

# Profiled Top Square Section



## OPTIONS

### Stock colours available:

Steel grey or high visibility safety yellow  
(other resin types and RAL colours to order\*)

### Stocked Sizes:

Square Section Dimensions:  
50 x 50 x 6000 mm

Top Profile Dimensions:  
H71 x W60 x L 6000 mm

Mid (Knee) Rail Dimensions:  
D38 or 40 x L6000 mm

Kicker (Toe) Plate Dimensions:  
H100 x D15 x L6000 mm

All other sizes cut down to order

### Fitting/Connector Range:

GRP floor socket | Fabricated steel base/side plates

### Additional Options:

Cut to size prior to delivery  
Full or partial fabrication prior to delivery  
Full range of fasteners

\*Note: minimum order quantities & lead times apply. Please contact us for further information.

## SPECIFICATION

**Resin Type:** Isophthalic Polyester

### Characteristics:

Std: steel grey or safety yellow colour.  
Industrial grade corrosion resistance.  
Resin type offers fire retardant to ASTM E84 Class 1 and flame spread index 15 or less. Operating temperature range: -50C to +105C.

### Applications:

Suitable for all general industrial environments. Mid concentrations of inorganic acids & alkalis.

### Profiles manufactured/tested in accordance with:

ISO9001 | EN13706 | EN 13501-1:2007

### Can be fixed to:

GRP grating platforms, concrete, metal or wooden substrates

### Fixing methods:

Rails are assembled by either plain or colour matched rivet systems. Typical fixtures to concrete substrates are achieved using expansion anchors (stainless/galvanized or zinc plated) or chemical anchors.

## BENEFITS

- > Corrosion & chemical resistant with little or no maintenance (full details available)
- > Standard colour of safety yellow for top profile & knee rail
- > Cost effective replacements for end of life metal rails
- > Long lasting & durable - GRP handrails have been in service for 40+ years
- > Suitable for exterior or interior
- > Fire retardant - materials tested accordance with EN 13501-1:2007
- > Impact resistant
- > Relative light weight makes for easy transport, handling & reduced load on existing structures
- > Rapid & simple fabrication - no welding on site. Rivet assembled + range of fasteners to suit all scenarios
- > Low electrical conductivity - good for use near electrical installations
- > Low thermal conductivity - good for use in extreme cold
- > Easily cleaned (mild detergent)
- > Rapid delivery times on ex-stock items: typically 5 days for standard items\*
- > Pre-fabrication service available

\*subject to order type & size

## APPLICATIONS

Typical applications:

- Access platform walkways
- Pedestrian bridges, steps & walkways
- Worker access to machinery
- Manufacturing plants
- Marine vessel applications
- Water treatment works
- Offshore wind & oil facilities
- Railway trackside applications

## DESCRIPTION

Square section GRP handrail systems are perfectly suited to interior, exterior and aggressive environments where industrial chemicals or acid/salt air may quickly corrode metal systems. For safety critical applications, products are available which have been tested and approved to safety standards  
BS EN ISO 14122-3:2001 & BS 6399-1:1996.

Available in a standard safety yellow (top profile & knee rail) and a choice of yellow or steel grey stanchions and kicker plate, GRP handrails provide all the advantages of light weight, high strength and durability, coupled with a corrosion resistant, non-conductive, fire retardant and virtually maintenance free life. The product provides for worker safety in a wide variety of exposed locations in all industrial and commercial environments e.g. water treatment works, marine applications, loading bays, walkways, guarding around machinery etc.

The light weight of the product makes transport, handling & installation far easier than metallic products. Rail systems can be made to size and partially assembled prior to delivery for immediate installation.