STAIR NOSING AUSTRALIA

MAXIMUM QUALITY
MAXIMUM SAFETY

INSTALLING FRP STAIR NOSINGS ONTO CHECKERPLATE

Checker plate thickness for stairs is usually between 3 mm and 6 mm. For regular foot traffic, 3 mm to 4.5 mm works well, while **5 mm to 6 mm** is best for heavy industrial use

If there is some flexibility/movement on thinner sheets when a person walks on the steps, you may need to screw.

We can create partial shallow countersink pilot holes that do not go all the way through. We don't charge for this.

> A partial or shallow countersink pilot is a type of recessed hole drilled into a material, such as wood or metal. It is made just deep enough so that the head of a screw can sit level with, or slightly below, the surface of the material.
>
> This technique helps create a smooth and finished appearance, prevents the screw from snagging on objects, and can also reduce the risk of splitting the material. The depth of the pilot hole is carefully controlled to avoid over-drilling, which could weaken the material or allow the screw to sink too far.
>
> Recommended self-tapping screws.

To install FRP (Fibre Reinforced Polymer) stair nosing onto a checker plate surface, you may need a combination of robust mechanical fasteners and a strong adhesive, like Soudal T-Rex, to create a secure and durable bond.

You will require a countersunk head to ensure a flush finish, and the screws should be made of 316 stainless steel.

Fasteners

Self-Drilling Screws, sometimes known as Tek screws.

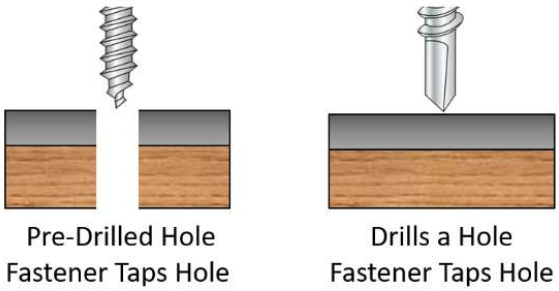
Self-drilling screws, often referred to as Tek screws, are a type of screw designed to create its pilot hole and cut its threads as it's driven into a material.

← Self-drilling

← Self-tapping screws

Self-tapping screws are designed to create their own threads in the material being fastened; however, they usually require a *pre-drilled pilot hole* before they can be driven in. Unlike self-drilling screws, which have a drill point and can create both the pilot hole and threads

Self-tapping screws rely on a pre-drilled path to start the thread-cutting process. WE CAN CREATE THE PILOT HOLE FOR YOU.



Start by thoroughly cleaning the checker plate surface to remove any dirt, grease, or debris that might interfere with

adhesion. This step is crucial, as a clean surface ensures maximum contact between the adhesive and the stair nosing.

Next, assess the surface for any irregularities and, if necessary, pre-drill holes at strategic intervals to facilitate the installation. This preparation will not only make the installation process smoother but also enhance the stability of the nosing.

Fasten with screws; use self-tapping (rely on a pre-drilled path to start the thread-cutting process) or self-drilling. (can create both the pilot hole and threads)

The choice of stair nosing affects how you fix the FRP.

If your nosing has a 10 mm turn-down at the front, you must screw, as the check plate steel often has a rolled edge and may flex or move with a very small turn-down on the face.

If your nosing has a turndown of> 25 mm, you can use adhesive, as the longer nose covers the rolled edge and there is less movement.

After preparing the surface, apply a suitable adhesive evenly along the underside of the stair nosing. Select an adhesive specifically designed for FRP materials to ensure optimal bonding.

Finally, position the nosing carefully over the tread, ensuring that it aligns perfectly with the edge. Then, securely fasten it in place with screws, applying consistent pressure to help the adhesive set properly. This combination of adhesive and screws will result in a solid and lasting installation that enhances both safety and aesthetics.

Follow the adhesive manufacturer's instructions for curing time before allowing any traffic on the stairs.

NOTES:

Slow and Steady:

When screwing, start slowly and keep the screw straight to ensure a properly sized hole in the fibreglass.

Variable Speed Screw Gun:

A variable-speed screw gun is recommended to control screw speed and prevent overheating, which can damage the fibreglass.

Avoid Over-Torquing:

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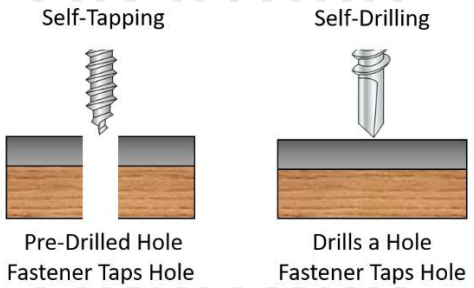
Excessive pressure can lead to cracking, so use a moderate amount of force when driving the screw. Do not over-tighten fasteners

Consider a Pilot Hole (in some cases):

For very thick fibreglass or when working with specific materials, a small pilot hole may be beneficial.

Use a countersunk head, self-drilling screws or self-tapping



screws