

EMEA TASKWORX® – ECOWORX® – ECOWORX S™ – COMFORTWORX® CARPET TILE INSTALLATION

Notice: For best results review the following guidelines prior to installation. Shaw Contract will not be responsible for improper installation and failure to follow these guidelines may result in a limited warranty coverage.

These installation procedures are intended to assist in the installation of Shaw Contract TaskWorx, EcoWorx and ComfortWorx carpet tiles within most project environments. Specific questions regarding installation not covered within this guidance document must be referred to Shaw Contract EMEA tel: +44 (0) 20 7961 4120.

Any variance from these procedures will become the sole responsibility of the installer.

I. GENERAL INFORMATION

- All instructions and recommendations should be followed for a satisfactory installation.
- Acclimation of the material prior to its installation is required. All boxes of material should be removed from their delivery pallet and their contents emptied. The material should be stacked and stored not more than five boxes worth of material high within the laying area for at least 24 hours at an ambient temperature of between 18 °C and 27 °C and an ambient air Relative Humidity of not less than 40%.
- Should the material have been stored or transported at temperatures less than 10 °C immediately prior to delivery, the conditioning time of the material should be extended to at least 48 hours. Note: Materials that have been transported or stored at temperatures that exceed 27 °C will also require a comparable conditioning time.
- Install the product after all other trades have completed work that could damage the floor covering.
- Use of cementitious patching, smoothing and levelling underlayment's that meet or exceed maximum moisture level, pH requirements and compressive strength of 3,000 psi (20 N/mm squared) are more than acceptable.
- Inspect all material for damage before installing. Claims will not be accepted for flooring that has been cut to size and/or installed.

If you have any concerns regarding the product fit or finish, please call Shaw Contract EMEA tel: +44 (0) 20 7961 4120.

II. SUBFLOOR INFORMATION

The correct preparation of the subfloor is a major part of any successful installation. All subfloors must be clean, flat, dry and structurally sound. The subfloor must be within a surface deviation of no greater than 5 mm under a 2 metre straight edge (Surface Regularity 2 (SR2) – BS 5325 / BS 8203 / BS 8204)

Note: The responsibility of determining any substrate is suitable to be installed over rests solely with

the installer/contractor on site.

A. WOOD SUBFLOORS

- Do not install material over wood subfloors that lay directly on concrete or over dimensional lumber or plywood used over concrete.
- Do not apply polyfilm or visqueen over wooden subfloors.
- Basements and crawl spaces must be permanently dry. Where necessary, local regulations prevail.
- All other subfloors – Plywood, OSB, particleboard, chipboard, wafer board, etc. must be structurally sound and be installed following their manufacturer's recommendations. Local building codes, national standards and manufacturer's recommendations may only establish minimum requirements of the flooring system and may not provide adequate rigidity and support for proper installation and performance. Plywood should be of a suitable flooring grade, be at least 6 mm thick and conform to all relevant country applicable regulations and standards.

The responsibility of determining if an existing flooring finish is suitable to be installed over rests solely with the installer/flooring contractor on site. If any doubts exist in relation to the suitability of such a base, serious considerations should be given to its full removal and its subsequent repair.

B. CONCRETE & SAND CEMENT SUBFLOORS

- Floors shall be smooth, permanently dry, clean, and free all foreign material such as dust, wax, solvents, paint, grease, oils, and old adhesive residue. The surface must be hard and dense, and free from any substance to impede adhesion.
- Cementitious based substrates should have a country applicable moisture vapor content that is deemed dry enough to lay carpet tile floor finishes upon. The 'British Standard 5325 and 8203' requires surface hygrometer readings to have reached equilibrium and be below 75% Relative Humidity (RH). The 'ASTM F1869' states a maximum moisture level per the CaCl test method of 8 lbs. per 1000 ft² in a 24 our period.
- Do not install over cementitious bases with a history of high moisture or hydrostatic conditions. Excessive moisture in the subfloor could promote mold, mildew, and other moisture related issues like the trapping of moisture emissions under the flooring, which may contribute to an unhealthy indoor environment. Shaw Industries does not warrant nor is responsible for damage to floor covering due to moisture related issues.
- The pH level of concrete should be between 7-10.
- The final responsibility for establishing if the concrete / cementitious base is fit for its designed purpose or if it is dry enough to be installed upon lies solely with the floor covering installer.

NOTE: IT MAY NOT BE THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO CONDUCT THESE TESTS. IT IS, HOWEVER, THE FLOOR COVERING INSTALLER'S RESPONSIBILITY TO MAKE SURE THESE TESTS HAVE BEEN CONDUCTED, AND THAT THE RESULTS ARE ACCEPTABLE PRIOR TO INSTALLING THE FLOOR COVERING. WHEN MOISTURE TESTS ARE CONDUCTED, IT INDICATES THE CONDITIONS ONLY AT THE TIME OF THE TEST.

C. LIGHTWEIGHT CONCRETE & ANHYDRITE (GYPSUM) BASED SCREEDS

All recommendations and guarantees as to the suitability and performance of lightweight concrete and anhydrite (gypsum) based screeds under carpet tile flooring are the responsibility of the supplier / manufacturer. The installer of the system may be required to be authorized or certified by the manufacturer. Correct on-site mixing ratios and properly functioning pumping equipment are critical. To ensure proper mixture, slump testing is recommended.

- Surface must be permanently dry, clean, smooth, free of all dust, and be structurally sound.
- As with all bases, Relative Humidity (RH) moisture tests should be conducted prior to undertaking any flooring works. Materials should have a country applicable moisture vapor content that are deemed dry enough to lay carpet tile floor finishes upon. The 'British Standard 5325 and 8203' requires surface hygrometer readings to have reached equilibrium and be below 75% Relative Humidity (RH). The 'ASTM F1869' states a maximum moisture level per CaCl test method of 8 lbs. per 1000 ft² in a 24-hour period.
- Bond testing to determine compatibility of adhesive to the substrate is advised. Primer can be utilized to promote adhesion.

D. RADIANT UNDERFLOOR HEATING: WET / HYDRONIC ONLY

In most instance wet or Hydronic underfloor heating systems are installed below sand cement / Anhydrite screeds that have been laid to a depth somewhere between 50 to 75 mm thickness

It is imperative that the underfloor heating system has been previously commissioned and found to be fully functioning correctly prior to any part of the carpet tile floor coverings package being installed upon the base's surface. The underfloor heating system must be switched off for at least 48 hours prior to commencement of works and must remain off for a further 48 hours after the installation has been completed. It is also important to note that whilst the underfloor heating system has been decommissioned, an alternative heating source should be provided to ensure that the area of installation is kept at a constant temperature of between 18 °C and 27 °C.

After this 48-hour period, the underfloor heating system can be gradually recommissioned in accordance within standard industry recognized rules. Once operational, it is important to note that the heating system must not exceed the industry agreed maximum operating temperature of 27 °C at the underside of the floorcovering (the adhesive line). In areas where the use of a higher temperature is unavoidable, agreement from your chosen adhesive manufacturer should also be obtained.

Failure to follow the aforementioned guidelines can result in floor finishes and their associated systems being irreversibly damaged.

E. EXISTING FLOOR COVERINGS

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- Carpet tiles can in most instances be installed over existing hard-surface type floor coverings, provided that the existing material is fully adhered, is clean, flat, dry, structurally sound and free of deflection or material that could have an adverse effect on the installation. Existing sheet vinyl floors should not be heavily cushioned and not exceed more than one layer in thickness. Soft underlayment and soft substrates can compromise the integrity of such products as well as diminish indentation resistance.
- Installation of any floor finish is NOT allowed over any type of carpet.
- Do NOT install over wood floors that are adhered to concrete.

Solvent residue left in and on the subfloor may have a negative effect upon newly installed floor finishes and their subsidiary underlying systems. Never use solvents or citrus adhesive removers to remove old adhesive residues.

F. RAISED ACCESS PANEL SUBFLOORS

- 60 cm x 60 cm panels are recommended.
- Raised access panels must be stable, level, flat, free and clean of existing adhesives.
- Where / if necessary, repair or replace any loose or unstable panels.
- Lippage (variation of height) between of panels must not exceed 0.75 mm
- Gaps between panels must not exceed 1 mm.
- There should be no deflection of the individual panels – Concave less than 0.75 mm.
- The surface of the system must be flat and level within a surface deviation of no greater than 5 mm under a 2.0 metre straight edge.
- Should access to the underside of the raised access base be a requirement, allow for framed inspection type hatches.
- Modular floor finishes that are being installed directly upon such panels must have their joint lines staggered so that they do not coincide with those found on the raised access system.
- It is important to note that the joints of raised access bases can sometimes be physically viewed grinning back through the entire thickness of the floor finish. Such disparity is not considered to be a product defect.
- Use the appropriate installation methods for the product. Should the raised access base be constructed out of magnetically receptive panels or a cementitious base have an IOBAC magnetically receptive resin applied to its surface, please view *IOBAC – MagTab information in the ‘Bonding’ section below.

NOTE: Should any doubt exist concerning the suitability of the raised access base, such surfaces can be covered with a 6 mm thick flooring grade plywood. Self-tapping screws, ring shank nails or divergent staples can be used to fix the boards. Should there be slight undulations or differences in height observed in the plywood sheets, a thin coat of a suitable flexible flooring / board grade feathering underlayment can be applied to the plywood's facade prior to installing the floor finishes up on its surface.

III. INSTALLATION

TOOLS:

Tape Measure, Chalk Line, Utility Knives, T-Square, Paint Brush, Medium Thickness – Fluff Free Paint Roller or Medium Grained Foam Paint Roller, Broom or Vacuum and if necessary, tools for subfloor repair.

BONDING:

Use a premium grade pressure sensitive type adhesive such as:

- Shaw – LokWorx+ / LokWorx Carpet Tile / 4151 Adhesive.

Refer to label directions for proper application and coverage rates etc. Should the base be dusty or overly porous, use Shaw 9050 surface primer.

Note: It is extremely important that the subfloor be completely free of dust or debris that could contaminate the applied adhesive. To ensure a proper bond, apply a suitable primer such as 'Shaw 9050'. Failure to prime the subfloor may result in installation failure.

Note: Recommended Adhesives and primers are also available from:

F. Ball and Co, Mapei, Uzin, Thomsit, Tremco, Schonox, Bostik, Eurocol, Ardex, Xchem etc. or comparable adhesive. Always check manufacturers recommendations regarding their individual use.

Use a full spread of adhesive.

- Apply the adhesive to a suitable coating weight and thickness using an appropriate foam or a fluff free paint roller. Note: Surface tackifiers should not be applied too thinly.
- The adhesive must be allowed to dry completely before installing the carpet tiles upon its surface. Installing material into a wet adhesive line will result in a permanent bond and in some instances, it may also even cause the carpet tiles to lift or bubble.

Note: With best practice in mind, acoustic backed carpet tiles such as those supplied with a 'ComfortWorx' backing must be installed upon an adhesive line which has been applied at the heavier end of its recommended application thickness. Once allowed to dry and the tiles have been installed, the material must be rolled with a 50 kg flooring grade roller to ensure that it is optimally bonded and free from any deflections.

*IOBAC – MagTabs can be used to affix both TaskWorx and EcoWorx backed carpet tiles to a magnetically receptive substrate such as a steel encapsulated raised access panels or an IOBAC magnetically receptive resin. For further details and installation guidance, visit: [IOBAC – Magtab Installation Guide](#)

Please note that IOBAC MagTabs are not approved for use with 'ComfortWorx' backed carpet tiles

If previously installed carpet tiles are to be removed and then reinstated within a second location, please note

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that fresh IOBAC MagTabs should be used to ensure a suitable bond is attained.

**** Carpet tiles that are to be used within a second location should be removed with due care and be neatly palletized. Prior to securing the material for transit, ensure that all edges are protected.**

The material should be allowed to acclimatise to its new surroundings prior to being reinstalled.

Standard installation advice should always be followed and tiles that are square and undamaged should only be used.

Should additional material be required to complete the installation, please contact your local Shaw Contract sales representative for additional purchasing details.

SETTING OUT:

- Start the carpet tile installation as near to the centre of the room as possible and position it to use the largest perimeter cut tile size.
- Snap a chalk line parallel to one major wall bisecting the starting point. It may be necessary to offset the centre chalk line to assure perimeter tiles will be at least half size.
- Snap a second chalk line from the starting point at 90° to the first line. Use a 3-4-5, 6-8-10, or larger triangle depending on the room size. Meters or feet may be used to lay out the triangle in these proportions.

INSTALLING:

Install carpet tiles using conventional installation techniques. Construction 'type' expansion joints should not be overlaid with any part of a Shaw Contract system. The material should be stopped either side of the joint and an expansion type cover strip should be incorporated into the installation.

To minimise product variation, install each full box and complete an entire pallet before starting another pallet. Each tile has directional arrows on the back. These arrows allow for one-directional or multi-directional installation. Some styles may be large scale or linear in design and may require quarter turning.

If you are unsure which directional profile to install the product, please contact Shaw Contract EMEA tel: +44 (0) 20 7961 4120.

Begin installation at the intersection of two chalk lines. Continue until you complete one quadrant. Proceed to an adjoining quadrant until all four quadrants are completed. Larger areas may require chalk lines bisecting the original four quadrants.

Note: Install tiles using the pyramid technique. This gives you multiple alignment checks. If the edges do not align and the misalignment increases with progression of the installation, find and correct the source of the problem.

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- Carpet tiles come in various sizes. All Shaw Contract tiles have directional arrows on the back of the tile. This facilitates the installation method which is based on the requirements of the product, or the preference of the customer.
- Slide tiles into position to prevent yarn from being trapped between the tiles. Trapped yarn will adversely affect the appearance of the installation and will cause alignment problems.
- Tiles must fit snugly, but not be compressed. Press the entire surface of the tile to ensure adhesion. Check for fit by measuring the length of ten full tiles after installation. The measurement must not be less than or exceed by more than 5 mm, the length of the tiles being multiplied by ten. For example: if 50 cm x 50 cm tiles are being installed, the measurement should be between 5.00 m and 5.05 m (5000 mm x 5005 mm).
- Roll the entire installation with a 50 kg. roller to assure proper adhesion to the substrate.

Note: Flat wire / hearing loop type cables should be installed on top of the adhesive line and centred underneath the carpet tile for better seam quality.

CUTTING PERIMETER TILES:

- Perimeter tiles should be either marked back or measured and cut from their reverse side using a carpet trimming knife.

Note: The carpet tile systems that are mentioned within this document are quite flexible and can if necessary, be coved up the wall and be freehand cut with a carpet trimming knife, wall trimmer or similar cutting tool. Whilst cutting carpet tiles, a build-up of bitumen can sometimes accumulate on the surface of the blade and obstruct its cutting edge. Such deposits can be easily removed using white spirit and a cloth.

IIII. POST INSTALLATION CARE AND PROTECTION:

- To prevent damage, place plywood over the carpet tiles when heavy objects are being moved across their surface.
- To prevent excessive wear to the carpet tiles surface, use protective mats under chairs that include caster type wheels.
- Place a non-staining floor protection over the carpet tiles surface to protect it when additional construction activity is to take place. Do not use plastic sheeting as it will trap moisture. Self-adhesive systems are not recommended as they can leave tacky residues which can attract dirt and spoil to the carpet tiles surface.

For best results, temperatures should remain above 10 °C and an ambient humidity should not fall below 40%.