

Product Description

Roppe Metal Stair Treads, Nosings and Flat Steps are constructed of heat treated exterior grade aluminum 6063T3, which is resistant to corrosion. The inlaid anti-slip epoxy color coating is color fast and available in eight standard colors, including

Glow-in-the-Dark inserts, which can be used to generate numerous color combinations due to the dual-channel face design. Roppe Metal Stair Treads are resistant to marring, scratching and chipping. Roppe Metal Stair Treads, Metal Nosings & Metal Flat

Steps are supplied with pre-drilled, countersunk holes, which provide a flush finish when installed with mechanical fasteners.

Features

- **High Quality Metal**
- **Corrosion-Resistant**
- **Superior Durability**
- **ADA Compliant**
- **Optimized For Visually Impaired**
- **Excellent Slip Resistance**

Technical Data

ASTM E648 (NFPA 253) - Critical Radiant Flux: **Class I, > 0.45 W/cm²**

ASTM E662 (NFPA 258) - Smoke Density: **Passes, <450**

ASTM F925 - Chemical Resistance: **Passes (see chart)**

ASTM D2047 - Slip Resistance: **> 0.6**

California Title 24: **Passes**

Acclimation Time: **48 Hours**

Storage & Acclimation Temperature: **65° - 85° F**

Additional Information

Approved Adhesives

Premium, Exterior Grade Polyurethane Adhesive.

Approved Fasteners

#10 Wood Decking Screws
#10 Self-Tapping Concrete Screws
#10 Stainless Steel Machine Screws
#10 Stainless Steel Bolts & Nuts

Custom Offerings

Material is available at custom lengths and depths. Custom lengths must be ordered in 1" increments. Custom colored strips, including glow-in-the-dark colors available for an additional charge. Contact a sales representative for more information.

Availability, Cost & Samples

Roppe Flooring products are sold

through distribution. To locate the nearest distributor, visit roppe.com or send an e-mail to support@roppe.com.

Technical Documents & Support

Additional product resources and technical documents are available online at roppe.com. For additional technical support, send an e-mail to solutions@rhctechical.com.

Metal Treads

Standard Metal Stair Tread

Nose Type: **Square**
 Nominal Nose Length: **1 ¼" (31.75 mm)**
 Nominal Overall Thickness: **1/4" (6.35 mm)**
 Nominal Tread Depth: **9" (228.6 mm)**
 Nominal Tread Length: **36" (91.4 cm), 48" (1.22 m)**
 Nominal Safety Strip Width: **One 2" (50.8 mm) insert**
 Safety Strip Spacing: **~ 1/4" (6.35 mm) from nose**
 Safety Strip Material: **Epoxy w/ Aggregate**
 Pre-Drilled Hole Location: **1 ½" from leading edge,**
1 ⅝" from back edge
 Drill Hole Quantity: **8 (36"), 10 (48")**
 Weight Per Lineal Foot: **2.5 lbs.**

Special Order Metal Stair Tread

Nose Type: **Square**
 Nominal Nose Length: **1 ¼" (31.75 mm)**
 Nominal Overall Thickness: **1/4" (6.35 mm)**
 Nominal Tread Depth: **7.5" (190.5 mm)**
11" (279.4 mm)
 Nominal Tread Length: **12" (91.4 cm) - 144" (3.66 m)**
 Nominal Safety Strip Width: **1" Increments**
 Safety Strip Spacing: **One 2" (50.8 mm) insert**
 Safety Strip Material: **~ 1/4" (6.35 mm) from nose**
 Pre-Drilled Hole Location: **Epoxy w/ Aggregate**
1 ½" from leading edge,
1 ⅝" from back edge
 Drill Hole Quantity: **1 ⅝" from back edge**
4 (12"-21"), 6 (22"-32"),
8 (33"-45"), 10 (46"-62"),
12(63"-75"), 14 (76"-92"), 16
 Weight Per Lineal Foot: **(93"-113"), 18 (114"-120")**

Metal Stair Nosing

Nose Type: **Square**
 Nominal Nose Length: **1 ¼" (31.75 mm)**
 Nominal Overall Thickness: **1/4" (6.35 mm)**
 Nominal Tread Depth: **4" (101.6 mm)**
 Nominal Tread Length: **1' (30.48 cm) - 10' (3.05 m)**
 Nominal Safety Strip Width: **One 1" (25.4 mm) insert**
 Safety Strip Spacing: **~ 1/4" (6.35 mm) from nose**
 Safety Strip Material: **Epoxy w/ Aggregate**
 Pre-Drilled Hole Location: **⅝" from leading edge,**
⅞" from back edge
 Drill Hole Quantity: **4 (12"-21"), 6 (22"-32"),**
8 (33"-45"), 10 (46"-62"),
12(63"-75"), 14 (76"-92"), 16
(93"-113"), 18 (114"-120")
 Weight Per Lineal Foot: **2.5 lbs.**

Metal Flat Step

Nose Type: **None**
 Nominal Overall Thickness: **1/4" (6.35 mm)**
 Nominal Tread Depth: **7" (117.8 mm)**
 Nominal Tread Length: **1' (30.48 cm) - 10' (3.05 m)**
 Nominal Safety Strip Width: **One 1" (25.4 mm) insert**
 Safety Strip Spacing: **~ 1/4" (6.35 mm) from nose**
 Safety Strip Material: **Epoxy w/ Aggregate**
 Pre-Drilled Hole Location: **⅝" from leading edge,**
⅞" from back edge
 Drill Hole Quantity: **4 (12"-21"), 6 (22"-32"),**
8 (33"-45"), 10 (46"-62"),
12(63"-75"), 14 (76"-92"), 16
(93"-113"), 18 (114"-120")
 Weight Per Lineal Foot: **2.5 lbs.**

Fasteners

Fastener Type: **#10 Wood Decking Screws**
#10 Self-Tapping Concrete Screws
 Wood Fastener Length: **2" (50.8 mm)**
 Concrete Fastener Length: **1 3/4" (44.45 mm)**
 Fastener Packaged Quantity: **8 screws (36"), 12 screws (48")**

1. PRE-INSTALLATION CHECKLIST

- Consult all associated product literature concerning adhesive installation, maintenance and warranty prior to installation of stair treads.
- Allow all trades to complete work prior to installation.
- Deliver all materials to the installation location in its original packaging with labels intact.

- Do not stack pallets to avoid damage.
- Remove any plastic and strapping from product after delivery.
- Inspect all material for proper type, color and matching lot numbers if appropriate.
- Ensure that all adhesives intended for installation are approved for use with stair tread and substrate.
- Do not proceed with installation until all conditions have been met.

2. SUBSTRATE PREPARATION

All substrates must be prepared according to ASTM F710, as well as applicable ACI and RFCI guidelines. Substrates must be clean, smooth, permanently dry, flat and structurally sound. **Use a straight edge or level to determine substrate flatness, as Metal Stair Treads will not conform to substrate.** Substrates must be free of visible water or moisture, dust, sealers,

paint, sweeping compounds, curing compounds, residual adhesives and 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. All substrates must be vacuumed with a flat vacuum attachment or damp mopped with clean, potable water to remove all surface dust. Sweeping without vacuuming or damp mopping will not be acceptable.

CONCRETE SUBSTRATES

All concrete must have a minimum compressive strength of 3500 PSI and be prepared in accordance with ASTM F710. When stair treads are being installed directly over concrete, concrete surfaces that have an ICRI Concrete Surface Profile (CSP) over 4 should be smoothed with a suitable cementitious patch (such as the Excelsior CP-300) to prevent imperfections from telegraphing through stair tread materials.

RESINOUS SUBSTRATES

When installing directly over a resinous products, such as the Excelsior MM-100 or an epoxy coating, ensure that coating is dry to the touch and has cured for the prescribed length of time. Substrate must be clean, dry, sound and free of contaminates. Ensure to follow installation procedures for non-porous substrates.

GYPSUM BASED SUBSTRATES

Gypsum-based substrates must have a minimum compressive strength of 3500 PSI. Gypsum substrates that do not meet this requirement must have one coat of the Excelsior MM-100 or equivalent installed to improve the tensile/pull-off strength of the substrate. Substrate must be structurally sound and firmly bonded to subfloor. Any cracked or fractured areas must be removed and repaired with a compatible patch or repair product. Follow instructions for installation over a gypsum substrate. New or existing gypsum substrates may require a sealant or primer. Follow all manufacturer's recommendations regarding preparation for resilient flooring installation.

WOOD SUBSTRATES

Wood substrates must be constructed per federal, state and/or local building codes. Wood substrates should have a minimum thickness of 1". If plywood is being used, ensure plywood is Underlayment Grade with a minimum thickness of 1/4" and is fully sanded prior to installation. When stairs may be subjected to moisture, use an APA approved exterior grade plywood.

Other wood materials, such as OSB, lauan, particleboard, chipboard, fiberboard or cementitious tile backer boards, are not acceptable substrates. Avoid preservative-treated and fire-retardant plywood, as some may be manufactured with resins or adhesives that may cause discoloration or staining of materials. Do not install stair treads, risers or stringers directly over solid or engineered hardwood flooring without first installing plywood or a suitable cementitious repair product at a minimum thickness of 1/4" over the hardwood flooring.

Wood substrate deflection, movement, or instability may cause stair tread installations to release, buckle or become distorted. As such, do not use plastic or resin filler to patch cracks. Do not use cement or rosin coated nails and staples or solvent-based construction adhesives to adhere the plywood. Do not install on a sleeper system (wood subfloor system over concrete) or directly over Sturd-I-Floor panels.

METAL SUBSTRATES

Metal substrates must be thoroughly sanded/ground and cleaned of any residue, oil, rust and/or oxidation. Substrate must be smooth, flat and sound prior to 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. Contact a local paint or coating supplier for coating recommendations. Install stair treads within 12 hours after sanding/grinding to prevent re-oxidation. Any deflection in the metal floor can cause a bond failure between the adhesive and the metal substrate. Be sure to follow

installation procedures and trowel sizes for non-porous substrates.

When installing Metal Stair Treads over metal substrates, use a #10 Stainless Steel Machine Screw or a #10 Stainless Steel Bolt and Nut assembly to install treads. Use a #10 SAE Zinc Washer when using a nut and bolt assembly.

EXISTING FLOORING SUBSTRATES

Metal stair treads may be installed over existing flooring materials. Any and all loose tiles must be removed and repaired or replaced. When handling asbestos containing materials, ensure all OSHA regulations are followed and all procedures are compliant with local, state, federal and industry regulations and guidelines. All grout lines, seams and irregularities must be filled and troweled flush with a suitable cementitious patch, such as the Excelsior CP-300. All existing flooring substrates that are outside of flatness tolerances should be repaired with a cementitious patch or self-leveling underlayment (with a minimum compressive strength of 3500 PSI after 28 days) to avoid unevenness and hollow spots.

Do not install flooring until any moisture on, between or below existing flooring has completely dried. Ensure all dust, dirt and debris are removed prior to flooring installation. Existing flooring substrates are non-porous - follow all installation instructions for non-porous substrates.

3. CRACKS, JOINTS & VOIDS

All cracks, joints and voids, as well as the areas surrounding them, must be clean and free of dust, dirt, debris and contaminants. All minor cracks and voids 3/64" wide or less may be repaired with a suitable cementitious patch, such as the Excelsior CP-300, or an epoxy filler, such as the Excelsior EN-610.

To treat through cracks (depth at least 75% of the thickness of the concrete), chase joint or crack with a suitable saw or grinder and open to a minimum width of 1/4". Be sure to clean all dust, dirt and debris from crack. Joints and cracks should then be sealed with a suitable, elastomeric caulk (such as Ardex Ardiseal Rapid Plus, Mapei P1 SL or equivalent) designed for

use in expansion joints. Install a closed-cell backer rod at prescribed depth and follow caulk manufacturer's instructions for installation. Ensure surface is troweled flush with surface of concrete.

To treat other cracks and voids (such as control cuts, saw-cut joints and surface cracks) over 3/64", chase joint or void with a suitable saw or grinder and clean all dust, dirt and debris from crack. Fill entire crack with a rigid crack filler (such as Ardex Ardifix, CMP CM10 or equivalent) designed for use in control or saw-cut cuts. Follow material manufacturer's instructions for installation. Ensure surface is troweled flush with surface of concrete.

Review all manufacturer installation instructions and/or consult manufacturer technical staff for all crack or joint filling products prior to treating joints and cracks.

4. METAL TREAD INSTALLATION

Ensure step substrate is suitably prepared prior to installation, as manufacturer is not responsible for substrates that have not been properly prepared and tested for moisture. Ensure adhesive is approved for use with stair tread material and that proper application techniques are followed, as manufacturer is not responsible for any and all adhesion issues related to improper adhesive selection or usage. Prior to installing adhesive, ensure all stair treads fit each step, as stair treads, nosings and flat steps are difficult to cut on-site and may deform when improperly cut. 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 or flat step and mark a center line on the back edge of the tread for alignment during installation. **Material must have a gap of 1" or more around all sides in order to allow for uniform centering on stairwell.** Place each stair tread, nosing or flat step on the substrate and use a punch or marker to mark pre-drilled hole location onto 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.

Apply a 1/2" bead of adhesive inside of and around perimeter of each pre-drilled hole. Apply adhesive around perimeter of Metal Stair Tread, Nosing or Flat Step and create a tight serpentine or "S" pattern on the remainder of the backing, ensuring that adhesive covers 75% of the back of the tread. 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 or flat step into place. Fasteners should sit flush with surface of the material and should not protrude whatsoever. If installing over open access metal substrates with stainless steel nut and bolt assemblies, be sure to trim bolt after installation to ensure bolt end is flush with nut. **Protruding fasteners could create a tripping or safety hazard.** Mechanical fasteners may need to be tightened and adjusted over time, especially as stairwell has heavy or continuous usage.

5. INITIAL MAINTENANCE

Ensure that adhesive has cured for recommended period of time prior to conducting initial maintenance. Remove any protective coverings prior to cleaning. Sweep, dust mop and/or vacuum stair tread to remove any dirt, dust or debris.

Mix 2-4 ounces of Excelsior All Purpose Cleaner per gallon of clean, potable water. Use a clean mop to apply cleaning solution to treads and let stand for 5-10 minutes.

Use a 22 gauge soft bristled deck brush to scrub floor in order to remove dust, dirt and debris. If stair tread is heavily soiled, additional cleaning may be required.

Use a wet vacuum or clean mop to

remove any and all excess cleaning solution. Rinse area with clean, cool water and allow floor to dry entirely.

Alternately, material may be cleaned with a pressure washer and NC-900 cleaning solution. Be sure to use clean, potable water and ensure pressure does not exceed 1000 PSI.

Do not use detergents, abrasive cleaners or "mop and shine" type products, as they may cause abrasive strip to discolor. Do not use vacuums that have a beater bar or electric brooms with hard plastic bottoms or no padding, as this may cause discoloration, scratching and loss of sheen.

For further information regarding daily or routine maintenance, please consult the product care & maintenance document or the associated product technical data sheet.

6. FLOORING PROTECTION

Protect newly installed stair treads, risers and stringers with construction grade paper, such as Ram Board, to protect material from damage by other trades. Do not slide or drag heavy equipment across the new stair treads. Limit usage and foot traffic according to the adhesive's requirements. When moving appliances or heavy furniture, protect stair treads from scuffing and tearing using temporary floor protection.

Ensure all castors that may come in contact with stair treads are clean and free of any and all dirt and debris. Routinely clean castors to ensure that dirt or debris has not built up or become embedded in castors. Replace castors at regular intervals, especially if they become damaged or heavily soiled.

Place walk-off mats at outside entrances. Ensure mats are manufactured with non-staining backs to prevent discoloration.

7. WARRANTY

Roppe provides a 5 year limited warranty on all Metal Stair Treads. For additional information, see associated warranty documents.

FOR PROFESSIONAL USE ONLY. PLEASE CONSULT ALL ASSOCIATED TECHNICAL DATA SHEETS, SAFETY DATA SHEETS, MAINTENANCE DOCUMENTS AND WARRANTY INFORMATION PRIOR TO INSTALLATION.