

# Unicork 2 Flooring Installation and Maintenance

Installing Unicork floors is simple but there are several things to consider in order to fully achieve successful, long lasting results. Be sure to understand all installation instructions before commencing. Contact us for technical assistance if unsure of installation procedures.

Upon receipt of merchandise, please complete the following pre-installation checklist.

- Inspect your shipment cartons for damage, shortage, color or other variance to expectations. Report any damage or shipping errors immediately to your To Market representative. Do not cut or begin installation until after notification to your To Market representative. Beginning to install product constitutes acceptance.
- Verify packing slip for proper color, thickness and amount of material shipped. Report any errors prior to beginning installation or cutting any material to your To Market representative. Beginning to install product constitutes acceptance.
  - After you open the tile cartons for initial inspection, close and seal back up until you are ready to install
- Check the shipment for adhesive and lacquer
- Lacquer must not be exposed to freezing temperatures
- Adhesive must not be exposed to freezing temperatures
- Store material in a clean/dry area at 65 -75°F and less than 70% humidity.
- Read material safety data sheets

Unicork 2 cork flooring is installed by gluing the tiles to the subfloor. While these glue down cork floors are easy to install, correct adhesive type and proper subfloor preparations are critical to long-term performance and customer satisfaction. Use only the To Market adhesive and tools supplied with the order.

## Moisture precautions:

Cork floors should never be installed over any areas where there is any indication of moisture beneath subfloors. Moisture problems are especially common in below grade or on freshly poured concrete or leveling compounds not completely cured. It is the responsibility of the installer to test for any signs of moisture. All subfloor moisture and excessive vapor emissions must be permanently eliminated prior to installation.

Surface moisture resulting from spills usually in kitchens, bathrooms, and laundry rooms are not a concern provided the cork tiles are correctly sealed with polyurethane (see below). As on any other flooring material, surface spills on cork floors simply need to be wiped up as soon as possible.



# **Installation Tools**

The following are tools typically used for Unicork 2 floor installations: (Rollers and brushes necessary for applying the adhesive, lacquer and finish are included with shipment if ordered)

- Broom handle (threaded)
- Small Lates paint brush
- Rollers (included)
- Clean and smooth-headed metal hammer (not rubber)
- 100lb roller (clean)
- J- Roller / seam roller
- Measuring tape
- Metal Straight edge
- Utility knife with extra blades
- Cutting Board
- Chalk line
- Lint free cloth
- Adhesive: (included with shipment)

Based on order, you will receive .8-quart, 2.75 quart, 1.37-gallon or .8, 2.5 and 5kg containers

Approximate coverage is 430 square feet per 1.37 gallon or 5kg Container.

• Lacquer: (included with shipment) Unicork 2 high traffic floor lacquer

1.05, 2.6 and 5.25-quart or 1, 2.5 and 5 liter containers

Approximate coverage is 100 square feet per quart

 Polymer Finish: (included with shipment) Unicork 2 Polymer Finish 8 quart or 1 liter container

Approximate coverage is 650 – 850 square feet per quart.

1 coat (applied with lint free cloth)

<u>NOTE:</u> Polymer finish is a protection of the varnish. It is part of the periodical maintenance, more than it is part of the installation. It can only be applied after the varnish is completely dry, i.e. at least after 10 days of drying of the final coat of varnish. Although Polymer finish can be applied pure, it is recommended to apply the polymer finish diluted in clean water. The procedure of putting polymer finish on the floor is a routine that should/could be repeated once per 2 months or less, depending on use of the floor. After about 6 treatments with Polymer finish the product is best removed with stripper. After which the routine starts all over again. By stripping the Polymer finish every 6 (or so) times, the floor is protected yet not overly contaminated when renovation is in order. Removing 60 layers of Polymer when renovation is in order after 10 years is almost impossible. So is varnishing over Polymer finish.



## **Subfloor Preparation**

Unicork 2 tiles can be installed over most existing floor surfaces provided those surfaces are completely smooth, structurally sound, level and clean. Subfloors (whether new or existing) must be free of dirt, grease, wax, or anything else that would hinder a optimal adhesive bond. It will be necessary to fill in any cracks, joints, ruts, grooves, seams, or any rough surfaces in existing floors using wood fillers or high-quality latex - Portland cement patch and then sand smooth to ensure uniformity. This must be done to prevent imperfections on subfloor surfaces from "telegraphing" through the cork tiles after installation. Ask your To Market Representative or To Market Technical services for correct latex - Portland cement depending on subfloor type.

## A) Concrete Sub-Straight

The subfloor needs to be completely cured for a minimum of 90 days and measure no more than 3lbs of moisture per 1,000 square feet in a 24-hour period. This should be measured by the calcium chloride test and RH test. (ASTM F1869, ASTM F2170)

Corrective action for excessive moisture: If moisture level in subfloor exceeds max 3lbs as tested by calcium chloride, corrective action must be taken using any of these approved moisture barrier manufacturers: Ardex, FloorSeal or Koester.

Following all manufacturer's instructions, apply moisture barrier first. Apply Ardex P82 primer over the moisture barrier following manufactures instructions. Apply Ardex SDS trowel grade Portland cement-based underlayment over the P82 primer following all manufactures installation instructions. Take a moisture level test to confirm levels have been corrected to maximum 3lbs.

Sub-floor shall be free of all paints, dust, debris, grease, adhesive residue and must be straight and level to a tolerance of no greater than a 3/16 deviation in 10 lineal feet under a straight edge. (ASTM F710) Unicork 2 will telegraph subfloor imperfections just like any other cork flooring. All old floor coverings must be removed so Unicork 2 can be fitted directly on to the subfloor. All remnants of adhesive must be removed and any unevenness repaired. On concrete use Portland based cement or latex based floor leveling compound and allow to fully dry per manufacturer's instructions. <u>Gypsum based patching and leveling compounds are not acceptable and will void warranties if used</u>. Clean and vacuum the floor thoroughly to remove any dust or debris which would prevent proper bonding of adhesive to the subfloor. Under no circumstance should Unicork be installed over cork, linoleum or LVT, LVP or other vinyl flooring or other resilient flooring. Under floor or radiant heating should be turned off during installation to allow for proper drying of adhesive and lacquer during the entire installation.

## B) Wood Sub-Sub straight

Plywood 3/4" tongue and groove exterior grade, smooth side up is the minimum requirement for wood sub-floor installations. Contact To Market Technical Services with questions prior to installation. Secure all loose flooring and protruding nails, screws etc.



Replace any damaged wood, fill inset nail or screw heads and any seams or cracks with Ardex feather finish or equivalent latex patching compound. No Gypsum based compounds are to be used. Clean and vacuum the floor to remove any dust or debris that may inhibit proper bonding. Remember to follow the 3/16 in 10 lineal foot deviation rule for resilient flooring. Cork is resilient and will telegraph imperfections in the subfloor like all resilient flooring.

#### C) New Subfloor

If the existing floors are in poor condition it is often easier and more economical to install a new subfloor over the existing floor rather than to repair and prepare the existing floor. The easiest method is by installing a quality sanded plywood over the existing floor. Existing floors may be covered with 3/8" or ½" plywood sanded on one side (sanded side up) and securely anchored to the existing floor. (If thinner subfloor is desired, the minimum thickness should be ¼" APA approved underlayment panel). If a thicker subfloor is needed, fir plywood, sanded on one side, is recommended (sanded side up). The joints on the plywood should be staggered. Screw holes (counter sunk) and seams need to be patched with a filler. Once the filler dries, it is extremely important to sand the filler areas smooth (as well as any other rough areas on the subfloor).

The smoother the better, and the less chance of imperfections "telegraphing" through installed cork tiles. After sanding, the whole area must be vacuumed completely free of dust in order for the adhesive to adhere properly.

Hint: A damp rag may be used to 'tack' the area even after vacuuming.

#### **Pre-Installation**

Installation should not start until all other trades have finished in the room. The sub straight must be flat, clean and dry. Cork tiles should be placed in the room(s) of installation at least 72 hours before the installation begins to allow for acclimatization. At this time also check that tiles are the chosen desired pattern, color, and shading and inspect tiles for possible imperfections. All materials must be stored and installed at room temperature above 65°F and below 75°F. Do not install in humidity over 70% or under 35%

If a special pattern is specified, dry lay tiles to ensure accuracy and reduced waste.

Because cork is a natural product, there will be color and shade variations from tile to tile which add to the uniqueness and natural beauty of cork flooring. The blending of shades and/or colors is the installer's responsibility. Depending on the tile chosen certain patterns can be created. Lay out the tiles creating desired pattern (staggered seams is usually recommended). Now is the time to mark any lines on the subfloor that will be used as guides for installing the cork tiles. Unicork 2 tiles are directional but can be fitted in a pattern or design. Owner or specifier will dictate requirements for pattern design other than Ashlar or standard running bond if required.

When setting out the designs make sure that the joints do not coincide with the joints in the sub flooring. Unicork is installed from the middle of the room to the edge of the room.

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First, work down a wall to find the center point of the first wall. Take a tile and mark out the tile widths from the center of the wall to make sure that you end up with over half a tile width in the end row. Adjust your mark at the center point of the room if needed. Then use the same measurement from the center point of the opposite wall. Using a chalk line make a line across the center of the room by joining up these two points. Use a tape measure to find the center point of the chalk line. This will be the starting point when you start fitting. Fit tiles on one side of the room at a time.

To apply the adhesive to the floor, first use a small brush to apply to the edges and corners, then use the adhesive roller (supplied) for the larger expanses. It is essential to use only the Unicork 2 contact adhesive, which was supplied. Affix the roller to a broom handle, so that the adhesive can be applied from a standing position. This will enable the installer to see that the adhesive has been applied thoroughly and evenly. Take care not to walk on the floor during or after application. Prior to use, prepare rollers by brushing by hand or with a stiff brush to remove any excess lint. Glue and fit one side of the room at a time. The adhesive should be allowed to dry from white to clear with a minimum of 1 hour dry time (*the glue normally will dry in 15 to 30 minutes, when the glue is not dry after an hour something is not in order. The subfloor is not taking in moisture from the glue, which will result in improper bonding*) depending on room temperature. After adhesive has properly dried, commence installing.

## Unicork 2 Installation

Unicork 2 tiles, unless otherwise specified for specialty pattern, are to be installed in an ashlar or running bond method. Commence laying the tiles when the adhesive floor has become transparent and fully dry to the touch. Because the Unicork 2 adhesive is a special latex-based contact adhesive, it can be left standing open up to 4 hours once applied to the floor. Caution is needed to insure no dust or debris settles on its surface. *NOTE: Glue in the pail cannot be left open, the lid should be on the pail when not in use, otherwise the glue will form a film.* The same adhesive is applied to the back of the tiles at the factory which, when joined, creates an incredible bond if nothing foreign impedes it.

Open the Unicork 2 tile boxes and begin mixing tiles from at least three different cartons. Check each pack before and during laying. Being a natural product, tiles could vary slightly in width. Changes in humidity, storage, transport and in the receiving room can cause the tiles to shrink. Therefore, the installer should take as much tiles as needed for each row. Place them on their side (long side) and select tiles with the same width. It will make installation a lot easier. Incidental smaller tiles can be used for another row using only the smaller tiles. The first tile is then started in the center of the room, with the long side of the tile care-fully aligned along a chalk line. Be sure to check your lines for accurate measure to ensure a squared-up installation.

The quickest application method is to use a paint roller (included in purchase) and pan. It is important to feather out the edges of the contact cement so that it does not form humps or bumps once it has dried. These could show up as imperfections once the tiles are installed.

Do not put any pressure on the tile until it is correctly aligned. To ensure tight seams, tiles can be manipulated using the clean, free of sharp edges, face of a metal hammer (do not use a rubber mallet). Hold the handle of the hammer in one hand and the claw or cat's paw in the other. Put pressure on the tile with the face of the hammer while pulling in the direction of the adjacent tile seams. Never use the edge of the hammer face by tilting and be careful not to dent the tiles with too much pressure. By doing

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this you will notice the tile seam will tighten as you go. Continue the process on all the tiles and you will have consistently tight seams. After seams are tight put pressure on the tile with your hand over the full face of the tile to ensure good adhesion. Use a J roller as you go and a 100lb roller over the whole floor once a good number of tiles have been fitted.

Hint: Larger rooms can be prepared one section at a time (20 to 30 square feet or more at a time) Apply adhesive to 20 to 30 square feet of subfloor. Smaller areas such as bathrooms can be completely prepared at one time.

Cutting of tiles should be done using a clean and sharp utility knife and a straight metal edge to ensure accuracy. Around the edges of the room, you will need to cut tiles. When cutting around posts, against walls, drains, etc., measure carefully to ensure a proper fit allowing for expansion. Once you have completed one side of the room, apply adhesive to the other side and repeat the process.

Hint: Areas requiring tiles to be cut (along wall edges, cabinets, toilets, tubs, etc) can be done after the rest of the floor is installed.

Hint: To measure the cut, place the tile that needs to be cut up against the wall (or cabinet, counter, etc.) but overlapping the last row already installed.

Hint: If cuts will be exposed (not covered by trim, molding, or transition strips) tile edges should be sanded smooth.

Hint: If rolling chairs are used at desks, place plastic protective floor mats under chairs. Be sure to use mats that do not have the pointed nubs on the bottom.

## UNICORK 2 Adhesive

Adhesive has been included with each order. Always follow instructions as shown on the adhesive containers.

Hint: It is recommended that one or two tiles are tested in a low visibility area prior to installing the complete floor. This will ensure that the subfloor and adhesive are compatible. This will also allow the installer to understand how the contact adhesive works with cork tiles.

Important hint: The contact cement has been applied to each tile in manufacturing but must be applied to the subfloor and left until fully dry to the touch.

#### UNICORK 2 Lacquer

Two coats of Lacquer have been applied at in manufacturing. It is recommended that a minimum one or two additional coats of To Market lacquer be applied after installation. Rollers have been included to insure proper coverage.



The first coat of Unicork lacquer must be applied at the end of the first 8-hour day using the Lacquer roller (supplied). This must be done regardless of the number of tiles that have been fitted in that period. The lacquer will protect the Unicork from any expansion or contraction issues that may occur due to environmental changes. Before applying lacquer, make sure the floor is completely free from dust, dirt and debris by vacuuming and wiping with a damp lint free cloth.

Shake lacquer bottle well prior to use, per the instruction label on the bottle. Let sit to allow bubbles that may have been created by shaking to dissipate. If bubbles get on the lacquer roller, they will be transferred to the floor's surface and will dry as crater-like features causing an irregular appearance.

While lacquer is settling, trim the edges of your roller at an angle inward to ensure that no excess fluff remains. This will help to insure a good lacquer finish.

Affix a broom handle to the supplied lacquer roller, so that lacquer can be applied from a standing position to ensure complete floor coverage. It is not recommended that lacquer is poured directly onto the floor. Use a bucket or paint tray for a holding and applying.

When applying the lacquer, soak the roller, avoid dripping excess on the floor surface and work approximately 10 feet away from you pulling the roller toward you with only one pass. Do not go back and forth with roller If you have missed an area, the second coat will cover the area. Spread evenly and don't leave any pools. Continue the process going wet edge to wet edge. It is essential that you apply all the lacquer recommended and supplied. Divide the floor into smaller sections and work at a steady pace. Unicork 2 lacquer is self levelling. The edges and seams are vulnerable to if not properly lacquered.

Hint: It is always better to over lacquer than under lacquer. Allow lacquer to dry for 8 hours minimum between coats. *It is recommended for 3 times thin coats than than 1 time thick. Thick coats will dry too slow. The surface may feel dry, the microns below the surface could still be 'wet'. Important while varnishing: you can notice if you are going too thick when the roller stops rolling and starts 'sliding'.* 

*Hint: 2 coats applied at the plant. It is preferable the floor is sanded slightly (hand sanded) just to open the varnish for better grip. This follows the procedure of renovating.* 

Hint: The varnish is 100% dry in about a week, and fresh varnish bond better when the existing coat is not yet 100% dry. Since it will take over a week before the materials arrive from factory to installation, we should slightly sand after installation before first on site coat.

**NOTE:** The final coat should be left untouched for at least 12 hours. 24 hours is recommended or up to 48 hours depend on local conditions.



Although the tile is provided with two coats of lacquer applied at the factory, an additional two coats must be applied after installing the tile to seal both the surface and the beveled edges against dirt and liquid. Lacquer should be applied at a rate of .9 quart or 1 liter to 100 square feet. Apply a second coat following the same instructions referenced above.

**WARNING:** If the second coat is applied before the first coat has dried, the lacquer will take on milky white appearance the next day. Consider humidity & weather when calculating dry time between coats

In order to protect the lacquer from traffic dirt and debris, a polymer finish coat must be applied. (see Polymer Finish instructions below)

For lacquer to dry properly:

- Apply at room temperature (65-75 Fahrenheit). WARNING – Adhesive and varnish will not work properly if temperature requiremets are not followed
- Apply in humidity below 70%.
- Ensure adequate ventilation (DO NOT USE FANS TO DRY LACQUER).
- Do not apply too thinly or too thickly (spread rate = .9 quart or 1 liter per 100sqft).
- Allow minimum drying time of 8 hours between coats.

Total cure time of the lacquer: 1-2 weeks. This is not to be confused with drying time.

During cure time avoid excessive water spillage and placing heavy objects on the floor; always wait 2 weeks before laying rugs. (Use only cloth-backed rugs not rubber backed

#### UNICORK 2 Finish

After the second coat of lacquer has thoroughly dried the minimum 8 hours. *Polymer can only be applied when varnish has cured*). It is recommended to apply diluted polymer *to prevent incorrect application and possible lines and stripes of drying polymer*. *Water used to dilute polymer MUST BE CLEAN*. Cover the entire surface with polymer by wiping thoroughly making sure to get into any beveled edges if applicable. Apply one coat and allow polymer to dry a minimum of 1 hour before allowing traffic on the floor.

Caution: Do not under any circumstances use Silicone caulk or Silicon based materials on Unicork . Acrylic Caulk only is approved for use with Unicork if necessary.



# <u>Maintenance</u>

Unicork 2 must be cleaned and maintained on a regular basis using the Unicork Cleanser purchased from To Market and follow the instructions on the packaging. No high PH detergents, bleached based cleaners, harsh detergents containing any vinegars, pastes, or waxes should be used. For periodic cleaning. Clean with warm water and neutral pH cleanser. Ring mop until damp and mop floor to remove any dirt or debris collected on floor. Do not use excessive water. As with other flooring types, vacuuming cork floors regularly is also recommended. Do not use flooring waxes on Unicork floors.

Any heavy furniture or chairs should have felt pads placed on the feet. Heavier objects such as pianos and pool tables may require larger pads under the feet. This will help reduce denting of the floor.

Hint: Dents in cork floors caused by heavy furniture will usually recover up to 90% over time once furniture has been removed.

If heavy items are on wheels (pianos, big screen TV's etc.) they should not be rolled directly on the cork. Always put a piece of plywood with a packing quilt underneath to move these objects.

Daily Maintenance: - The cleanser (Reiniger) is a product that can and may be used on a daily basis to freshen up the floor. Cleaner should be diluted by adding to clean mob water.

Monthly Maintenance: The Polymer finish is the protection of the varnish and may/can be applied every 2 months (or less) depending of use.

NOTE: the frequency of use of Polymer determines the frequency of use of Stripper / Remover.

## **Repairing Damaged Tiles:**

Damaged tiles are easy to replace. Using a stiff scraper and a mallet, scrape the tile out of its place, being very careful not to damage neighboring tiles. It is crucial to clean any debris from the area. This is usually accomplished by using sand paper. If any filler has come up with the tile, it will need to be repaired and sanded smooth just as in the installation steps described above. Once the area is clean, simply re-apply water-based contact cement to the area and to the replacement tile, and once the adhesive is dry to the touch, press replacement tile firmly into place.

## UNICORK 2 Remover

The polymer finish must be stripped off and reapplied once a year in commercial applications and every 5 years in residential, depending on the amount of soil and traffic. Use remover in a solution of 1:10 parts water and scrub lightly to remove soil and polymer. Make sure all dirt and cleaning residue is removed and the floor is completely dry then apply a new polymer finish