

Centr x HYROX Perform Turf Technical Manual

Installation · Maintenance · Warranty

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When Turf is Delivered: Check its texture, color, and style; make sure there are no visible defects before installation. Centr or the authorized Centr distributor must be immediately notified of any damage or product irregularities prior to installation.

I. Handling & Storage of Materials

Receive rolls in a careful manner to avoid any damage. Adhesives or surface preparation product containers shall be unbroken and labels intact until time of use. Prevent damage or contamination to materials by water, moisture, freezing, excessive heat, foreign matter or other causes.

Perform Turf rolls will arrive on site back rolled, and should be stored on site with adhesives, etc., for at least 24 - 48 hours prior to installation (extreme cold or hot conditions may require additional time). Material should only be stored inside on a clean, dry, smooth surface.

Rolls should be removed from pallets and any loading/shipping constraint pressures be removed in order to acclimate to room conditions.

Work from all other trades must be complete, especially overhead trades, before installation can begin.

II. Installation Materials

- CENTR x HYROX Perform Turf
- Adhesive:
 - Mapei Ultrabond Sport PU 1K
 - *or approved alternatives.*
- Tools:
 - Sharp utility knife with spare blades
 - Carpenter square & straight edge
 - Measuring tape
 - Chalk line (for layout)
 - Protective gloves
 - Safety glasses
 - 1.5mm x 1.5mm x 1.5mm (1/16" x 1/16" x 1/16") square notch trowel
 - 50mm (2") masking tape (to secure seams)
 - Concrete blocks (for weighting seams)
 - Kraft paper (to protect flooring from blocks)

III. Sub-Floor Preparation

Each subfloor shall be inspected to determine the special care required to make it a suitable foundation for turf. All cracks 1/8 inch (3 mm) wide or protrusions over 1/32 inch (.8 mm) should be filled or leveled.

WOOD FLOORS

- New wood sub-floors should be CDX exterior plywood installed smooth side up.
- All nails, staples or screw fasteners must be caulked and surface sealed with epoxy sealant.
- Plywood should be acclimatized for a 48-hour period prior to installation of flooring.
- All wood sub-floors must be clean and dry of all dust, dirt, and previous floor finishes.
- Patch cracks, holes, and rough or uneven areas with an appropriate cement based leveling compound (such as Mapei Planipatch, etc.) to manufacturers' standards.

CONCRETE FLOORS

- Ensure the sub-floor is smooth and level to a tolerance of 3.2mm (1/8 in) in 3.05m (10 ft).
- Ensure concrete floors have cured for a minimum of 6 weeks.
- It is vital that a moisture test be completed prior to floor installation. Moisture is the single most significant factor that causes bonding failure to the sub-floor. Moisture tests must be performed on all concrete floors regardless of age and grade level.
 1. Test shall be in accordance with ASTM F-1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Sub-floor Using Anhydrous Calcium Chloride.
 2. One test should be conducted for every 1,000 sq ft of flooring and the results must not exceed 2.27 kg per 92.9m² (5 lbs per 1,000 sqft) in 24 hours.
 3. Use ASTM F2170, the Relative-Humidity Test, as an alternative. Slab not to exceed 75% humidity.
 4. If test results exceed limitations or hydrostatic pressure exists, the installation must not proceed until the problem has been corrected or an approved vapor barrier underlayment is installed.
 5. All test results must be kept on file and be accessible upon request.
- If lightweight concrete has been used in construction DO NOT use the F1869 test.

- If poured-gypsum underlayment has been used, check with the underlayment manufacturer on how to test for dryness. Never use calcium chloride testing with gypsum underlayment.
- Ensure existing concrete floors are clean, dry and smooth.
- Remove any wax, paint, varnish, adhesive or any other material that would prevent proper bonding of adhesive.
- Repair any low spots with a cementitious based latex patch mix.
- Fill and smooth any rough or porous concrete sub-base prior to installing flooring.

***Note:** If concrete sealers, curing compounds or floor hardeners have been applied, the surface must be treated prior to adhesive application to ensure proper bond. Always allow patching materials to dry thoroughly and install according to the manufacturer's instructions. Excessive moisture in patching material may cause bonding problems or a bubbling reaction with the adhesive.*

IV. Installation

Before work commences, examine the areas to be covered and report any flaws or adverse conditions to the general contractor, site manager, and/or architect. Do not proceed with the installation of Perform Turf until substrates and conditions comply with the requirements indicated in manufacturer's instructions.

a. Temperature and Humidity

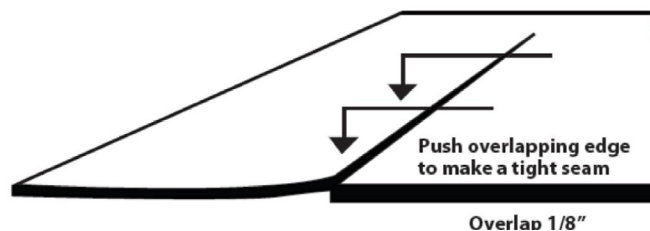
The environment in which the turf is to be installed must be controlled with the temperature between 65° F and 75° F (18° C and 24° C) and the relative humidity of 65% or less. If installed over concrete, the slab temperature should not be less than 65° F (18° C). These conditions must be maintained for at least 48 hours before, during, and 48 hours after the installation.

At the job site, the installer should unroll all rolls and allow them to relax overnight. It may be necessary to weigh down the seams until the adhesive develops a firm set if not relaxed completely.

b. Roll Installation

1. Make the assumption that the walls you are butting against are not straight or square. Using a chalk line, make a starting point for an edge of the flooring to follow. The chalk line should be set where the first seam will be located.

2. Remove the material from the shrink wrap and unroll it onto the floor. Lay the rolls on the floor in a way that will use your cuts efficiently. Cut all rolls at the required length, including enough to run up the wall a few inches.
3. If end seams are necessary, they should be staggered on the floor and overlapped approximately 3". End seams should be trimmed after acclimation period using a square to ensure they fit tightly without gaps.
4. After rough cutting, allow the cuts to relax in position for a minimum of two hours, but 24 hours is preferred.
5. After allowing the flooring to acclimate and relax, you may begin the installation.
6. Align the first edge to the chalk line. It is very important that the first seam is perfectly straight.
7. Position the second roll with no more than a 1/8" overlap over the first roll at the seam. After adhesive is applied to substrate the material will be worked back to eliminate the overlap. This procedure will leave tight seams and eliminate any gaps. Care should be taken to not over compress the seam. Over compressed seams will cause peaking.



8. Repeat for each consecutive sheet necessary to complete the area or those rolls that will be installed that day.

c. Roll Installation – Adhesive

1. After performing the above procedures, begin the application of the adhesive. We recommend Mapei Ultrabond Sport PU 1K, a one-component moisture-cured polyurethane adhesive. Apply Mapei Ultrabond Sport PU 1K using a 1/16" square-notched trowel.
2. Fold over the first drop along the wall (half the width of the roll).
3. Spread the adhesive using the proper size square-notched trowel. Take care not to spread more Mapei Ultrabond Sport PU 1K than can be covered with flooring within 30 minutes. The open time of the adhesive is 30–40 minutes at 70°F and 50% relative humidity.
4. NOTE: Temperature and humidity affect the open time of the adhesive. Temperatures above 70°F and/or relative humidity above 50% will cause the adhesive to set up more quickly. Temperatures below 70°F and/or relative

humidity below 50% will cause the adhesive to set up more slowly. The installer should monitor the on-site conditions and adjust the open time accordingly.

5. Lay the flooring into the wet adhesive. Do not allow the material to “flop” into place; this may cause air entrapment and bubbles beneath the flooring.
6. Immediately roll the floor with a 75–100 lb. roller to ensure proper adhesive transfer. Overlap each pass of the roller by 50% of the previous pass to ensure the floor is properly rolled. Roll the width first and then the length. Roll again within the first 60 minutes.
7. Fold over the second half of the first roll and half of the second roll. Spread the adhesive. Spread the adhesive at right angles to the seam to ensure 100% coverage across the seam. Roll the flooring.
8. Continue the process for each consecutive drop. Work at a pace so that you are always folding material back into wet adhesive.
NOTE: Do not allow adhesive to cure on your hands or come in contact with the finished flooring. Immediately wipe off excess adhesive with a rag dampened with mineral spirits/denatured alcohol! Cured adhesive is very difficult to remove from hands and we strongly suggest wearing gloves!
9. After rolls are properly laid, the edges and seams must be bricked (sufficiently weighted down with blocks) until the adhesive is cured, to ensure proper bonding of flooring to the sub-base. Grey concrete utility bricks, 2" x 4" x 8" are the only suitable weights to be used.
10. The weight blocks must be put directly onto the seam in a continuous row, with kraft paper as a protector sheet between the turf and weight blocks.
11. Keep traffic off the floor for a minimum of 24 hours. After installation, the floor should be free from rolling loads for a minimum of 48-72 hours. Foot traffic and rolling loads can cause permanent indentations or bond failure in the uncured adhesive.

V. Maintenance

The following procedures are key in helping to preserve your Turf:

- i. Keep it clean.
- ii. Brush periodically.
- iii. Do not abuse!

i. Keep It Clean

1. Dust, pollen, and airborne pollutants

For lightly soiled areas, it may be necessary to use a rectangular microfiber mop with one (1) ounce of Zep Neutral pH Floor Cleaner per gallon of water. For heavily soiled areas, repeat the procedure using three (3) ounces of Zep Neutral pH Floor Cleaner per gallon of water followed by a thorough rinsing with warm water. A wet vacuum can be used to remove excess water from the surface.

2. Stains and other blemishes

Be prompt. It is always easier to clean up a fresh spill than one that has dried and hardened. Remove any solid or paste-like deposit with a spatula or table knife. Blot up excess liquids with paper towels, a clean cloth, or a dry absorbent, such as kitty litter or fuller's earth. Dry absorbents can then be vacuumed up afterwards.

Synthetic fibers have high resistance to staining. However, it is important to realize they are only one part of a sophisticated system of various components designed for overall performance. Some cleaning agents safe for the face fibers can be harmful to other components of the Turf system. The first can be used liberally directly on the turf surface, and the second should only be applied by rubbing a cloth that is lightly soaked in the cleaner to minimize penetration of possible harmful agents below the turf surface.

In the **first** group of cleaners, which generally can be applied without any special precautions, are:

- A warm, mild solution of granular household detergent or any low sudsing detergent for fine fabrics. Use approximately one teaspoon to one pint of water. This will handle most waterborne stains including:

Coffee	Cola	Tea	Blood
Ketchup	Milk	Ice Cream	Urine
Mustard	Cocoa	Butter	Dye
Fruit Juices	Vegetable Juices	Glue	Latex Paint

- A three (3) percent solution of ammonia in water may be used in lieu of household detergent for more stubborn stains.

- Do not use cleaners that contain chlorine bleaches or caustic cleaners (pH above 9) or highly acidic cleanses (pH below 5). Use only neutral cleaners such as Zep Neutral pH Floor Cleaner.
- Rinse the area thoroughly with clean warm water to remove any traces of soap or ammonia.
- Blot up excessive liquid.

The **second** group of cleaners, where agent must be applied sparingly and care taken to avoid penetration beneath the turf, are:

- Mineral spirits or a grease spot remover like perchlorethylene (dry cleaning solution) of the type sold by most variety stores and supermarkets. In general, cleansers in this category should handle most oil-based stains including:

Asphalt	Motor Oil / Grease	Chewing Gum	Lipstick
Tar	Suntan Oil	Crayon	Nail Polish
Shoe Polish	Cooking Oil	Ballpoint Ink	Floor Wax

Caution: Mineral spirits and other petroleum-based solvents are flammable. Do not smoke or permit open flames near where these are being used.

Be sure the area is well ventilated where solvent cleaners are used and remember to use sparingly.

3. Animal waste - Neutralize with a mixture of white distilled vinegar in an equal amount of water. Flush thoroughly with water after application. And vacuum up excess solution with a wet vacuum.
4. Chewing gum - In addition to dry cleaning fluid, chewing gum can be removed by freezing. Aerosol packs of refrigerant are available from most carpet cleaning suppliers for this purpose, or dry ice can be used. After freezing, scrape with a knife.
5. Fungus or mold spots - A one (1) percent solution of hydrogen peroxide in water can be sponged on to the affected area. Flush thoroughly with clean water after application.

ii. Brush Periodically

1. Matting of fibers may occur in areas of high foot traffic, especially if fibers have become soiled with dirt and other airborne pollutants.
2. Periodic “cross brushing” of the Turf can help restore the aesthetic appearance of the Turf. “Cross brushing” means all brushing activity takes place against the grain, nap, or sweep of the Turf fibers. By brushing against the Turf, the fibers are “fluffed up”. A brush with synthetic bristles should be used. Never use a brush with metal or wire bristles as these will change the Turf fibers.

iii. Do Not Abuse!

Although Turf is made of tough, durable fibers, certain precautions should be taken to prevent any damage.

- Lighted cigarettes cannot ignite the Turf, but they can damage the Turf by fusing the tips of the fibers together.
- Furniture and equipment with sharp or jagged edges should not be placed on Turf as this may puncture or tear the Turf.
- Water from sprinkler systems or hard water areas can leave mineral deposits on Turf that may cause discoloration.
- Make sure Turf is not exposed to reflected sunlight windows as this may fuse the Turf fibers together.

Proper care and maintenance will enhance the aesthetics and usefulness of your turf.

VI. Warranty

The CENTR x HYROX Perform Turf is guaranteed to be free from manufacturing defects on both material and workmanship for **five (5) years** from the date of shipment. If such a defect is discovered, the customer must notify Centr either through the contracting installer, distributor, or directly. If found to be defective under normal non-abusive conditions, at the discretion of Centr, the sole remedy against the seller will be to repair, to replace, or to issue a credit not exceeding the selling price of the defective goods. These warranties only apply to the original purchaser.

Warranty shall not cover dissatisfaction due to improper installation, normal wear, damage from improper maintenance or usage, or general misuse, including and without limitation: burns, cuts, tears, scratches, scuffs, damage from rolling loads, damage from cleaning products not recommended by Centr, slight shade variations or shade variations due to exposure to direct sunlight, or differences in color between samples or photographs and actual flooring.

I. Items Under Warranty:

1. *WEAR*– We warrant that CENTR x HYROX Perform Turf will not wear more than 50% of its surface pile weight as a result of normal wear and tear during the five (5) year warranty period. By normal wear and tear is meant fiber loss from the wear layer through normal friction, not crushing or flattening of the fiber surface pile in any area, nor due to abnormal usage of the fiber surface.
2. *TENSILE STRENGTH* We guarantee that the CENTR x HYROX Perform Turf will not exhibit UV Degradation or loss of tensile strength greater than 50% during the five (5) year warranty period.

II. Warranty Exclusions:

1. Disfigurement or damage caused by abnormal use or any damage to the Turf not arising out of a defect to our product. For example, the warranty does not cover tears, burns, cuts, installation on stairs or damage in transit.
2. Differential fading due to light exposure, shading, pile crush, dye lot differences and soiling.
3. Any condition that would have had a visible defect upon inspection prior to installation.
4. Damage to Turf from any use for which the product was not designed.
5. The exact matching of shade or color.
6. Any express or implied promise made by any salesman or representative.

7. Tears, burns, cuts, or damage due to improper installation, improper use or improper cleaning agents or maintenance methods.
8. Labor costs for installation of original or replacement material.
9. Sale of "Remnants", "Seconds", "Off Goods" or other irregular (non-first quality) flooring materials. With respect to "Seconds", "Off Goods", or "Remnants" such are sold "as is," and Centr makes no warranties whatsoever, express or implied with respect thereto, including warranties of merchantability or fitness for a particular purpose.
10. Problems caused by moisture, hydrostatic pressure, or alkali in the sub-floor.
11. Problems caused by uses, maintenance, and installation that are contrary to CENTR x HYROX Perform Turf specifications, recommendations, or instructions.
12. Material installed outdoors.
13. Material installed with obvious defects.
14. Material that is not installed and maintained as recommended by Centr.
15. Damage to flooring products from pallet jack and tow-motor or vehicular traffic.
16. Environments where the product will be exposed to animal fats, vegetable oils, grease, or petroleum-based materials. (i.e.: commercial kitchens or auto repair facilities.)
17. Premature wear and deterioration from spikes or natural grass cleats.
18. Differences in color between products and photography.

These warranties are in lieu of any other warranty expressed or implied. Centr shall not be liable for any incidental or consequential damages which may result from a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. These warranties give you specific rights, and you may also have rights which may vary from state to state. To know what your legal rights are in your state, consult your local or state Consumer Affairs Office or your State Attorney General.