



Metal Stair Tread, Nosing, & Flat Step

INSTALLATION

This document is intended for professional use to provide minimum requirements for substrate preparation, adhesive application, and special installation requirements for a successful installation of these products, each unique application may require additional or further steps to ensure complete satisfaction. We rely on the expertise and professionals that are installing the products to adjust based on site conditions. Refer to the product website to confirm that you have the most current revision of this document as the requirements contained within are essential to maintaining the full system warranty for the product installed. Documentation available at time of installation will be referenced regarding warranty.

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RECOMMENDED FASTENERS & ADHESIVES

The fasteners & adhesives below are the recommended adhesives for the installation of this product. Select the appropriate application method based on the conditions of the substrate.

Required for Installation		Premium, Exterior Grade Polyurethane Construction Adhesive (such as Loctite® PL 3X Construction Adhesive) along with Recommended Fastener Type
Substrate	Recommended Fasteners	Drill Bit Size
Concrete	#10 Self Tapping Concrete Screw	5/32"
Wood	#10 Wood Decking Screws	1/8"
Metal	#10 Stainless Steel Machine Screws with Flat Washers and Locking Nut (Purchased from Hardware Supplier)	1/4"

***Verify the drill bit size with your fasteners prior to drilling holes**

In the event you are not able to get to the underside of the metal steps to use the machine screws, washers and locking nuts, you would simply switch to a #10 Flat Head Self Drilling screw long enough to provide an adequate bond to the metal. Usually, 1" would be sufficient. I would recommend a pilot hole and the use of loctite or similar thread locker if desired.

If desired, paint the heads black (or whatever color matches) before inserting them. Using a foam insulation board to paint them all at once and then touch them up after inserting if necessary. We would recommend the use of a premium rust preventative spray paint. These are recommendations and should be confirmed as suitable before full scale implementation, but they are based on experience.

STORAGE, HANDLING, INSTALLATION, SERVICE, & ACCLIMATION ENVIRONMENT

All products must be stored in an indoor, climate-controlled (60° - 85° F) space and protected from the elements prior to installation.

All products must be stored on a dry, flat, level surface. Carefully stacked, aligned neatly and not on edge. Do not stack pallets and protect products from damage.

All products must be installed when conditions are within 40° - 95° F temperature range. Best conditions for installation are within the 60° - 85° F temperature range for the adhesive working properties. Colder weather slows the adhesives' curing process.

While we do our best to provide quality products and workmanship in our manufacturing facilities, quality installation is the responsibility of the installer. Inspect all material for proper type, color, and matching lot numbers if appropriate. We ask that we are notified of any inaccuracies or defects prior to installation as **we do not pay labor for or material costs on installed materials with visual defects.**

Users are advised to confirm suitability of these products by their own tests and ensure that all adhesives intended for installation meet the requirements of the end user.

If there are concerns regarding this information or the service temperature, substrate temperature or installation environment will not meet these requirements, please contact Technical Services for recommendations prior to installation at solutions@rhctechical.com, we will be happy to discuss and provide direction or confirmation of the project at that time.



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SUBSTRATE PREPARATION

Substrates must be clean, smooth, permanently dry, flat, and structurally sound. Substrates must be free of visible water or moisture, dust, paint, sweeping compounds, post placement curing compounds, residual adhesives and chemical adhesive removers, concrete hardeners or densifiers, solvents, wax, oil, grease, asphalt, visible alkaline salts or excessive efflorescence, mold, mildew and any other extraneous coating, film, material, or foreign matter. If not, consideration should be taken regarding the effects of these conditions and how they can affect the installation.

All substrates must have all existing adhesives, materials, contaminants, or bond-breakers mechanically removed via scraping, sanding, grinding, or buffing with a 25 grit Diamabrush Prep Plus tool prior to adhesive installation. In extreme situations, shot blasting may be required. Mechanical preparation must expose at least 90% of the original substrate. Following cleaning and removal, all substrates must be vacuumed with a HEPA approved vacuum and flat vacuum attachment to remove all surface dust. Sweeping without vacuuming will not be acceptable.

Do not use solvent/citrus based or other chemical adhesive removers or oil-based cleaning compounds before installation.

CONCRETE SUBSTRATES

All concrete substrates, whether on-grade and/or below grade should be solid with no major cracks or voids.

WOOD SUBSTRATES

Wood substrates must meet local and national building codes and be solid and free of any movement.

OTHER SUBSTRATES

With ***Terrazzo or Ceramic existing flooring***, ensure existing flooring is a single layer of material and that all materials are clean, dry, sound, solid, well adhered, and free of factory and/or site-applied finishes, waxes and/or contaminants. Remove and repair all loose tiles and utilize a suitable primer and cementitious patch to fill grout lines and other depressions.

Metal substrates must be mechanically sanded/ground/abraded and cleaned of any residue, oil, rust and/or oxidation. The substrate must be smooth, flat and sound before installation. When installing in areas that may be subject to topical water or moisture and/or high humidity, an anti-corrosive coating must be applied to protect metal substrate. Be sure to follow installation procedures and trowel sizes for non-porous/non-absorptive substrates.

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By covering a substrate, underlayment, or existing surface, you have indicated acceptance of the substrate and installation environment.

Before installation, inspect all treads before installing or during installation to verify that there are no visible defects, damage, or excessive shading variations. If there are concerns regarding shade or color variation, do not install material, and consult a sales representative and manufacturer's technical staff.

Material is designed to be installed with a perimeter gap around the tread. This gap can be whatever the end user wants, but ***we recommend a minimum of 1" to eliminate the need to cut the metal treads due to inaccurate measurements.***

If material needs to be cut, it is recommended to use a wet band saw or diamond blade for cutting. After cutting the edges should be sanded with the appropriate high-speed sander or grinder.

- Determine the center of the stairwell and mark a center line on the riser portion of each step.
- Determine the center of each stair tread, nosing, and/ or flat step. Mark a center line on the back edge of the tread for alignment during installation.
- Place each stair tread, nosing, and/or flat step on the substrate and use a punch or marker to mark pre-drilled hole location onto the substrate.
- Measure the length of the desired fastener and use tape to mark hole depth on the drill bit, ensuring hole depth is 1/4" deeper than the length of the fastener.
- Using a hammer drill or equivalent and a suitable drill bit (depending on substrate), pre-drill holes at pre-determined markings and depth.



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- **Apply a 1/2" bead of Premium, Exterior Grade Polyurethane Construction Adhesive inside the stair nose, as well as around perimeter of each pre-drilled hole, around perimeter of Metal Stair Tread, Nosing, and/or Flat Step and create a tight serpentine or "S" pattern on the remainder of the backing.**
- If the substrate nose has a large radius, apply two beads of adhesive at the center of the radius to ensure a tight fit.
- Use appropriate **mechanical fastener to screw stair tread, nosing, and/or flat step into place.**
- Fasteners should sit flush with the surface of the material.
- When installing over **metal substrates, use a #10 Stainless Steel Flat Head Machine Screw / Flat Washer and Nut assembly** including Washer to mechanically fasten. If installing over open access metal substrates, be sure to trim the bolt after installation to ensure the bolt end is flush with nuts. Protruding fasteners underneath could create a safety hazard.
- Mechanical fasteners may need to be tightened and adjusted over time, especially if the stairwell has heavy or continuous usage.

SUPPORT & ADDITIONAL RESOURCES

Product Support Phone & Email	(800) 537 – 9527 / sales@roppe.com
Technical Support Phone & Email	(844) 393 – 4044 / solutions@rhctechical.com
Product Technical Documentation	www.roppe.com
Associated or Related Documentation	Metal Stair Tread Technical Data Metal Stair Nosings Technical Data Metal Flat Steps Technical Data Metal Stair Tread, Nosing, & Flat Step Care & Maintenance

The contents contained within this Installation Sheet may be utilized or copied into another projected related document. While this original document will remain in effect at the time of product installation, this TDS shall not be supplemented or replaced by the resulting project documentation. Any alterations to the wording or requirements contained in or derived from this document shall void all related warranties. Before accepting this document, refer to the product website to confirm that you have the most current revision. These products are intended for installation by professionals. Prior to use the user must determine the suitability of our products for the intended use. The user alone assumes all risks and liability.