

Anti-Slip Hi-Traction™ COVERS Installation Guidelines

What is needed for Installation:

Mechanical fasteners:

- Appropriate PPE - Safety glasses, gloves, dust mask and hearing protection are suggested
- Broom and dust pan or ShopVac
- Tape Measure or Ruler
- Marking utensil or Sharpie™
- Shop Cloth
- Variable Speed Drill with the appropriate sized bit
TiAIN (titanium aluminum nitride) drill bits are recommended especially for stainless steel. Alternatively, solid carbide drills designed specifically for stainless applications could be used.
- All fasteners (Screws) should feature low profile heads, such as Truss Heads or Pan Heads supplied by Safeguard.
- Socket wrench (for use with Saddle Clip Assemblies over Grating)

Adhesive:

- Appropriate PPE - Safety Glasses, gloves, and dust mask are suggested
- Broom and dust pan or ShopVac
- Tape Measure or Ruler
- Light grade sandpaper and/or Scotch-Brite Pad (or similar)
- Denatured alcohol or acetone
- Standard caulking gun used to apply adhesive
- Nail to puncture seal of adhesive cartridge
- Paint Scraper
- Depending on the condition of the substrate (surface) a power washer, primer and grinder may be necessary

SURFACE PREPARATION

Prior to installing your SAFEGUARD® Antislip Cover, surface preparation is necessary. The extent depends on the condition of the surface (substrate) you are covering, as well as the installation process you intend to use.

MECHANICAL FASTENERS:

In most cases, simply sweeping the surface and removing loose debris is sufficient. Here are some exceptions:

- Raised/Uneven Surfaces – Depending on the severity (more than 1/8”), leveling compound may be needed. Uneven surfaces can make fastening difficult (adhesive impossible) and can cause damage to the cover over time.
- Chipped Concrete (particularly on leading edge of steps) – Old and damaged concrete that is chipping away requires leveling compound. SAFEGUARD® Covers are not load-bearing and must be fully supported. Gaps under the cover or unsupported areas will result in damage to the (FRP) fiberglass cover.
- Steel – remove existing screw heads

CUTTING YOUR SAFEGUARD ANTISLIP COVER

All SAFEGUARD® Covers are cut and fabricated to customer specification. Should additional field cutting be necessary, Safeguard suggests using a diamond blade with appropriate PPE.

RECOMMENDED MECHANICAL FASTENERS

All fasteners should feature low profile heads, such as Truss Head or Pan Head screws supplied by Safeguard.

CONCRETE:.....Masonry Fasteners with Plastic Insert Sleeve Tapcon®

STEEL:.....Self-Tapping 1” or
1-1/2” Truss Head Screws
Self-Drilling 3/4” or
1” TEK – Pan Head Screws

WOOD:.....Self-Tapping 1” or
1-1/2” Truss Head Screws

NOTE: Wood Screws with small profile heads (same diameter as body) are not recommended

STEEL/FIBERGLASS GRATING:.....Universal Saddle Clip Assembly

* If installing SAFEGUARD® Covers over Grip-Strut or Grating with a raised surface set back from the leading edge, Safeguard recommends a “Backer Plate” under the nosing, to fill in this area and support the cover. This is available by request.

DRILLING FASTENER HOLES:

Safeguard can pre-drill holes in your Antislip Cover to assist in fastening. If you choose to drill the covers in the field, below is a chart with the recommended drill bit sizes for the corresponding screws. In addition to pre-drilled holes in your SAFEGUARD® Cover, pilot holes in the substrate can be helpful during installation.

Screw/Bolt Size	Drill bit size required
#8 x 1” Screw	7/32” diameter drill bit
#10 x 1-1/2” Screw	9/32” diameter drill bit
1/4” Bolt	3/8” diameter drill bit

Drill Bits: TiAIN (titanium aluminum nitride) drill bits are recommended especially for stainless steel. Alternatively, solid carbide drills designed specifically for stainless applications could be used.

Countersinking: Due to the low profile of the Safeguard Covers, countersunk holes are limited to the 1/8” Pultruded FRP (Fiberglass) base construction products. It is recommended that countersunk holes are specified prior to manufacturing.

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Section 1

PILOT HOLE DEPTH:

CONCRETE:..... Drill to the Depth of the Plastic Sleeve used with the masonry fastener.

NOTE: If using Tapcon®, follow the manufacturer's recommended instructions.

STEEL:..... Drill all the way through the steel (or as deep as possible).

WOOD:..... Not necessary however, if preferred, drill just to the depth of the screw being used.

STEEL/FIBERGLASS GRATING:..... N/A

OUTDOOR APPLICATIONS & EXPANSION/CONTRACTION:

To compensate for expansion/contraction over outdoor substrates (wood, concrete etc), use 1/8" larger drill bit than size recommended on the chart when drilling holes in your Safeguard® Cover. It is also important to leave a small space between Walkway Covers when assembling a series end to end. A space of approximately 1/8 inch should be left between sheets.

ADHESIVE & PSA (Peel & Stick "Pressure Sensitive Adhesive"):

When using an adhesive, all surfaces must be clean, dry, and dust-free. If the surface has a pre-existing coating, it must be fully bonded to the substrate. If there is peeling or possible delamination, all existing coatings or paints must be removed until the bare substrate is exposed. This may require scraping, grinding or sand blasting.

NOTE: If a SAFEGUARD® Cover is adhered to an unstable surface, or one that delaminates from the substrate, the cover will come off as well.

Once the substrate is clean of loose debris, rust, or coatings, the surface can be wiped with acetone or de-natured alcohol. This will help to eliminate oils* and grease that may inhibit the bond.

Finally, the substrate can be lightly abraded using a Scotch-Brite™ pad (or similar type) until the surface shine is dulled.

* Surfaces that are exposed to grease or oil may require a degreasing agent or primer. If the substrate is extremely saturated, mechanical fasteners are strongly recommended or a combination of adhesive and mechanical fasteners.

Applying Ladder Rung Covers to Carbon Steel:

1. Thoroughly clean steel rungs to remove any dirt, oil, grease, etc.
2. Abrade to remove any rust.
3. Apply a metal primer followed by high quality industrial coating which does not contain silicone or Teflon.
4. When the topcoat is dry or cured, scuff lightly with sandpaper to remove gloss.
5. Adhesive such as Sikaflex 252 can now be applied.

RECOMMENDED ADHESIVE:

Safeguard carries the Sika line of adhesives. Sikaflex®-252 is a 1-component, moisture cured, polyurethane adhesive with extremely high thixotropy and high strength.



- Bonds and seals at the same time
- One part formulation
- Replaces rivets and mechanical fasteners
- Very high thixotropy for good gap filling properties
- Adhesion to a wide range of substrates
- Short tack free and curing time
- Non-staining curing process
- Initial load-bearing capacity
- Sandable and paintable
- Increases torsional stiffness of final assembly
- Shock/impact resistant
- Vibration and sound damping
- Excellent weather and water resistance
- USDA approved for incidental food contact



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