

# Staircare SC-R Handrail Systems

## FRP Handrail and Guardrails SC-R™ Benefits

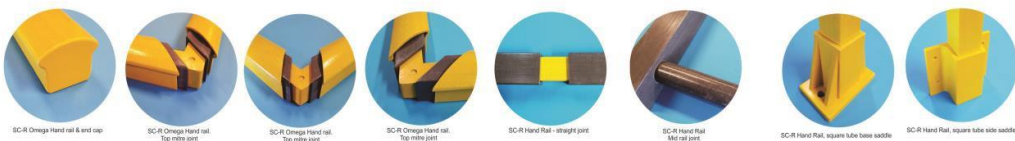
SC-R™ FRP handrails and guardrails require basic installation skills, there is no need for specialist trades such as welding or hot works permits. Hand and guardrails are non-conductive, lightweight, do not create toxic fumes and can be installed in wet areas.

Staircare SC-R™ handrail, stair tread, grating and structural shapes combine to a FRP system that provides safe and versatile access. Made from FRP composite materials they provide the ultimate in corrosion resistance for aggressive environments.

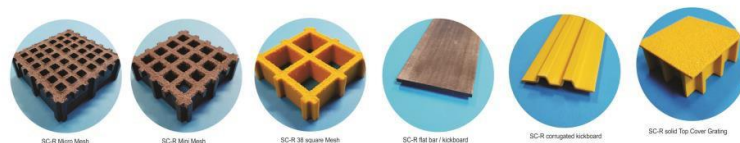
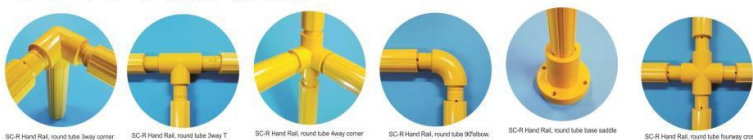
SC-R™ hand and guardrails are made from FRP with a suitable resin system and UV protection designed to meet individual site requirements.

1. Low installation cost, easy to assemble, no welding or need for hot works permits
2. Lightweight, high strength to weight, no need for heavy lifting equipment
3. AS 1657-2018 compliant
4. Corrosion and chemical resistant
5. During manufacture a silicon carbide grit is incorporated into the walking surface that do not delaminate and offer Class P5 Slip Protection
6. No thermal and electric conductivity
7. UV resistant with fire retardant
8. Low maintenance, no re painting, easily cleaned with water pressure for a long service life

### SC-R Handrail



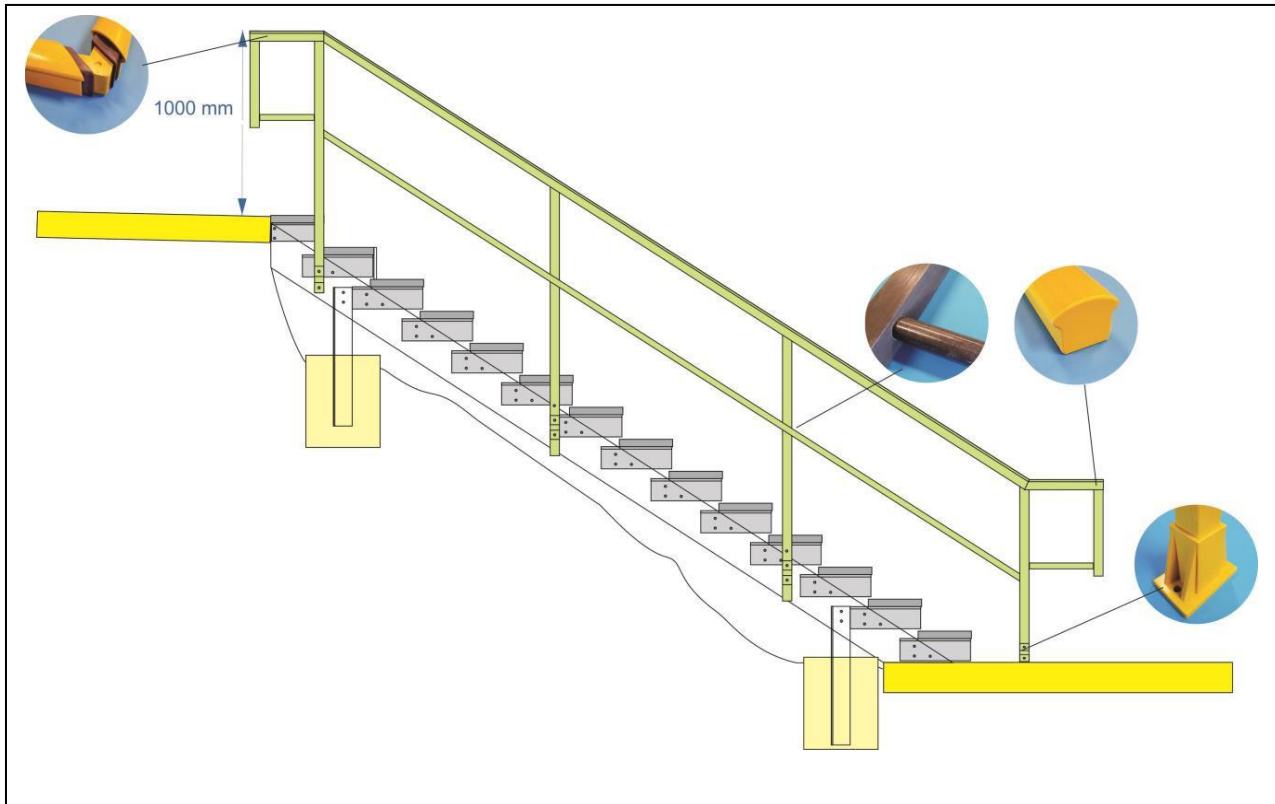
### SC-R Guardrail



# FRP Handrail

Staircare FRP handrail SC-R™ offer strength, durability, versatility and ease of installation with many advantages over traditional materials. It is a lightweight modular system with multiple use.

Staircare FRP Handrail SC-R™ have been tested to AS1657-2018. The load testing confirmed the suitability of SC-R™ as handrail or guardrail systems. Guardrails would be in combination with SC-R™ kick plates.

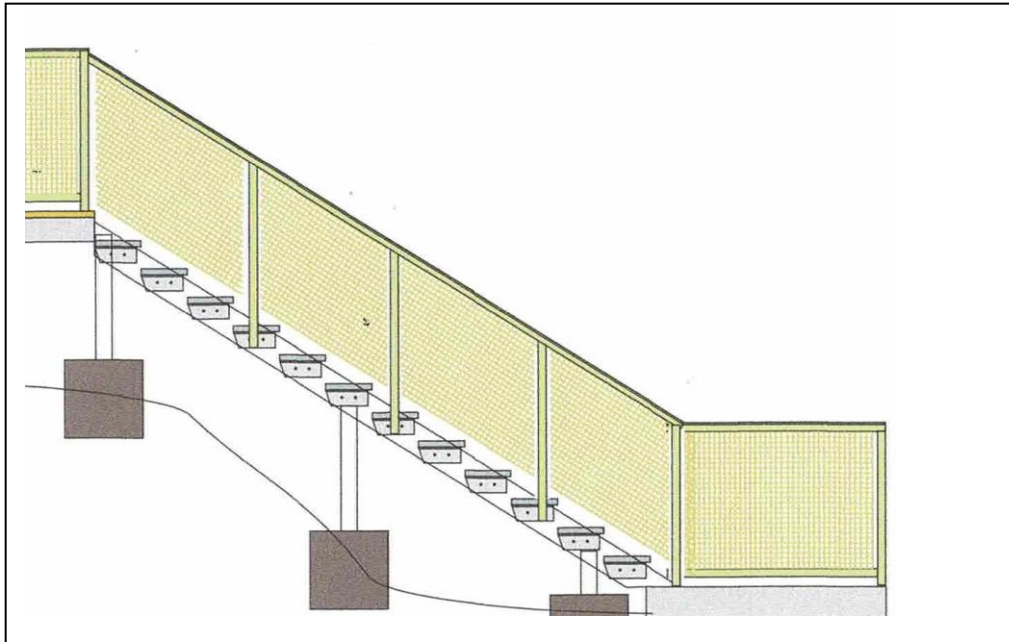




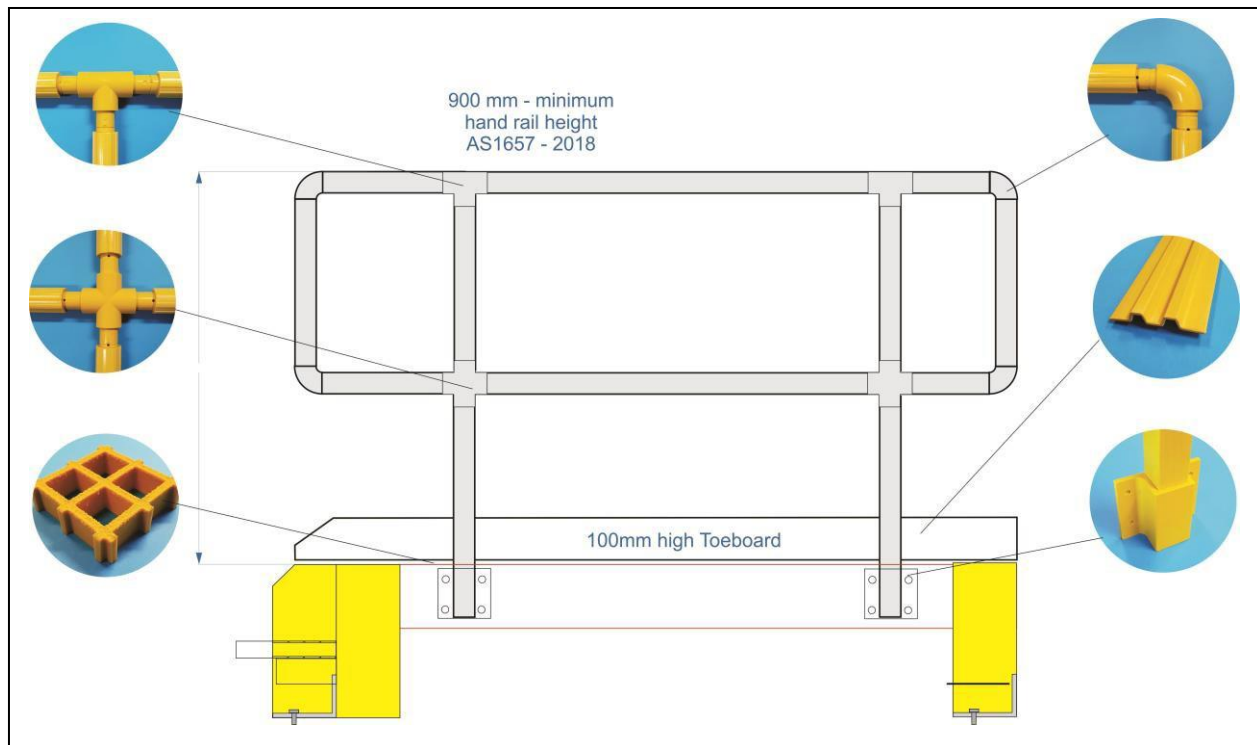
# FRP Handrail with SC-R mini mesh infill

Staircare SC-R Handrail have developed a complete handrail infill utilising SC-R translucent mini mesh with smooth surface. The mini mesh infill completely close handrails between stanchions for safety, in particular to stop children from climbing. The translucent mini mesh allows light to transfer achieving a light and airy feel.

Staircare SC-R handrail fully complies with the requirements of AS 1657-2018.



# FRP Guardrails SC-R™



SC-R guard railing: - Staircare offers a round ribbed tube configuration with solid FRP connectors and SC-R kickboard that results in a robust, strong guardrail system well suited for platforms and fall from heights protection.





# Staircare SC-R Handrail & Guardrail

SC-R Hand and Guardrail can be supplied in individual components or in panel sizes made to your specific requirements.



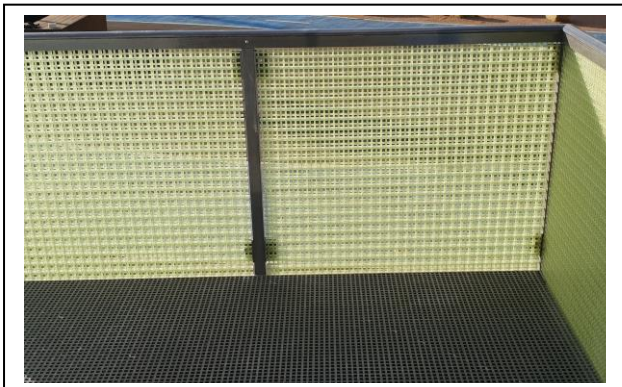
SC-R Handrail Square Tube with Omega Top Rail



SC-R Square Tube with Omega Top Rail Panel



SC-R Guardrail Round tube Panel



SC-R Square Tube, Omega Top with SC-R Translucent Infill Panel

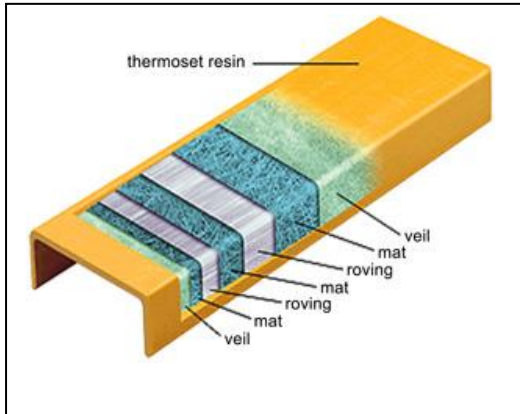


SC-R Square Tube Removable

# Staircare SC-R Handrail Materials Comparison

## What are FRP Components?

Staircare (FRP) components including handrail stanchions, top rails and structural shapes are manufactured using the well proven pultrusion process. Multi directional glass mats and continuous fibre roving as well as a synthetic veil are drawn through a resin bath that also contains the required colour pigments and is then pulled through a heated die to form the desired shape. The process creates an exceptional composite material with colour throughout, excellent corrosion resistance and UV inhibitors in the resin matrix and synthetic surfacing veil.



The above sketch and photo shows fiberglass strands and veil being pulled through the coloured resin mix as part of the FRP construction process.

## Corrosion Resistance

Staircare SC-R FRP railings, structural shapes and grating have exceptional corrosion resistance to a wide variety of chemical and petrochemical spillage, saltwater, fume and fire resistance making the products ideal for use in the harshest environments.

## Life Time Cost

Staircare FRP materials provide significantly longer life expectancy, durability and corrosion resistance in demanding applications. The resin and colour pigment mix in combination with UV inhibitors ensures that colour is throughout the materials, requiring no or very little painting maintenance, adding to a long service life.

## Electrical and Thermal Non Conductivity

SC-R fiberglass is electrically non-conductive providing safety benefits for installation in electrical substations or mitigate situations with stray current issues to reduce step and touch voltage hazards. Low thermal conductivity makes for a comfortable material to work with that can also be a safety feature. Unlike metals FRP products do not contract or expand.

## UV Protection

UV inhibitors are mixed into the resin and also into a synthetic veil that is incorporated on the surface, ensuring protection from UV radiation and the harsh outdoors.

## Environmental Impact

Staircare SC-R pultruded and moulded FRP manufacture produces less greenhouse gas and consumes less energy compared with alternative materials such as steel and aluminium. FRP materials do not corrode or deteriorate and offer a very long service life and can be recycled