

TuffScreen Screen Protectors



TuffScreen screen protectors are designed to increase the impact resistance for Touch screens frequently found on PDA's, mobile phones and In-car navigation systems.

Down time for any system with a touch screen can be costly in the time the unit is out of Service and the bill for the repair. TuffScreen Screen Protectors help to protect your investment from accidental damage, while its unique construction is transparent to the operator

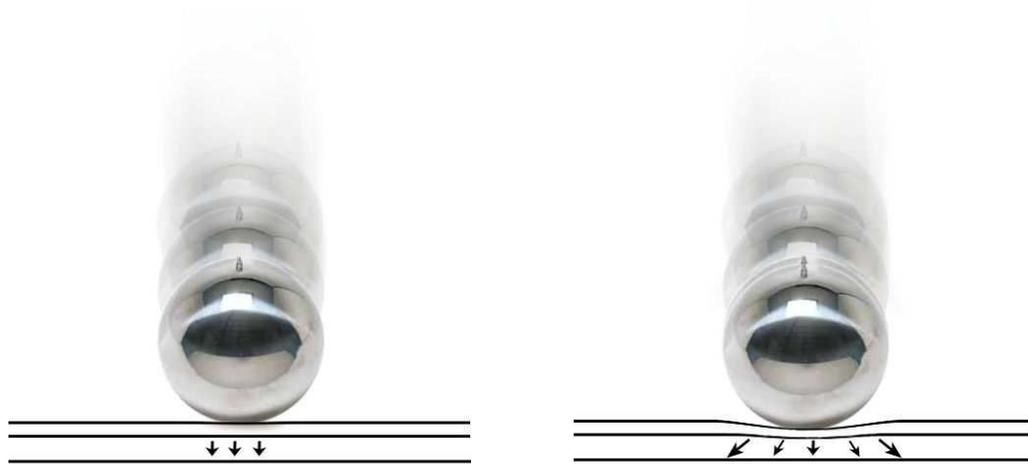
Each TuffScreen is Laser cut to ensure the best possible accuracy and, from customer supplied drawings, custom shapes and sizes can be manufactured. Tuffscreen can be cut small enough for a mobile phone, hand held games console and PDA's, or as big as a 22" TFT screen. Prices for the protectors are worked out on an overall area.

As part of the customisation service the TuffScreen protector can be made with bespoke lettering or graphics bonded into the sandwich construction making legends, directions or graphical elements impervious to wear.

Each protector is made using a high quality, screen printable hard coated polyester film, consisting of a base layer and a chemically bonded UV-cured hard surface coating. The top film is chemical; abrasion & scratch resistant with a long flex life. This is bonded

onto a clear polyurethane elastomer which acts as both shock absorber and self adhesive.

It's easy to see how TuffScreen compares to ordinary screen protectors under impact tests by transferring the load across a wider area



TuffScreen is easy to apply and will leave no residue on the screen if removed. Each protector comes packaged with a IPA Screen wipe to clean the surface and to ensure the best optical qualities.

For outdoor use why not enquire about our TuffScreen-Excel, all the same impact resistance properties but with the addition of a MARAG™ (Motheye, Anti Reflection, Anti Glare) coating developed by the Fraunhofer Institute.

Technical Specifications

As can be seen from the following table Tuffscreen is 95% efficient at letting light through but a fall off in efficiency can be seen towards the lower wavelengths and however the polyester sheet used for the hardcoat top surface will absorb all light of a wavelength less than 300nm

Optical Properties

Colour	Peak Wavelength (nm)	Efficiency (%)
Red	660	95.49
Green	565	93.36
Blue	430	90.88
White	N/A	96.15
Ambient	N/A	95.02

Solvent Resistance

Chemical	TuffScreen
Ketones	Very Good
Esters	Very Good
Alcohols	Very Good
Aliphatic hydrocarbons	Very Good
Aromatic hydrocarbons	Very Good
Chlorinated hydrocarbons	Very Good
Organic acids	Very Good
Mineral acids (dilute)	Very Good
Alkalis (dilute)	Very Good
Oils and Fats	Very Good
Foodstuffs	Very Good
Household cleaning agents	Very Good