

GRP TRAFFIC & ROAD SAFETY PRODUCTS · TECHNICAL DOCUMENT

GRP anti-glare screen

The modular GRP anti-glare screen is mounted on top of the concrete barrier on motorways and link roads to stop the headlights of oncoming traffic from affecting the driver. Vertical GRP blades set at an angle along a continuous GRP rail cut off the oncoming headlights. Light and modular, it is easy to install; the module length matches the precast barrier element.

TECHNICAL SUMMARY

Dimensions

Blade height	At least 600 mm; planned against the barrier height
Blade profile	125 mm wide, 5 mm wall
Rail profile	125 mm wide, 20 mm thick
Blade spacing	250 mm (between fixings on the rail)
Blade angle	25° on the rail
Module length	The precast barrier element length; any length on cast-in-place barrier

Mounting

Base	Top of the concrete barrier, levelled before mounting
Rail fixing	M10×100 mm steel expansion anchors, about 1 m apart
Fixings	All metal parts galvanised

Material and appearance

Rail	GRP, white
Blade	GRP, yellow
Reflector	70×150 mm, every 2.5 m, on both faces of the blade

TYPE TESTS

Test	Method	Value	Test condition
Heat deflection temperature	TS 1400	≥ 100 °C	Conditioned 24 hours at 23 ± 2 °C and 50 ± 5 % relative humidity before testing
Water absorption	TS 702	≤ 0.40 %	Conditioned sample
Chemical resistance	TS 710	No change in appearance or structure	The test solution does not change colour and no sediment forms

Test	Method	Value	Test condition
Flame resistance	TS 1066	Does not ignite or self-extinguishes	Conditioned sample
Impact resistance	TS 10381	No damage within a 5 mm diameter area, deflection ≤ 2 mm	Measured after the impact test
Wind resistance	TS 10381	≤ 2.5 %	Transient deformation 10 minutes after the test, as a share of the support span
Barcol hardness	TS 10381	≥ 40 Barcol; change ≤ 30 %	Hardness change on the conditioned sample
Flexural strength	TS 985	≥ 150 MPa (1500 kgf/cm ²)	Conditioned sample
UV resistance	ASTM G53	No visible colour change	500 hours
Thermal cycling	TS 10381	Conforms to the standard	Conditioned sample
Reflective material — water	—	No blistering or lifting	Bonded to the profile, 48 hours in water
Reflective material — adhesion	—	Does not peel off	2×2 cm cross-cut on the profile, the piece is pulled
Reflective material — salt spray	ISO 3768	Unaffected	22 hours; 5 % sodium chloride solution at 35 °C; 2 samples

WHERE IT IS USED

- Motorway median. On top of the concrete barrier
- Link roads. Where opposing traffic runs close