

The special fibreglass for high temperature application is produced from a mixture of quartz sand and pure alumina with the addition of alkali oxides. Appropriately selected chemical composition and surface preparation protect them of hot gases and aggressive chemicals influence and enable long work in high temperatures, there is ST basic yarn type. For the same insulating applications could be use E-glass fibre too. After relaxation and preparation the E-glass gives SE yarn type, which can be use for more smooth and flexible final products with higher resistance to wear under dynamic conditions.

Sizes and kind of packaging

The tapes is supply in roll with standard length 30 meters in carton box around 20 kilos. can be done both on pallet with weight around 1 ton and in carton box around 40 kgs according to below table:

Size TxW	Dia. of roll	weight g/m ²
1.5x25 mm	28	960
1.5x40 mm	28	960
1.5x50 mm	28	960
3x40 mm	38	1600
3x50 mm	38	1600
3x75 mm	38	1600
3x100 mm	38	1600
5x25 mm	54	2600
5x40 mm	54	2600
5x50 mm	54	2600
5x75 mm	54	2600
5x100 mm	54	2600

Parameter	ST fibre	SE fibre
Diameters	7 - 15 µm	4 - 11 µm
SiO ₂ contents	64-70%	52-58%
Strength	1800 MPa	2100 MPa
Melting point	750 °C	840 °C
Density	2,50 g/cm ³	2,56 g/cm ³

The table shows the comparison of data ST fibre with E-glass isolation fibre.

At the next stage the fibreglass roving is formed by texturing and twisting process to bushy insulation yarns with various sizes, from 600 up to 5000 TEX. The textured yarns are the base of all kinds of textile insulations as woven, knitted, braided materials, such as tapes, cloths, cords, ropes, sleeves.

The types of ST glass tapes

There are few types of glass tapes, depend of weaving style and kind of application.



ST 550 L – The ladder tape woven with wrap yarns missing in the centre, the gap is around 25% of the tape wide. This tape is designed for sealing gases on flange with bolts and it gives easier installation and does securing fasteners in bolt line.



ST 550 A - The webbing type with plain weave and high tensile strength in additional with self-adhesive surface.

Main properties of semi-finished fibreglass products:

Property / Type	Unit	ST 550 tape	SE 600 tape
Max working temperature	°C	550	600
Bulk density ρ	g/cm ³	0.9 - 1.2	1.1 - 1.6
Thermal conductivity λ at 400°C	W/mK	0.13	0.16
Ignition loss at 400°C	W/mK	< 1.5 %	< 2.5 %
Compressibility	%	60	55
Tensile strength	MPa	350	420

Areas of application

The first of all, the ST and SE glass tapes are use as insulating and sealing material, especially as a substitute and equivalent of previously used asbestos textile. Energy production, metallurgy and other kind of industry are the domain of application this material. They use it in isolations of blocks, industrial furnaces, heavy machinery as gas seals, shields, varies kind of pads also as carrier material for roller conveyors.