

## BUILDINGS & INFRASTRUCTURE

# FR-E23

## Glass Polyester Composites Profiles Profile properties

### Mechanical properties (EN 13706, minimum values)

Property	Unit	E23 (5mm)	E17 (3mm)
Full section bend test	GPa	23	17
Tension modulus - axial	GPa	23	17
Tension modulus - transverse	GPa	7	5
Tension strength - axial	MPa	240	170
Tension strength - transverse	MPa	50	30
Pin bearing strength - axial	MPa	150	90
Pin bearing strength - transverse	MPa	70	50
Flexural strength - axial	MPa	240	170
Flexural strength - transverse	MPa	100	70
Interlaminar shear strength - axial	MPa	25	15

### Physical properties

Property	Method	Unit	Typical value
Density	ISO1183	g/cm <sup>3</sup>	1.7 - 2.0
Coefficient of thermal expansion	BS6319	10/°K	8 -10 (lengthwise)
Thermal conductivity	ISO8301:1991	W/m.K	0.3 - 0.5
Fire reaction classification	EN 13501-1	Euroclass	B: Very low contribution
	EN 13501-1	Smoke production	S2: Limited smoke production
	EN 13501-1	Flaming droplets / Particles	d0: No flaming droplet/particle