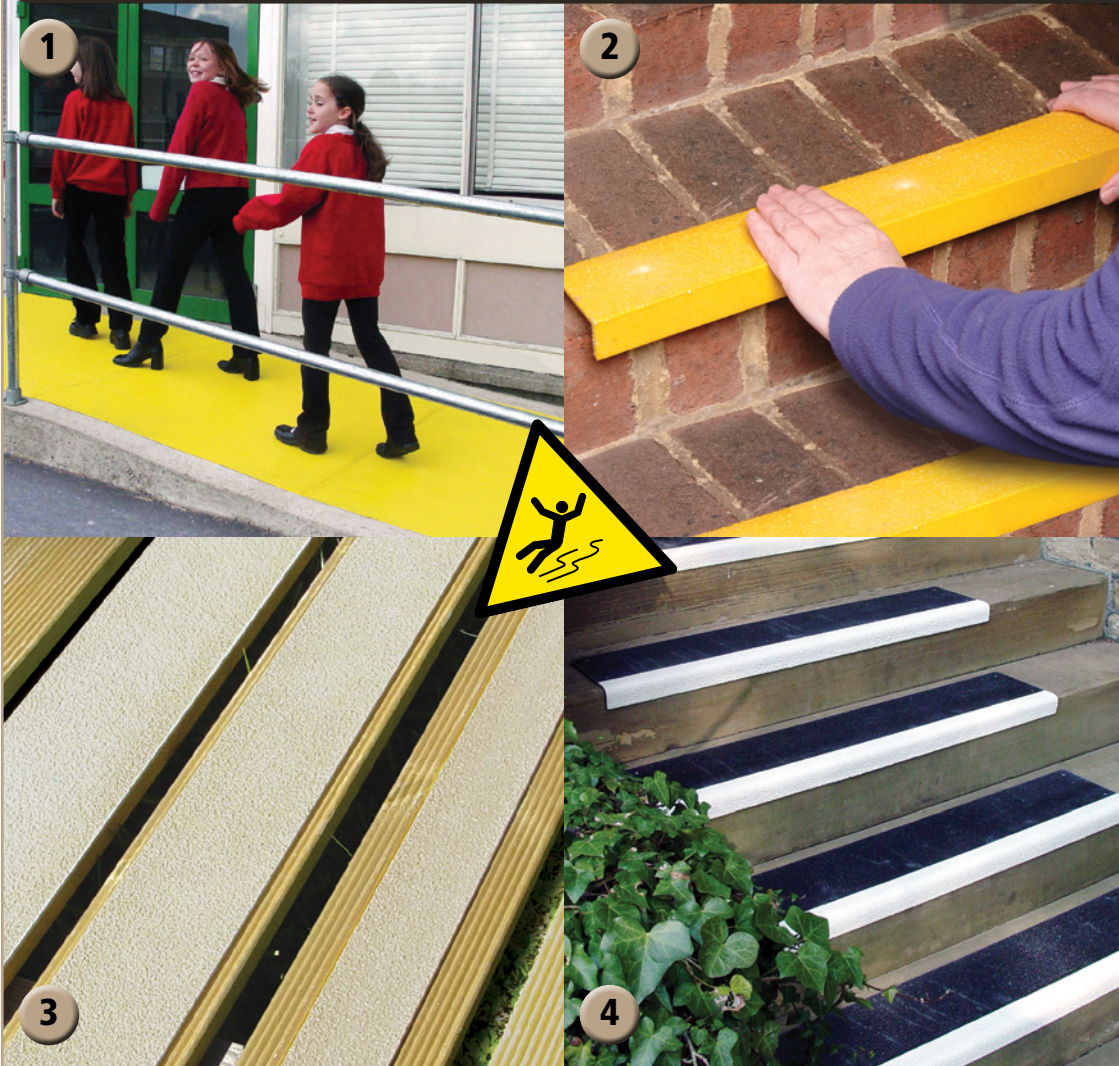


WATCO®

The UK's leading direct supplier of industrial strength flooring products

Firm-Step® Range

Instant anti slip surfaces for steps, ramps, floors, decking, vehicles etc.



- 1 Sheets for ramps or around machinery
- 2 Step edges with a choice of sizes
- 3 Strips for wooden decking
- 4 Step covers with a choice of nosings

Please visit our website

www.watco.co.uk
for latest available sizes and prices or ask for a copy of the Watco Catalogue.

See reverse of this datasheet for fitting instructions

Watco offer a wide range of virtually indestructible slip resistant surfaces. Our Firm-Step GRP range is based on an extremely durable fibreglass base with a coarse, ceramic grit which is bonded to the top for a heavy duty, slip resistant surface.

- All items preformed – just fix in place
- Excellent slip resistance even in the wet
- Step covers with high visibility nosing
- Anti slip sheets for use on ramps or around machinery
- Use inside and out
- Oil and chemical resistant
- Will not rot or warp
- Comprehensive range of standard sizes – all direct from stock
- Next day delivery available
- Cut to size service – usually within two days with no cutting charge
- Glue or screw fix
- Ideal for wet or weak substrates which cannot be adequately prepared for paint
- Helps meet the requirements of the DDA and 2004 Building Regulations
- Stainless steel and aluminium versions are available for some products - please ask for details
- Fitting instructions overleaf
- Custom sizes and colours are available

Watco Firm-Step® Range - Fitting Instructions

Instructions for use

These items are generally glued and screw fixed. Watco Adhesive Mastic is ideal since it will make up minor deviations in the substrate and prevent the GRP drumming or rocking. Watco Adhesive Mastic should be applied to sound, clean dry surfaces if it is to be the only method of fixing in lightly trafficked areas.

If application is to damp, dirty or friable surfaces or in very cold weather, use Watco Adhesive Mastic to bed the GRP item into place and then always screw fix. Screw fixings are generally made at about 600mm intervals.

Drilling through the GRP is easy using a standard twist drill suitable for wood or metal. Countersinking is not required (see below). Screw fixing should also be used if the GRP is likely to be trafficked before the Watco Adhesive Mastic has set.

Trimming

A good quality abrasive disc, jigsaw or hacksaw can be used for trimming. The GRP material is quite tough to cut by hand, so if power tools are not readily available, please ask about our cut to size service.

Fixings

If mechanical fixing is required, the following may be used as a guide:

Watco Tactile Plates

To timber:

30mm zinc plated or stainless steel screws.

To steel plate:

20mm self-tapping pan head Pozzi stainless steel screws or 20 self-drilling pan head Phillips zinc plated screws.

To concrete:

30mm zinc plated or stainless steel impact anchors (Hilti HPS-1 or similar).

To open mesh:

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

Watco Firm-Step Edge

To timber:

1. Lay out all pieces of Firm-Step Edge material on the substrate upside down.
2. Apply the adhesive as stated above. Turn the material over and secure to the substrate, applying body weight to expel any air.
3. Mark Firm-Step Edge where holes are to be drilled. Using a 6mm masonry drill bit, drill through Firm-Step Edge only exposing the substrate.
4. Using a 3.85mm drill bit, drill through the stair tread as stated above (for hard wood, you may need to pilot hole).
5. Once all treads have been pre-drilled, using stainless steel screws (Stainless steel Pozzi head 32mm x 4.2mm screws, supplied by us or similar), screw the material down and aim to make the screw fixings flush with the top surface.

To steel checker plate (or similar):

1. Lay out all pieces of Firm-Step Edge nosing material on the substrate upside down.
2. Apply the adhesive as stated above. Turn the material over and secure to the substrate, applying body weight to expel any air.
3. Using a 3.85mm drill bit, drill through the Firm-Step Edge nosing and steel checker plate.
4. Once all treads have been pre-drilled, using stainless steel screws (Stainless steel Pozzi head 32mm x 4.2mm screws, supplied by us or similar), screw the material down and aim to make the screw fixings flush with the top surface.

To concrete or ceramic:

1. Lay out all pieces of Firm-Step Edge nosing material on the substrate upside down.
2. Apply the adhesive as stated above. Turn the material over and secure to the substrate, applying body weight to expel any air.
3. Using a 6mm masonry drill bit, drill through the Firm-Step Edge nosing and into concrete.
4. Push raw plugs into the 6mm drilled hole and tap to ensure that the raw plugs are flush with the substrate.
5. Once all nosings have been pre-drilled, using stainless steel screws (Stainless steel Pozzi head 32mm x 4.2mm screws, supplied by us or similar), screw the material down and aim to make the screw fixings flush with the top surface.

To open mesh:

1. To avoid hitting a load bar of the open mesh, place the Firm-Step Edge on the open mesh area, then from underneath, mark where you want the fixing to go.
2. Then using a 10mm drill bit, drill through the Firm-Step Edge and ensure it is in the centre of the open mesh.

3. Once all treads have been pre-drilled, using 40mm dome head bolts (supplied by us or similar) push them through the pre-drilled holes.
4. Using a 40mm diameter washer and a nylock nut, tighten up from underneath. (40mm diameter washer and nylock nut supplied by us or similar).

Watco Decking Strips:

Dry fit all strips to ensure correct fit, place strips in position using screws provided drill through pre-drilled holes and into the substrate, repeat on all of the pre-drilled holes. (if drilling into hardwood a pilot hole may be required).

Watco Firm-Step Sheets and Step Covers:

The following assumes you are using the double fixing method, if not, simply follow the same instructions but without the mechanical fixing element.

Adhesive fixing:

All substrates:

Apply an approx. 6mm bead (this may need to be increased dependant on the substrate conditions) of Watco Adhesive Mastic around the periphery of the underside of the Firm-Tread Sheets approx. 25mm in from the edges. Then, starting from the bottom left corner come up at an angle (approx. 200mm across) and then down at an angle, to create a 'peak and a trough', repeat this until you reach the end. Immediately press the panel firmly to the substrate to ensure adequate transfer of adhesive (depending on the size of the bead, this will elevate the sheet by approximately 1-1.5mm). A firm bond will be achieved in about one hour under normal circumstances and conditions. Secure with mechanical fixings, as below.

Firm-Step Step Covers:

Drill two holes on each side of the Firm-Tread Step Covers, one approximately 15mm in from the back edge and 15mm from the side. The second one should again be approximately 15mm from the side and approx. 10m back from the contrasting nosing (55mm) For larger treads, it may be necessary to have further fixing points in the centre of the tread.

Firm-Step Risers:

If you are using Firm-Step Risers, these should be fitted before any of the stair treads. Using Watco Adhesive Mastic in the same method as above. Push these onto the riser as far down as they will go. When Firm-Tread Step Covers are fitted these will hold the Firm-Step Risers in position.

Firm-Step Sheets:

Drill holes 15mm in from all edges at no more than 300mm apart from the centres. Depending on the width of the panels it may be necessary to provide fixing points at 600mm centres down the middle of the panels. As substrates vary considerably, additional fixings may be required to fix the panels down. If fixing down two pieces of flat sheet that is constrained by sides (i.e. a ramp with wall on either side) a 5mm expansion gap should be considered between the two or more sheets. This gap can be filled with a standard high modulus mastic.

Mechanical fixing:

Applying to Substrate:

If you are using Firm-Step Risers, these should be fitted to the riser substrates, as above, before commencing the following procedures.

To timber:

1. Lay out all pieces of Firm-Step material on the substrate upside down.
2. Apply the Watco Adhesive Mastic as stated above. Turn the material over and secure to the substrate, applying body weight to expel any air.
3. Mark Firm-Step where holes are to be drilled. Using a 6mm masonry drill bit, drill through Firm-Step only exposing the substrate.
4. Using a 3.85mm drill bit, drill through the stair tread as stated above (for hard wood, you may need to pilot hole).
5. Once all treads have been pre-drilled, using stainless steel screws (Stainless steel Pozzi head 32mm x 4.2mm screws, supplied by us or similar), screw the material down and aim to make the screw fixings flush with the top surface.

To steel checker plate (or similar):

1. Lay out all pieces of Firm-Step material on the substrate upside down.
2. Apply the adhesive as stated above. Turn the material over and secure to the substrate, applying body weight to expel any air.
3. Using a 3.85mm drill bit, drill through the stair tread and steel checker plate.
4. Once all treads have been pre-drilled, using stainless steel screws (Stainless steel Pozzi head 32mm x 4.2mm screws, supplied by us or similar), screw the material down and aim to make the screw fixings flush with the top surface.

To concrete or ceramic:

1. Lay out all pieces of Firm-Step material on the substrate upside down.
2. Apply the adhesive as stated above. Turn the material over and secure to the substrate, applying body weight to expel any air.
3. Using a 6mm masonry drill bit, drill through the stair tread and into concrete.
4. Push raw plugs into the 6mm drilled hole and tap to ensure that the raw plugs are flush with the substrate.
5. Once all treads have been pre-drilled, using stainless steel screws (Stainless steel Pozzi head 32mm x 4.2mm screws, supplied by us or similar), screw the material down and aim to make the screw fixings flush with the top surface.

To open mesh:

1. To avoid hitting a load bar of the open mesh, place the Firm-Step Stair Cover on the open mesh area, then from underneath, mark where you want the fixing to go.
2. Then using a 10mm drill bit, drill through the Firm-Step Stair Cover and ensure it is in the centre of the open mesh.
3. Once all treads have been pre-drilled, using 40mm dome head bolts (supplied by us or similar) push them through the pre-drilled holes.
4. Using a 40mm diameter washer and a nylock nut, tighten up from underneath. (40mm diameter washer and nylock nut supplied by us or similar).

Preparation

Very little preparation of the substrate is required. It should be reasonably clean and dry if the Watco Adhesive Mastic is to be the only means of fixing. Badly dished or holed concrete etc. should ideally be filled. Watco Adhesive Mastic will take up minor undulations and imperfections.

Countersinking

When drilling holes in the GRP we do not recommend countersinking. When the screw is screwed down firmly, the screw head becomes embedded in the surface texture. The top of the screw head should be flush with the surrounding surface and therefore not present a trip hazard.

Watco Adhesive Mastic

After drilling holes in the GRP, turn the panel over and apply Watco Adhesive mastic. (The 310ml tube fits into a standard skeleton gun, also available from Watco.) Apply a 6mm bead around the periphery of the GRP panel and in horizontal stripes at approximately 200mm intervals. Immediately press the GRP panel firmly into place. The Watco Adhesive Mastic will generally have achieved a good bond within 2 - 4 hours in normal drying conditions.

If the Watco Adhesive Mastic is to be the only method of fixing, please ensure that a good bond has been achieved before re-opening the area for use.

As a guide one 310ml tube of Watco Adhesive Mastic is sufficient for any one of the following:

- 3 linear metres of Step Covers
- 2 x 1200mm x 1200mm Sheets
- 1 x 1200mm x 2400mm Sheet
- 12 linear metres of Firm-Step Edge
- 8 x Tactile Plates

Watco Polyurethane Adhesive

This is a good alternative to Watco Adhesive Mastic if glueing only (i.e. no additional mechanical fixing) to a metal surface. Available in a 295ml tube which fits a standard skeleton gun (also available from Watco). Watco Polyurethane Adhesive should be used when fixing Watco Firm-Step Ladder Rungs.

Watco Firm-Step Ladder Rungs

Cut to required length and fix in place with Watco Polyurethane Adhesive, ensuring the surface is suitably clean and dry beforehand.

Safety

Gloves are recommended when handling GRP. A dust mask and goggles should be used when cutting the product. Wear gloves when using Watco Adhesive Mastic and Watco Polyurethane Adhesive. Materials Safety Data Sheets are available for the adhesives.

Availability and Ordering

Available direct from Watco UK Limited and through agents worldwide. All Watco products are sold subject to the Company's Standard Conditions of Sale.

The Company and its representatives are often asked to comment on potential uses of Watco products which differ from those described in the Company's data sheets. Whilst in such cases the Company and its representatives will always try to offer helpful and constructive advice, the Company cannot be held responsible for the results of such uses unless they are specifically confirmed in writing by Watco.

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Floor Paints & Coatings

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Flooring

Anti Slip Coatings

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Floor Repair Materials

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Preparation Materials

Masonry Repair Materials

Wall Coatings

Exterior Products

Traffic Control

Metal Coatings

Roofing

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