FRP/GRP Stair Nosing (Stair Tread)

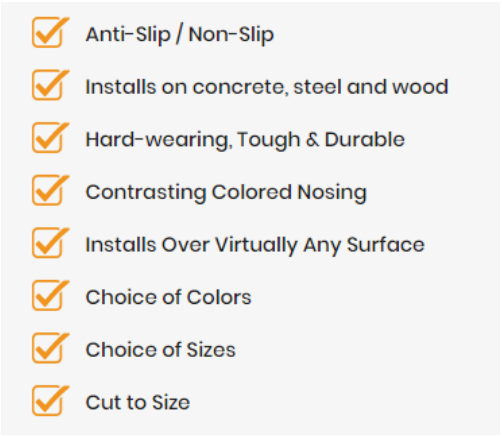
FRP Stair Treads are a prefabricated FRP **(F**iber **R**einforced **P**lastic) **/** GRP (**G**lass - fiber **R**einforced **P**lastic) product, which provides full coverage to the whole stair, with a contrasting colored nosing. They offer extreme slip resistance and can be installed on almost all types of stair substrates; including a traditional steel checker plate, which is notoriously slippery when wet.

Our Stair Treads can also be used over steps that suffer from surface deterioration. These Stair Treads have been used successfully in many applications and in many weather conditions – always retaining their grip for long periods of time*.

Available in many standard sizes and cut into your size.

It can be used in below area:

- Stadiums
- Industrial
- Restaurants
- Commercial Stairs
- State Parks
- Theme Parks/ Attractions
- Medical Facilities



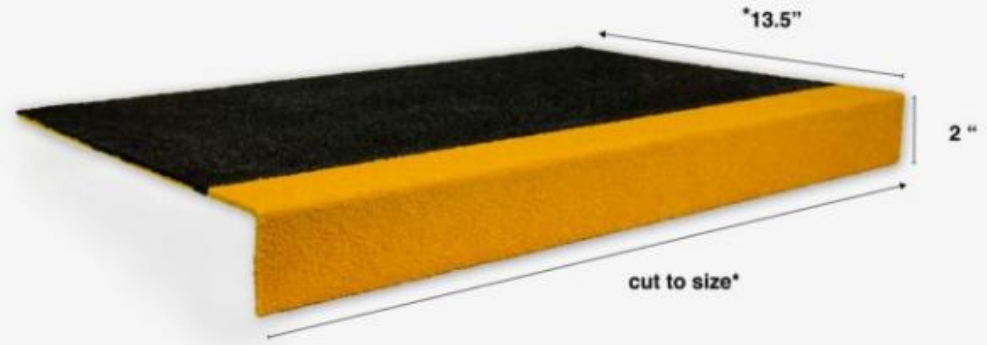
SIZES

FRP/GRP Stair Treads are available in a maximum

8ft wide x 13.5” deep with a 2” Yellow or Brown nosing incorporated into the tread and 2.2” down the riser.

The product is normally 0.16” thick with the nosing set at 85 degrees.

Our free cutting service is available to cut the Stair Treads to your desired size on both the length and the depth.



* = can be cut to the desired size

The standard size is as below:

Item No.	Size (mm)			Weight (Kgs/m)	Corner Remark
	Depth	Width	Thick		
DFS10/70/3	10	70	3	0.64	R=1 with ramp
DFS30/70/3	30	70	3	0.8	R=1 with ramp
DFS30/70/4	30	70	4	0.91	R=6
DFS55/55/4	55	55	4	0.94	90,87degree
DFS55/100/3	55	100	3	1.2	90degree
DFS55/100/4	55	100	4	1.5	R=6
DFS55/200/4	55	200	4	2.5	R=6
DFS55/250/4	55	250	4	3.1	R=6
DFS35/320/3	35	320	3	3.3	R=6 with ramp
DFS55/350/3	55	350	3	3.3	90degree
DFS55/350/4	55	350	4	4.1	R=6

DURABLE

FRP/GRP Stair Treads are manufactured from FRP (**F**iber **R**einforced **P**lastic) / GRP (**G**lass-fiber **R**einforced **P**lastic) to provide an extremely tough and durable product.

Non-Slip

FRP/GRP Stair Treads are pre-formed fiberglass treads that have a non-slip gritted top to provide a slip-resistant and hard-wearing surface. FRP/GRP Non-Slip products may assist in meeting ADA requirements.

DO IT YOURSELF INSTALLATION

The versatility of FRP/GRP Stair Treads allows it to be applied to almost any surface such as concrete, steel, and wood. These Stair Treads are supplied as a finished product, which means that they can be walked on immediately after installation. Refer to our Install Guide in the next tab for further details.

CUTTING THE STAIR TREADS

If you need to cut the Stair Treads to size during your installation, we recommend that a suitable dust mask with protective safety goggles and gloves are worn. The Stair Treads should be cut outside or in a well-ventilated area. If using a circular saw or angle grinder, use a standard carbon or diamond blade when cutting them to size.
Dust residue can be disposed of using normal waste disposal methods. No special permissions or licenses are required.

INSTALLATION OF STAIR TREADS

During the installation of FRP/GRP Stair Treads we recommend that safety gloves and glasses are worn while screwing the Stair Treads into place.

PREPARATION

FRP/GRP recommends that the surface is first swept and cleaned, ensuring that the surface is suitable to receive the Stair Treads.

FIXING TO WOODEN SURFACES

Lay the Stair Tread upon the surface and then use a 7/32” masonry drill bit to drill the top of the gritted surface only in the desired anchoring locations. We would recommend that six anchors (screws or rivets) are put in place every foot – 3 along the front edge (just behind the colored nosing) and 3 along the back edge.
Then screw into position using the Flat Star Head stainless steel.

Additional adhesive can be used on the back of the Stair Treads prior to screwing into position (if required) to add extra grip to the bottom of the Stair Tread. Adhesive is available for purchase on our website.

FIXING TO METAL SURFACES

Lay the Stair Tread upon the surface and then use a 1/4” masonry drill bit to drill the top of the gritted surface only in the desired fixing locations. Change the drill bit to a 1/4” metal drill bit. Use drilling compound, then proceed to drill the metal surface under the Stair Tread (the Stair Treads can be kept in position during this process as you have already pre-drilled the Stair Tread).
Place rivets into each hole and use a rivet gun to fix into position. Please ensure that all rivets have been compressed.
Additional adhesive can be used to the back of the Stair Treads prior to fixing in position (if required) to add extra grip to the

bottom of the Stair Tread.

FIXING TO CONCRETE SURFACES

Lay the Stair Tread upon the surface and then use a 1/4" masonry drill bit to drill the top of the gritted surface and into the underlying concrete sub-base only in the desired fixing locations. Remove the Stair Tread and re-drill the concrete anchor holes with an 5/16" masonry drill bit.

Insert plastic anchors into the holes in the concrete surface and replace the Stair Tread into place.

Then screw into position using the Flat Star Head stainless steel screws.

Additional adhesive can be used on the back of the Stair Tread prior to screwing into position (if required) to add extra grip to the bottom of the Stair Treads.

ADDITIONAL ADHESIVE

While mechanical anchors are all that is required to secure the Stair Treads, wherever possible, the application of an appropriate high strength gap filling adhesive will provide the following benefits:

– A secondary bond in the event that the fasteners should fail.

– A barrier against the "Drumming" noise that is created when fitting a cover over the existing substrate.

Apply a 1/4" bead of high strength gap-filling adhesive around the periphery of the Stair Tread and in horizontal stripes at approximately 8" apart. Immediately press the Stair Tread firmly to the substrate to ensure adequate transfer of adhesive. A firm bond will be achieved in about one hour under normal conditions. Secure with the screws or rivets and allow the adhesive sealant to cure before allowing excessive traffic to use the areas.

RECOMMENDED MECHANICAL FIXINGS

Recommended fixings – Based on 4ft Stair Tread

Over Wood

No 8 x 1.9" x $1_{1/2}$" – Flat Star Head Stainless Steel Screws

Over Steel Plate

No 8 x 0.8" Flanged headed rivets

Over Concrete

No 8 x Plastic Concrete Anchors (or equivalent)

No 8 x 0.8" x $1_{1/2}$ – Flat Star Head Stainless Steel Screws

Over Open Steel Grates

Stainless steel (recommended) or zinc plated saddle clips and domed head bolts suitable in length for the depth of the existing treads.

CLEANING GUIDE AND TIPS

While Stair Treads are extremely resilient to dirt and other contaminants, it will, as with most other things, become dirty.

Dry dirt and debris can easily be removed using a stiff brush and should be done so on a regular basis.

If the Stair Treads have been subjected to spillages or the dirt has become embedded, detergents can be used. It is always advised to test any cleaning product on the Stair Treads before starting the cleaning procedure. This can be done in an inconspicuous area of the installation.

Using the detergent, warm water and a suitable brush; scrub the affected areas until clean. The excess water can be removed using a wet/dry vacuum cleaner or power washer.

Where circumstances allow, the Stair Treads can be power washed without causing harm. Care should be taken when the Stair Treads have been glued down and / or edge is sealed as very high pressure power washing or repeated power washing could cause damage to sealants and adhesives.

GENERAL ROUTINE MAINTENANCE

The security of the mechanical anchors / adhesives should be checked on a regular basis. Circumstances will vary, based upon the volume of foot traffic, etc. but, as a guide, monthly inspections are advised in high traffic areas.

Technical Info

CHARACTERISTICS

- Slip Resistant Surface
- Impact Resistant
- Class 1 Flame Spread – Non Sparking
- Corrosion Resistant
- Lightweight
- Non Metallic
- Tough & Durable
- Choice of Nosing Color
- Choice of Sizes
- Quick Installation

APPLICATIONS

Ideal for the installation on steps, fire escapes, all staircases, decking surface, mezzanine floors and spiral staircases and for over-cladding onto worn surfaces.

TECHNICAL DATA

Description	**Slip Resistant Decking Profiles**
Top Finish	Carbon and Silicon Grip Top Surface
Stock Colors	Black with Yellow Nosing, Red with Yellow Nosing and Black with Brown Nosing
Thickness	Normally 0.16" Thick
Chemical Resistance	Different Chemical Resistance Available, Please Call our Technical Department for Advice.
Panel Size	8' x 13.5" (cut to size)
Panel Weight	25lbs
Service Temperatures	-4 F – 176 F
Load capabilities	Credited with no load bearing strength
Design Life	10+ Years (subject to traffic analysis)
General Use	Standard Pedestrian Traffic

SLIP RESISTANT LEVELS

Measured using the Pendulum test method (Four S rubber slider / 96 Slider) – standard simulated shoe sole.

Top Surface	**Dry Reading**	**Wet Reading**
Standard Grit Surface	80	75

The UK Slip Resistance Group guide to slip resistance of a floor for able bodied pedestrians.

Four S Pendulum Value	**Potential for Slip**
Above 65	Extremely Low
35 to 65	Low
25 to 65	Moderate
25 and Below	High