Johnsonite[®]

ComforTech® Cushioned Rubber Sheet Flooring

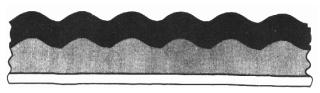
Installation Instructions

Introduction

Johnsonite **ComforTech** Rubber flooring features an exclusive construction that enhances thermal insulation, sound absorption, ergonomic comfort and safety.

ComforTech Rubber Flooring is ideal for institutional, health care, hospitality, corporate, retail and public space uses.





The highest quality of materials and workmanship are employed in the manufacture of ComforTech Rubber Flooring and careful inspection is made before shipment. However, a quality installation is the responsibility of the installer and we recommend that all orders be verified for accuracy and the materials be checked for satisfactory color match before you begin installation.

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

Johnsonite ComforTech Rubber Sheet Flooring materials are for interior installations only and not recommended for environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials. (i.e.: commercial kitchens)

Johnsonite ComforTech Rubber Sheet Flooring materials are not recommended for use where the product will be exposed to pallet jack or forklift traffic. The product is not recommended for automotive showroom applications.

ComforTech's cushioned construction requires the use of chair pads in work station and similar high caster wheel environments. ComforTech is not warranted against cuts or lack of protection under caster wheels.

Handling and Storage

- 1. ComforTech Rubber Flooring and adhesive must be site conditioned at room temperature for 24 hours prior to, during, and after installation. Room temperature must be maintained between 65° and 75°F (18° and 24°C) and relative humidity at 50%.
- 2. In rooms or areas exposed to intense or direct sunlight, the product must be protected during the conditioning, installation, and adhesive curing periods.
- 3. ComforTech Rubber flooring is not recommended for exterior use. Exposure to excessive U.V. rays can result in fading and/or color variation.

General Subfloor Preparations

1. **All subfloors** must be clean, flat to within 1/8" in 10 ft., 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 effect adhesive bonding.

Do not install ComforTech over expansion joints or in environments where the product will be exposed to animal fats, vegetable oils, or petroleum based materials. (i.e.: commercial kitchens)

Do not install where ComforTech will be exposed to pallet jack and forklift traffic. The product is not recommended for automotive showroom applications.

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.

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.

3. **Wood subfloors** must have a minimum of 18 inches of cross-ventilated space between the bottom of the joist and ground. Exposed earth crawl spaces should be covered with a polyethylene moisture barrier.

Wood joists should be on 16" centers with 1" boards installed diagonally and covered with 1/2" A.P.A. Approved underlayment plywood. Nail on 4" centers around perimeter and across field. Countersink nail heads. Fill all depressions, joints, cracks, gouges, and chipped edges with a good latex patching compound and sand entire surface smooth.

Single Wood and **Tongue and Groove** subfloors should be covered with 1/2" or 3/4" A.P.A. Approved underlayment plywood.

Johnsonite does not warranty installations over "particle board" or "chipboard" type underlayments.

4. For installations over resilient floor coverings, terrazzo, ceramic, metal, and radiant heated subfloors, contacts Johnsonite Technical Department for additional information.

ComforTech "Checker" – Pattern Installation

- 1. **ComforTech must be dry laid prior to adhesive application.** Unroll over entire floor. Each length should be laid in the same direction as the adjacent sheet. Back-rolling may be necessary to enhance flatness.
- 2. It is the installer's responsibility to inspect the dry laid installation for damage, defects, and color uniformity, prior to adhesive application.
- 3. Clean cut and fit the first sheet of ComforTech. Use a sharp utility knife and straight edge to trim the selvage edge for pattern matching.

It is necessary to cut halfway into the first full pattern along the linear edge of the product to achieve proper pattern matching. (Note: Allow up to 3 inches for pattern match in both length and width)

Apply weights to ensure proper position.

- 4. Pencil line the trimmed edge (**Fig. 1**) to ensure proper alignment after adhesive application.
- Fold back half the length of the sheet and apply the appropriate Johnsonite Adhesive.
 Only Johnsonite's #965 Acrylic, #996 Two-Part Epoxy or #975 Two-Part Urethane
 adhesives are approved for installing the Johnsonite ComforTech Rubber Sheet
 Flooring.



Fig 1

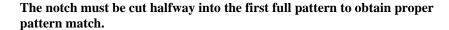
Johnsonite's #965 Acrylic adhesive is a water-resistant adhesive and Johnsonite's #975 Urethane and #996 Epoxy are water-proof adhesives. Use the #975 Urethane and #996 Epoxy in areas that may have excessive surface water exposure (i.e.: shower and locker rooms, therapeutic, swimming pool, and other similar areas).

Caution: #965 Acrylic latex adhesive is substrate porosity sensitive. Determine subfloor porosity and follow the specific label instructions regarding porous and non-porous substrate drying times prior to the installation of the rubber floor tiles.

6. After proper mixing (epoxy and urethanes only), apply adhesive to subfloor. See adhesive label for mixing directions, trowel recommendations, and subfloor porosity conditions. Remove wet adhesive at seams or off tile surface with a cloth dampened with rubbing alcohol or water.

Caution: Epoxy and Urethane adhesives must be removed when wet. The removal of dried adhesive can result in tile damage.

- 7. Reposition and install the first half length of ComforTech and cross roll with a 100 lb. 3 section roller. Fold back the opposite end of the sheet and duplicate the procedure.
- 8. Position the next sheet of ComforTech to match the "Checker" pattern. It is important that the top sheet be aligned with respect to the bottom to acquire the proper match of the "Checker" pattern after the seam is cut. To determine the required width, cut a notch in the selvage edge every 6 feet as illustrated (**Fig. 2**) to provide visual alignment and matching of the patterns.



(Note: An embossing process is utilized to create the ComforTech "Checker HD" pattern, therefore; a slight pattern run-out can be expected)

- 9. After aligning and matching the pattern, apply weights to hold the sheet in place. Move to the opposite side of the sheet and straight edge, trim, and pencil line the selvage edge as performed on the first sheet.
- 10. Fold back half the length of the sheet and place a chalk line approximately 12 to 14 inches from the seam edge (Fig. 3).
- 11. Trowel Johnsonite Adhesive between the chalk line and pencil line (**Fig. 4**). Reposition the half sheet and cross roll. Duplicate the procedure with the other half.



Fig 2



Fig 3



Fig 4

12. Utilizing the notches at the seam edge, adjust the underscriber for the required depth and underscribe the top sheet (**Fig. 5**). Use a Crain #188 Hinge Scriber or equivalent. Apply only light pressure is required to scribe the ComforTech product. Excessive pressure could result in distorting the seam edge. **Stop: If you are not skilled in the use of this underscriber, straight edge or double-cut the material.**



Fig 5

13. Place a scrap piece of flooring between the top and bottom sheets and cut the top sheet, along the scribe line, with a sharp utility knife (**Fig. 6**).



Fig 6

14. Fold back the top sheet as illustrated (Fig. 7) to expose the dry zone.

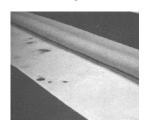


Fig 7

Seam sealing is only necessary where a water-resistant or sanitary flooring condition is required. Only Johnsonite #522 Seam Sealer or ComforTech Welding Rod are approved for welding ComforTech Rubber Sheet Flooring materials.

- 1. Apply approximately an 1/8" diameter bead of Johnsonite #522 Seam Sealer along the entire length of the first installed sheet's edge (**Fig. 8**).
 - d
- 2. Trowel the Johnsonite Adhesive to the remaining field between the chalk line and Seam Sealer.

Fig 8

- 3. Install the top sheet into the adhesive and tuck the edge by bending slightly.
- 4. Roll the seam area with a hand-roller.
- 5. Remove excess seam sealer with a clean, cloth dampened with water. Dried seam sealer can be removed with mineral spirits.
- 6. Cross roll entire surface with a 100 lb. 3 section roller. Inspect seamed areas and remove any additional adhesive and/or sealer residue.
- 7. Repeat the above procedures to install additional lengths of ComforTech "Checker" Rubber Sheet Flooring.
- 8. Avoid all traffic for 24 hours after installation. Drying time will depend on temperature, humidity, and the porosity of the subfloor.

ComforTech "Anthem" and "Fountain" – Installation

- 1. **ComforTech Anthem and Fountain must be dry laid prior to adhesive application.** Unroll over entire floor. Each length should be laid in the same direction as the adjacent sheet. Back-rolling may be necessary to enhance flatness.
- 2. It is the installer's responsibility to inspect the dry laid installation for damage, defects, and color uniformity, prior to adhesive application.
- 3. Clean cut and fit the first sheet of ComforTech "Anthem" or "Fountain".
- 4. A satisfactory seam cannot be obtained without trimming the factory edges. Use a sharp utility knife and straight edge to trim approximately 1/2 inch (12.7 mm) from the seam edge of each sheet or overlap the seams and double cut the material. Apply weights to ensure proper position.
- 5. Apply adhesive and, if required, the seams may be seam sealed with the #522 Seam Sealer as outlined in the installation instructions for ComforTech "Checker" pattern Rubber Sheet Flooring listed above or heat welded, as outlined in the following instructions below.
- 6. After installation, roll with a 100 lb. 3-section roller.

ComforTech "Anthem" and "Fountain" – Optional Heat Welding Instructions

General Recommendations:

- 1. Heat welding of the seams should not take place until after the "Anthem", or "Fountain" have been completely installed and the adhesive has dried. (A minimum of 24 hours depending on temperature, humidity, and adhesive used for installation)
- 2. Heat welding requires previous experience and knowledge of the special equipment and procedures, especially when heat welding rubber sheet flooring material. Rubber sheet flooring materials are softer and more resilient than vinyl sheet materials and can be easily cut or gouged with the trimming tools. Installers should practice on scrap pieces of the material prior to the actual welding to familiarize themselves with the materials.
- 3. Johnsonite's round solid-colored welding rods (CWR-XX) are 4mm in diameter. Johnsonite recommends the use of the Leister Hot Air Welding Tool equipped with a high speed round tip.

Routing:

1. Use a grooving machine equipped with a 3.5mm wide blade or for hand grooving use an Exacto #11-041X blade. Rout the ComforTech material to a depth equal to 1/2 or 2/3 the total thickness of the flooring material. Do not cut entirely through the flooring or into the polyester backing. After the seam has been properly routed, vacuum, and clean all debris, dirt, adhesive, and any other foreign material from the routed seam area which may interfere with proper bonding of the welding rod.



Heat Welding:

1. Use a Leister Hot Air Welding Tool equipped with a high speed round tip or similar equipment. The heat setting on the Leister unit should be set between 4.0 and 5.0. Other manufacturer's equipment may require different heat settings and should be determined by experimenting on pieces of scrap material.

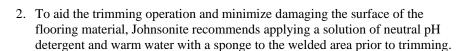
2. Allow the hot air welding tool to preheat for 5 to 10 minutes prior to actual welding. Feed the welding rod into the opening of the high speed round tip and apply the welding rod into the routed seam. Keep the base of the welding tip flat and parallel to the flooring material as you pull the welding tool back towards you along the seam.



- 3. A small ridge should be visible on both sides of the welding rod to ensure proper bond. Pull the welding unit across the flooring material at a constant speed. Pulling too fast can result in poor bonds and too slow could possibly burn the flooring material.
- 4. When approaching a wall or other obstruction, stop welding 2 to 3 feet from the obstruction. Use a spatula knife and trim the end of the welding rod to create a 2 to 3 inch angular ramp. Extend the groove in the flooring material up the welding rod ramp. Restart the weld at the obstruction and weld the seam and up the ramp to create a splice at the overlap of the welding rod.

Trimming the Weld:

Allow the welding rod to completely cool prior to trimming. As previously
mentioned, rubber flooring materials are softer and more resilient than vinyl
sheet flooring, therefore; extreme care must be taken when trimming the
welded area to minimize cutting or gouging the surface of the flooring.





3. The trimming procedure requires two (2) cuts. First, attach a knife sled to a quarter-moon spatula knife and trim off the top portion of the weld. Second, use the quarter-moon spatula knife and trim the welding rod smooth with the adjacent flooring in uniform and continuous cuts across the entire welded

section. Keep the knife extremely sharp and sharpened on one-side only.



Maintenance

72 hours after installation is completed, initial maintenance procedures must be implemented. Refer to Johnsonite ComforTech Rubber Sheet Flooring Maintenance Instructions for complete maintenance details.

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.



Technical Services Department 16910 Munn Road, Chagrin Falls, Ohio 44023 (800) 899-8916 ext 297 Fax (440) 543-8920

www. Johnsonite.com E-mail: info @ Johnsonite.com

© 2006 Johnsonite, Inc. A Tarkett Company.