

SUBFLOOR PREPARATION GUIDE

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INTRODUCTION

Subfloor preparation should always be carried out by experienced professionals. This guide is intended for experienced installers and adherence to these procedures should result in a quality installation. Recork will not be responsible for poor workmanship, problems created by improper site conditions, failure to adhere to subfloor preparation instructions, improper subfloors, improper applications, and the use of subfloor preparation products not recommended. If these instructions do not cover a particular site condition or if you require further information please contact our Technical Partner Lecol UK for further guidance www.lecoluk.com or sales@lecoluk.com

The methods required to properly prepare the subfloor vary with the type of subfloor, its surface and condition. This guide covers many of the typical subfloors you are likely to encounter.

The key to a perfect Recork installation is a perfect subfloor. Essentially the subfloor must be stable, dry, smooth, level and clean. Additional preparation will be required if the subfloor does not meet one or more of these requirements.

- A cementitious subfloor is deemed to be sufficiently dry to receive Recork flooring when the equilibrium relative humidity (ERH), as measured by a surface mounted flooring hygrometer box or an in-situ hygrometer probe, is 65% RH or less. If the ERH is greater than 65% a damp proof membrane (DPM) will be required.
- Variations in the levelness of the subfloor should not exceed 3mm in 2m (0.12" in 6.6 feet).
- A clean subfloor means dust-free and free from any contaminant that might undermine the bond between the flooring and the subfloor.

When undertaking a Recork installation please:

- Always use our approved subfloor preparation materials, adhesives and surface coatings.
- Make sure you read these instructions thoroughly.
- Make sure you comply with all relevant building regulations and health and safety codes.
- Make sure subfloor preparation, installation and coating products are used in accordance with manufacturers' recommendations.

Technical Datasheets for the products recommended in this guide are available to download at www.recork.co.uk

Wakol products can be purchased from KHR Company: www.khr-online.com

For guidance on installation of Recork please refer to our [Recork Installation Guide](#)

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CEMENT SCREEDS — EXISTING CEMENT SCREEDS

If you have an existing cement screed subfloor, perhaps in an older property, check whether a mechanical damp proof course is installed.

If you are satisfied that a mechanical DPC exists the next step is to check whether the screed is dry. To do this take a moisture reading using a surface mounted hygrometer box or an in-situ hygrometer probe.

If the moisture reading is above 65% RH:

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

If the moisture reading is below 65%:

1. Apply 1 coat of Wakol D3035 Dispersion Primer.
2. Once the D3035 is dry, apply the Wakol Z520 Levelling Compound.
3. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

CEMENT SCREEDS — NEW CEMENT SCREEDS WITHOUT UFH

With a new cement screed subfloor where a mechanical DPC is installed, there is no UFH system installed and the base has been down for longer than 30 days you don't need to take a moisture reading, however if you are unsure about the exact nature of the screed take a moisture reading using a surface mounted hygrometer box or an in-situ hygrometer probe:

If the moisture reading is above 65% RH:

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

If the moisture reading is below 65%:

1. Apply 1 coat of Wakol D3035 Dispersion Primer.
2. Once the D3035 is dry, apply the Wakol Z520 Levelling Compound.
3. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

CEMENT SCREEDS — NEW CEMENT SCREEDS WITH UFH

With a new cement screed subfloor where a UFH system is installed always take a moisture reading using a surface mounted hygrometer box or an in-situ hygrometer probe. It is possible to suppress a small amount of moisture in sand and cement sub floors with UFH but the RH reading should not exceed 85%:

If the moisture reading is above 65% RH and below 85% RH:

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

If the moisture reading is below 65%:

1. Apply 1 coat of Wakol D3035 Dispersion Primer.
2. Once the D3035 is dry, apply the Wakol Z520 Levelling Compound.
3. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

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CALCIUM SULPHATE (ANHYDRITE) SCREEDS

The best advice for all calcium sulphate subfloors is to remove the surface laitence (according to the manufacturer's recommendations) and then take a moisture reading. Industry practice would suggest this is best done with a sealed hygrometer over a period of at least 48 hours. In this case we would advise that the British Standard of 65% RH or less be achieved before carrying on with the levelling work.

If the sub floor is free from cracks and structurally sound:

1. Apply 1 coat of Wakol D3035 Dispersion Primer.
2. Once the Wakol D3035 is dry, apply Wakol Z520 Levelling Compound.
3. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

If there are hair-line cracks in the surface of the screed:

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

MASTIC ASPHALT SCREEDS — OLD BITUMEN ADHESIVE RESIDUE

When old parquet floors are removed, they will often leave a layer of the residual bitumen adhesive on the surface of the sub floor below. The best industry advice is to encapsulate this with primers and levelling compounds to create a new sub floor that is ready to receive a floor covering. Initially the contractor needs to make sure that any loose adhesive is removed before proceeding any further. Old bitumen can contain asbestos and so all health and safety precautions must be observed. We would not recommend abrasion of the bitumen for this reason and care must be taken when checking its condition.

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

MASTIC ASPHALT SCREEDS — CAST ASPHALT

Cast asphalt has been used in the UK as a moisture suppressing layer for many years. It was common from the 50's to the 70's but was also used after that. Theoretically it can be encapsulated quite easily and we would recommend this solution rather than direct adhesion of the floor covering. Please note, old bitumen can contain asbestos and so all health and safety precautions should be observed. We would not recommend abrasion of the bitumen for this reason and care must be taken when checking its condition.

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

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TILED FLOORS

There are two main types of tiled subfloors that contractors are likely to come across, ceramic tiles and stone or quarry tiles. Theoretically it is possible to install flooring on top of a tiled surface but it is important to firstly consider whether the tiles are suitably strong and well bonded to the substrate. In particular look out for hollow spots under the tiles, as a new subfloor created with primers and levelling compound will likely tighten everything below it and could create tension-related problems.

If you are satisfied that the ceramic tiles are suitably strong and well bonded, you must then check for moisture issues in the joints. We would not recommend you do not deviate from a moisture reading of 65% RH or less.

Finally consider potential contaminants on the surface of the tile. All tiled surfaces must be thoroughly cleaned before any other procedures can be carried out. We recommended using WAKOL R4515 Tile Cleaner. Tiles have to be abraded after cleaning to create a better bond. Visible scratches need to be created. We advise the use of diamond discs under a single disc machine for this process. All dust and sanding residue should be vacuumed immediately after.

If the moisture reading is above 65% RH:

1. Apply 2 coats of Wakol PU280 DPM Primer or 1 coat of Wakol MS330 DPM Primer.
2. Once the Wakol PU280 is dry, apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
3. Once the Wakol D3045 is dry, apply Wakol Z520 Levelling Compound.
4. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

If the moisture reading is below 65%:

1. Apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
2. Once the D3045 is dry, apply the Wakol Z520 Levelling Compound.
3. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.

WOODEN FLOORS

There are a variety of timber subfloor surfaces, and timber subfloors are more likely to move than a solid base, even if the timber subfloor has been adhered to a solid surface below. The cause of the movement could be as simple as the expansion and contraction of the timber caused by changes in temperature and humidity, or a weak sub-structure.

When installing over floorboards, the boards must be securely fixed and stable, and if necessary sanded back to remove any surface contaminants and major discrepancies in levelness. Once vacuumed they should be overlaid with a new, structurally sound flooring grade product, such as plywood. This product should be glued (using Wakol MS260) and screwed to the boards below to make it as secure as possible.

Existing plywood or chipboard subfloors must be stable and secure and free from surface contaminants before starting the process preparation process. Chipboards subfloors are likely to contain adhesive inhibitors or surface contaminants. Usually one coat of polyurethane primer (Wakol PU280) will seal out any issues but we cannot guarantee this and you should conduct your own tests to be absolutely sure.

Once the substrate is prepared:

1. Apply Wakol D3045 Gritted Primer to promote adhesion of the levelling compound.
2. Once the D3045 is dry, apply the Wakol Z520 Levelling Compound.
3. If necessary lightly sand the surface of the levelling compound to produce a completely smooth surface.