

# Gluedown Installation Guidelines

## General Information

Gluedown floors should be installed in accordance with the requirements of ASTM F710, BS 8203, AS/NZS 1884, DTU 53.2, DIN 18365 (Teil C) or other applicable National Standards and Building Codes for the installation of Resilient Flooring, and instructions below to ensure a quality fit. These floors are not suitable for installation outdoors nor in rooms that will be continually wet.

Before installation, all materials must be checked to ensure that batches are identical and free from defects. Complaints regarding clearly identifiable defects cannot be accepted after installation. Preparation and installation should not begin until all other trades have completed their work. Our adhesives should be used and with the appropriate applicator/trowel (consult your supplier).

## Acclimation of Material

At least 24 hours prior to installation, flooring materials must be removed from packaging (tiles and planks may be stacked but must be rested flat) and allowed to condition in the room where the installation is to take place. Room temperature should be kept between 65-85°F (18-27°C). If tiles and adhesive have been stored outside this temperature range, then it is recommended that time for acclimation be increased to 48 hours.

## Subfloor Preparation

Good preparation of the subfloor is essential to the final overall floor appearance.

The subfloor should be hard smooth, clean, dry and free from defects; irregularities in the subfloor will show through the finished floor. Any unevenness in the subfloor should be limited to the applicable national standard: a maximum of 3/16" in 10' (ASTM E1486) or 1/8" (3 mm) in 6' (2 m) (BS8203).

## Moisture in Subfloors

Moisture of the base subfloor e.g. (concrete) must be measured according to the national relevant standard:

- Where the hygrometer test is specified the moisture of the subfloor must be less than 75% RH.
- Where the calcium carbide test is specified construction moisture must be no more than 2% CM for cementitious screeds and no more than 0.5% CM for calcium sulphate screeds.
- Where the calcium chloride test is specified, the moisture of the subfloor should be less than 3 lbs. moisture/1000 sq. ft. per 24 hours.

**Note:** however, our adhesives will tolerate up to 8 lbs. moisture/1000 sq. ft. per 24 hours).

For any subfloor showing a moisture value above these limits, then a suitable damp-proof membrane/moisture suppression system must be used.

**Note:** some National Standards require the pH of the concrete slab to be controlled.

## 1. Solid Subfloors

### Concrete/Sand Cement Screeds

These subfloors should comply with the requirements of BS8204/ASTM F710/AS/NZS 1884/country specific standard.

### New and Old

For all concrete floors, mechanically abrade the floor to remove contamination (laitance, paint, plaster, adhesive etc). For USA then prepare the floor to ASTM F710. Elsewhere, then prime the floor and apply a compatible smoothing compound to a minimum thickness of 1/8" (3 mm). Where moisture values exceed the above limits, then a suitable damp-proof membrane/moisture suppression system must be used.

### Power Floated Concrete

Power floated floors require abrasion to remove surface laitance. (This can be removed either via scarification or light shot blasting). Where moisture values exceed the above limits, these surfaces must still be abraded before the application of a surface DPM. Then the floor should be primed, and a compatible levelling compound applied (minimum of 1/8" (3 mm).

### 'Anhydrite' (Calcium Sulphate-Gypsum)

Anhydrite screeds can be difficult to identify and can be mistaken for more traditional cement-based products. In the case of the floor screed not being sufficiently dry, consult the manufacturer and ensure that the correct smoothing compound and primer/sealer is selected.

### Asphalt

Asphalt should be inspected, and cracks repaired; a DPM may be required. It should be degreased, and the surface rinsed with clean water and then primed. A compatible smoothing compound should be applied to a thickness of 3/16"-1/4" (4 mm-6 mm).

### Painted Floors

Mechanically remove all paint back to the original base, prime and apply a compatible smoothing compound to a minimum of 1/8" (3 mm).

## 2. Wood Subfloors

### Standard Floorboards/Tongue and Groove

Floorboards should be well secured, loose boards firmly fastened, and worn/broken boards replaced. Install a minimum 1/4" (5.5 mm) flooring grade plywood\*\*, fixed at maximum 6" (150 mm) centres. Plywood joints should be smoothed over using skim coat/patch or alternatively a full coat of a fibre reinforced levelling compound.

### Undulating Timber Floors

These should first be levelled, by sanding/planing/patch filled before being overlaid with 1/4" (5.5 mm) plywood\*\*. Primer should then be applied followed by a minimum 1/8" (3 mm) layer of fibre reinforced levelling compound.

### All Chipboard/Particleboard/Weyroc/MDF/OSB

Overlay with a 1/4" (5.5 mm) flooring grade plywood\*\* fixed at maximum 6" (150 mm) centres. Plywood joints should be smoothed over using skim coat/patch or alternatively a full coat of a fibre reinforced smoothing compound.

### Flooring Grade Plywood Floors

Plywood joints can be smoothed over using skim coat/patch or alternatively a full coat of a fibre reinforced levelling compound. For any plywood floors with thickness less than 1/4" (5.5 mm), treat as chipboard.

### Wood Mosaic Panel, Woodblock, Wood strip, Laminate/Click products

These floor coverings must be removed together with any underlay and flooring accessories. The subfloor should be treated appropriately.

## 3. Other Existing Subfloors

### Resilient floor coverings e.g. linoleum, PVC, thermoplastic, carpet, cork

Remove existing floor covering and all traces of adhesive residues. In the USA please consult your supplier. Then treat the subfloor appropriately.

### Quarry Tile/Mosaic/Terrazzo/Porcelain/Ceramics

Test floor for evidence of damp. If after testing, dampness is detected consult your supplier. Check floor area for unstable, loose or broken tiles, waxes and sealers. Remove loose pieces and fill deep holes with rapid drying mortar. Degrease, rinse and abrade the surface of the floor. Apply suitable primer and compatible levelling compound to a minimum of 1/8" (3 mm). A second topcoat of primer and levelling compound may be required to smooth over old tile grout lines.

### Metal Floors

The metal surface should be cleaned, degreased and then mechanically abraded to remove contamination/rust and provide a surface key. Where this gives a level surface, the floor covering should then be adhered with epoxy adhesive; otherwise it must first be primed and levelled with the recommended levelling compound. Refer to supplier.

### Miscellaneous Floors

Magnesite, Granwood, etc. Consult your supplier.

### Asbestos

Some older resilient tiles and adhesives can contain asbestos. In case of doubt contact the relevant authority for advice on removal and disposal.

### Extreme temperature fluctuations (Sunrooms/Conservatories/areas adjacent to panoramic/floor to ceiling glazing/unheated rooms)

Where temperatures up to 122°F (50°C) are expected, our recommended adhesive must be used. In areas where a temperature more than 122°F (50°C) is possible the floor must be installed with epoxy adhesive. It is necessary to keep the temperature in these areas at 65-85°F\* (18-27°C) for 24 hours prior to, during, and 24 hours after installation. Shade windows prior to and at least 48 hours after installation.

### Underfloor Heating/Radiant Heated Floors

Planks/tiles may be installed over underfloor heating systems, but these must be constructed so that the temperature at the adhesive interface does not exceed 85°F\* (27°C) ensuring the correct adhesive is used. The underfloor heating must be commissioned before installation commences. It should then be switched off 48 hours before, during, and 48 hours after installation. Then the temperature can be gradually increased to 85°F\* (27°C) at no more than 4°F (2°C) per day to the desired temperature.

Electrical underfloor heating: please consult manufacturers to ensure their system is compatible with this flooring. Mesh/wire systems must be installed according to the manufacturer's instructions: embedded into a basecoat of appropriately reinforced smoothing compound in a single coat to a minimum depth of 3/8" (10 mm), OR in two separate 3/16" (5 mm) coats, (primed in between coats).

The room temperature must be between 65-85°F\* (18°C-27°C) prior, to and during installation.

This is applicable for both concrete and timber subfloors.

For underfloor heating pipes set into concrete, prime the surface before applying a compatible levelling compound to a minimum of 1/8" (3 mm).

**Important:** Care must be taken to avoid damage to the floor caused by localised "hot spots/thermal blocks". In particular, consideration must be given in placing rugs, and items of furniture which do not allow hot air circulation. No responsibility for damage to floor tiles can be accepted under these circumstances.

**Note:** Cleaning; please refer to our Floor Care Guide supplied with our cleaning products.

\* ASTM standards require installation in range 65-85°F; elsewhere the temperature should be 18-27°C.

\*\* All plywood must conform to either:

BS 8203 Annex A and fixed with screws, or ring shank nails; or

American Plywood Association (APA) underlayment grade/products stated by the manufacturer to be equivalent; or

National standards.