

# Johnsonite®

## Power Tape™ Rubber and Vinyl Stair Treads

### Installation and Maintenance Instructions

#### Introduction

---

Johnsonite Power Tape is a high strength, polyester thread reinforced, double-sided adhesive tape system designed specifically for the installation of Johnsonite Rubber and Vinyl Stair Treads on any suitable interior stair surface.

The Johnsonite Power Tape System is ideal for high-trafficked workplace interiors and public places such as airports, schools, and shopping malls, as well as, other health care, hospitality, retail and office environment applications.

Johnsonite cannot accept any responsibility for the loss or damage that may result from the use of this information, due to processing or working conditions and/or workmanship outside our control. Users are advised to confirm the suitability of this product by their own tests.

The Johnsonite Power Tape System and Johnsonite Rubber and Vinyl Stair Treads are for interior installations only and not recommended for environments where the stair treads will be exposed to animal fats, vegetable oils, or petroleum based materials (i.e.: commercial kitchens).

#### Handling and Storage

---

1. Johnsonite Power Tape and Rubber or Vinyl Stair Treads must be site conditioned at room temperature for 24 hours prior to, during, and after the installation. **Temperature must be maintained between 65° and 75°F. (18° and 24°C)**
2. In staircases that are exposed to intense or direct sunlight, the products must be protected during the conditioning and installation periods, by covering the light source.
3. **Johnsonite Power Tape and Rubber and Vinyl Stair Treads are not recommended for exterior use. Exposure to excessive UV rays can result in fading and/or color variation.**

#### General Subfloor Preparations

---

1. **All staircases** and floor surfaces must be clean, smooth, and dry. Dust, scale, and loose particles must be removed. The surface must be free of solvents, paint, grease, oil, wax, alkali, sealing/curing compounds, and any other foreign material, which could affect adhesive bonding.

**Do not install** Johnsonite Rubber and Vinyl Stair Treads in environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials (i.e.: commercial kitchens).

2. **Concrete subfloors** must be checked for moisture content. The test shall be in accordance with ASTM F-1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. One test should be conducted for every 1000 sq. ft. of flooring and the results not exceed 3 lbs. per 1000 sq. ft. in 24 hours. If the test results exceed the limitations, the installation must not proceed until the problem has been corrected.

An adhesion bonding test of the actual materials to be installed should be performed, every 1000 sq. ft. utilizing a 12" x 12" piece of product. The test pieces should remain in place for 72 hours and then evaluated for bond strength to the concrete.

Excessive alkali must be removed by mechanical means (i.e.: bead blasting, sanding or grinding.)

Fill all depressions, cracks, and other surface irregularities with a good quality cementitious underlayment filler or epoxy caulking compound.

**Important: When using epoxy caulking compound as a patching compound, the compound must be sanded prior to installation of stair nosings to ensure proper adhesive bonding.**

3. **Wood staircases** must be firmly nailed and sanded flat. Fill any depressions with a good quality latex patching compound or epoxy caulking compound.

**Johnsonite does not recommend nor warrant installations over existing resilient materials.**

All resilient materials and adhesives must be removed prior to installing Rubber and Vinyl Stair Treads.

**Caution: Some resilient flooring products and adhesives contain "asbestos fibers" and special handling of this material is required.**

4. **Terrazzo and Ceramic Staircases** - The surface must be thoroughly sanded to remove all glaze and waxes. Remove all loose tiles and clean the grout lines. Fill all grout lines and other depressions with a cementitious leveling compound.
5. **Steel staircases** - The surface must be thoroughly cleaned by sandblasting, wire brush or other mechanical means to remove all rust and other contaminants. Paint the surface with an anti-corrosive coating (i.e.: Sherwin Williams "Kromik Metal Primer" or equivalent) to prevent rust from recurring.

## **General Installation**

---

1. Johnsonite Stair Treads are available in convenient lengths and sizes, but normally, trimming will be required to obtain proper fit on each stair.
2. If the shape of the step does not conform to the shape of the stair tread and cannot be altered to conform, then we do not recommend the installation of our products. Do not attempt an installation of the stair treads unless a tight fit can be obtained, especially at the point where the nose of the product meets the step edge.
3. **Wide staircases**, which require butting multiple lengths of product, requires additional planning and dry fitting prior to installation to ensure proper pattern match. **Note: Trimming on both sides of the tread may be required to obtain proper pattern match to adjacent steps.**

## Stair Tread and Riser Installation

---

1. **Johnsonite Stair Treads must be trimmed to fit for both width and depth of the stair step and dry laid on each step prior to adhesive tape application and installation. Due to the wide variety of stair pan configurations, it may be necessary to trim the length of the nosing to match the stair step nosing and eliminate any un-adhered surfaces.**

**It is the installer's responsibility to inspect the dry laid installation and notify the appropriate authority of any imperfections, irregularities, or color variation prior to final adhesive installation.**

**Important:** Stair treads equipped with Carborundum strips require special handling. Do not flex, bend, or stand these treads on end. After fitting the stair tread, as described below, trim the Carborundum strips back 1/16" on each side to allow for expansion. After installation of the tread, roll the Carborundum strips with a 2" J-hand roller to ensure proper adhesion in the channel.

2. Since each step on a staircase varies slightly in width, depth, and squareness, Johnsonite recommends scribing each tread and riser to ensure proper fit on the step.
3. Measure the width of the step and place a pencil mark on the step's riser indicating the center of the step.

Next, measure the length of the stair tread and mark the center point at the back where the tread meets the riser.

4. Position the stair tread on the step with the right hand side fitted snugly to the stringer.
5. Utilizing a set of dividers, span the pointers across the two centerline marks. Increase the measurement by approximately a 1/16" to allow for expansion.
6. Move to the right hand side of the step. Place one pointer on the stringer and the other on the tread or nosing. Start at the back of the tread and pull the dividers forward. Keep the pointer firmly in contact with the stringer while exerting adequate downward force to scribe the tread material.

**Note:** When installing a one-piece tread and riser assembly, scribe the tread and riser portions at the same time (See fitting, scribing, and cutting the riser instructions below).

7. Use a hooked (linoleum type) or utility knife to cut the material.

**Note:** For large stair tread projects, utilize a 10" diameter 84 tooth carbide tip saw blade attached to a table or radial arm saw to cut the products to length.

8. Reposition the tread on the left hand side of the step and follow the same procedure to fit the left side of the tread or nosing.
9. To fit the stair tread to the depth of the step, place a 2 by 4 under the nose of the tread and position on step. If the tread is still deeper than the step, use the 4" side of the 2 by 4 or increase the size of the spacer, until the back of the stair tread is away from the riser.
10. Set the dividers 1/16" wider than the width of the spacer (i.e.: 2 by 4), scribe, and cut the back of the

stair tread.

11. Position the stair treads on the step. There should be approximately 1/16" uniform clearance around the perimeter of the tread. Number the tread to the respective step to ensure proper placement and fit during installation.
12. **Fitting the riser:** Following the previous directions for scribing the width of the stair tread, utilize the same centerline mark on the step, position the riser, scribe both sides, and cut.
13. Set the trimmed stair tread and riser in place. Position the nose of the stair tread over the riser. Scribe a line on the riser, utilizing the edge of the stair tread nose as a guide, and then trim the riser so that the top of the riser will abut to the bottom of the stair tread nose when installed.

**Caution: Special One-Piece Tread/Riser Combination Instructions:**

**Johnsonite recommends installing a CFS-00-A Cove Filler Strip at the angle where the riser meets the tread portion of the step. This filler strip must be installed prior to trimming the riser.**

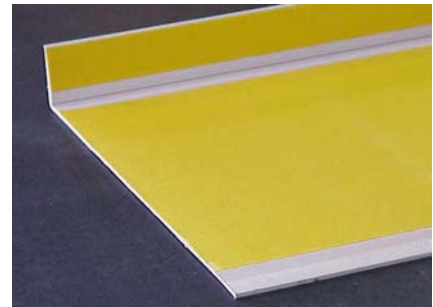
**14. Power Tape Application:**

**Standard Stair Tread and Riser**

---

- a. Prior to applying Power Tape, wipe the entire back and nosing areas of the stair tread and the back of the riser with denatured alcohol to remove any contaminants which may have been picked up during the dry cutting and fitting process which may interfere with proper adhesive bonding.

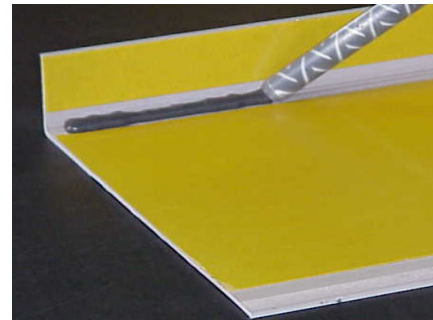
- b. Apply the 1-1/2" wide strip of Power Tape across the entire width of the nose portion of the tread. Keep the tape in line with the bottom edge of the nose. Keep the tape 1/2" away from the internal angle of the nose of the tread, as illustrated.



Next, apply the 9-1/2" wide strip of Power Tape approximately 1/2" back from the internal angle of the stair tread nose, as illustrated.

Thoroughly roll the tape to ensure proper bonding to the back and nosing areas of the stair tread. Trim off excess Power Tape along the edges of the stair tread.

- c. Gun or knife a bead of Johnsonite #930 Two-Part Epoxy Caulking Compound into the nose of the stair tread. Care should be taken not to over apply the epoxy caulking compound where the compound will flow into the taped areas and possibly interfere with proper tape adhesion. Apply sufficient bead of compound to fill the void between the internal angle of the stair tread nosing and the step edge.



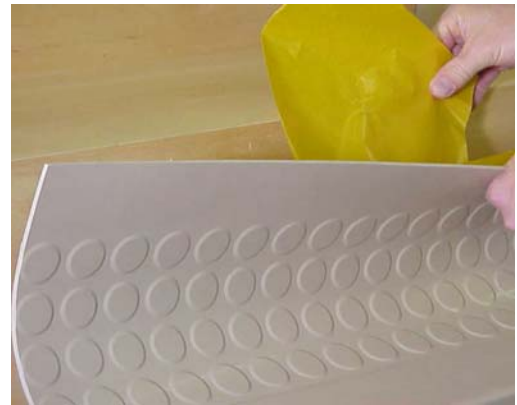
- d. Position the stair tread onto the step keeping the nose of the tread back from the step edge. Remove the release paper from the Power Tape along the nosing area only. Slide the stair tread back and firmly and uniformly press the nose against the step edge. Thoroughly roll the entire nose surface with a 2" J-hand roller to ensure proper adhesion to the step edge.



- e. After thoroughly adhering the nosing portion of the stair tread to the step edge, carefully lift the back edge of the tread along the riser area and remove the release paper.

After the release paper is removed, start at the front edge of the stair tread and press the tread down firmly and uniformly onto the step surface from front to back.

**When the tread is in its final position, roll the entire tread and nosing surfaces with a hand roller to ensure proper adhesion to the step surfaces.**

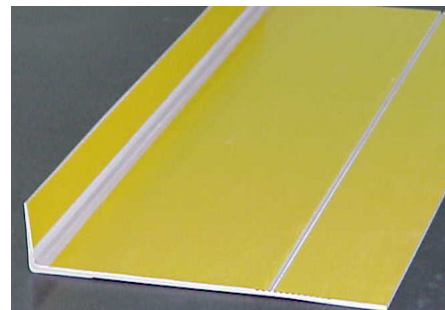


- f. Install the risers, after the stair treads have been installed. Using the 9-1/2" roll of Power Tape, apply a section across the entire back surface of the precut riser. Trim the excess Power Tape from around the perimeter of the riser, if necessary. Remove the release paper from the Power Tape, position, and install the riser. The toe or bottom portion of the riser should set uniformly on the tread surface. The top portion of the riser should abut tightly and uniformly to the bottom of the stair tread nose on the adjacent step. Thoroughly roll with a hand roller to ensure proper adhesive bond.

**Do not overlap the stair tread nose over the resilient riser material**

### **One-Piece Tread and Riser Combination Stair Treads**

- a. Prior to applying Power Tape, wipe the entire back, nosing, and riser areas of the stair tread with denatured alcohol to remove any contaminants which may have been picked up during the dry cutting and fitting process which may interfere with proper adhesive bonding.
- b. To ensure proper fit and support of the serrated transition portion of the one-piece tread and riser material, where the step's riser meets the step tread plate, Johnsonite recommends installing a CFS-00-A Cove Filler Strip to provide a uniform radius at this transition. The cove filler strip should be trimmed to fit the width of the stair and installed with Johnsonite #945 Contact Bond Adhesive.
- c. Apply the 1-1/2" wide strip of Power Tape across the entire width of the nose portion of the Tread. Keep the tape in line with the bottom edge of the nose. Keep the tape 1/2" away from the internal angle of the nose of the tread, as illustrated.



Next, apply one length of the 9-1/2" wide strip of Power Tape approximately 1/2" back from the internal angle of the stair tread nose and another length of Power Tape across the riser portion of the stair tread, as illustrated. Thoroughly roll the tape to ensure proper bonding to the back and nosing areas of the stair tread. Trim off excess Power Tape along the edges of the stair tread as required.

- d. Gun or knife a bead of Johnsonite #930 Two-Part Epoxy Caulking Compound into the nose of the stair tread as previously illustrated in the sections above. Care should be taken not to over apply the epoxy caulking compound where the compound will flow into the taped areas and possibly interfere with proper tape adhesion. Apply a sufficient bead of compound to fill the void between the internal angle of the stair tread nosing and the step edge.
- e. Fold the riser portion of the one-piece unit so that the show surface of the riser is laying on the show surface of the stair tread. Next, position the stair tread onto the step keeping the nose of the tread back from the step edge. Remove the release paper from the Power Tape along the nosing area only. Slide the stair tread back and firmly and uniformly press the nose against the step edge. Thoroughly roll the entire nose surface with a 2" J-hand roller to ensure proper
- f. After thoroughly adhering the nosing portion of the stair tread to the step edge, carefully lift the back edge of the tread and riser sections and remove the release paper from the tread section only.



Start at the front edge of the stair tread and press the tread portion down firmly and uniformly onto the step surface from front to back.

Next, remove the release paper from the riser section of the tread and install the riser starting at the bottom and continuing up until the top of the riser is fitted tightly and uniformly to the bottom of the stair tread nose on the adjacent step.

**Do not overlap the stair tread nose over the resilient riser material.**

When the tread and riser are completely installed, roll the entire tread, riser, and nosing surfaces with a hand roller to ensure proper adhesion to the step surfaces.



## Maintenance for Stair Treads

---

1. Thoroughly sweep or vacuum the entire surface area to remove all loose dirt and grit.
2. Prepare a cleaning solution by mixing 1 oz. to 4 oz. of a neutral detergent (pH of 7-8) per gallon of warm water. The dilution depends on light to heavy soil conditions.
3. Apply the solution with a clean nylon or rayon mop, and let stand for 5-15 minutes.  
**Important:** Do not let the solution dry.
4. Agitate the solution with the mop, then wet vacuum or mop up the cleaning solution.
5. Rinse with clean cold water and then remove all water by vacuum or mop.
6. Allow the product to thoroughly dry.
7. If desired, one or two coats of a liquid, acrylic floor finish may be applied to improve gloss level and ease cleaning. Follow manufacturer's directions for application and drying times.

If questions arise that have not been addressed in the brochure, contact your local Johnsonite distributor for assistance or Johnsonite Customer Service at 1-800-899-8916.

# Johnsonite®

Technical Services Department  
16910 Munn Road, Chagrin Falls, Ohio 44023  
(800) 899-8916 ext 297 Fax (440) 543-8920  
Web: [www.Johnsonite.com](http://www.Johnsonite.com), E-mail: [info@Johnsonite.com](mailto:info@Johnsonite.com)  
© 2006 Johnsonite, Inc. A Tarkett Company.