

MICROFLOOR WALL AND FLOOR



Microfloor Microcement System is a premium, seamless decorative/ protective coating designed for application on both floors and walls across residential and commercial environments. Engineered for versatility and durability, it provides a modern, continuous finish without joints, making it ideal for bathrooms, showers, wet areas, and general living spaces.



Seamless Design, Naturally Modern

Applied by hand in multiple layers, the system creates a refined, minimalist surface that can be customised in a wide range of colours and textures—from smooth contemporary finishes to more natural, tactile looks. Its seamless nature not only enhances visual appeal but also reduces grout lines, helping to minimise dirt accumulation and simplify cleaning.

The Microfloor system is fully sealed to provide water resistance, making it suitable for internal wet areas including showers and bathroom walls and floors when installed and maintained correctly. It adheres to a variety of stable substrates, allowing it to be used in both new builds and renovations without the need for full surface removal.

The Chemro Microfloor Microcement system generally consists of three coating layers:

1. Beton Microcement Base Coat
2. Microfloor (Topcoat)
3. Protective Sealer – available as Microgloss, Microsatin, or Micromatt

The selection of the base coat depends on the condition and profile of the substrate:

- Beton Microcement Coarse – for rough, high-profile surfaces
- Beton Microcement Medium – for medium-profile surfaces
- Beton Microcement Fine – for smooth or low-profile surfaces

For rough and medium-profile substrates, one or two additional layers of Beton Microcement Fine may be required to achieve a smoother finish.

When applying the first coat of Beton Microcement over waterproofing materials, it is essential to incorporate reinforcement mesh. A 60 g/m² fiberglass mesh is recommended and must be fully embedded within the first coat.

Important:

Chemro Microfloor Microcement is not recommended for use in swimming pools or in areas that are continuously submerged in water.

Ideal application and curing temperatures are between 10°C and 30°C, including the substrate surface temperature.

The WME% (Wood Moisture Equivalent) of the substrate and of each layer must be below 15% before applying the subsequent layer.

Surface Preparation

Surface Preparation for Chemro Microfloor System

1. General Requirements

- Surfaces must be structurally sound, clean, and free from dust, grease, oil, wax, curing compounds, and loose particles.
- Surface flatness and profile should match the microcement system requirements. Any cracks or holes must be repaired.
- The substrate should be dry. Wood Moisture Equivalent (WME%) must be below 15% before applying any layer.
- Ideal application and curing temperatures are between 10°C and 30°C (including substrate surface temperature).

2. Walls

- Plasterboard: Must be firm, smooth, and free of loose paper or dust.
- For wet areas, ensure cementitious waterproofing is applied first if required.
- Fibre Cement Sheeting: Ensure panels are properly fixed and stable.
- Surface must be clean, dust-free, and slightly sanded if smooth to improve adhesion.
- Concrete, Brick, Block, Masonry, Render: Remove loose particles, laitance, and surface contaminants.
- Grind or sand to provide a suitable mechanical key.
- Timber, Plywood, MDF: Sand the surface to remove gloss and improve adhesion.
- Ensure the surface is stable and dry.
- AAC (Autoclaved Aerated Concrete): Remove dust and weak surface particles.
- Prime if necessary to improve adhesion.

Key Features:

- Seamless finish across walls and floors
- Suitable for bathrooms, showers, and wet areas
- Durable, hard-wearing surface
- Water-resistant when properly sealed
- Low-maintenance and easy to clean
- Customisable colours and textures
- Ideal for renovations and new construction

Application Guide:



Additional Information

- Finish Options: Matt, Microsatin, or High Gloss
- Number of Coats: Two or Three (depending on desired effect and substrate)
- Microfloor Topcoat: Can be polished to achieve a Marmorino or smooth finish
- Quick application
- Tools Recommended: Steel trowel, No Black Mark Steel Trowel, plastic trowel, short nap 6mm ultra-microfibre roller

Attention – Applicator Responsibility and Safety

- The Chemro Microfloor System is developed for use by professionally trained applicators only.
- By using this system, you acknowledge, agree, and understand the warranty disclosure, and accept full responsibility to follow all instructions and recommendations provided in this system.
- All recommendations provided in this documentation are guidelines to help trained applicators achieve proper finishes.
- Non-trained applicators, who have not received certification from Chemro, are fully responsible for:
 - Assessing substrate conditions
 - Verifying waterproofing integrity
 - Conducting their own tests to ensure the coating is suitable for their intended purpose
 - Making all decisions regarding surface preparation and application
- Applicator responsibilities include:
 - Performing all surface preparation as specified
 - Ensuring proper mixing, application, curing, and safety procedures
 - Safety Precautions: Always use appropriate PPE: gloves, respirators, eye protection, and protective clothing
 - Ensure adequate ventilation in all work areas
 - Follow all local regulations regarding solvent-based materials and disposal
 - Never add water to the Microfloor or sealer materials
- Improper application, neglecting surface preparation, or failure to follow instructions may compromise the system's performance and void the warranty.
- Maintenance: A maintenance sheet is provided for proper care of the Microfloor surface. If a sheet was not supplied, please request one from Chemro before using the surface.

Structural Stability and Joint Preparation – Critical for System Performance

Structural Stability

- Firm Substrates: All surfaces, both walls and floors, must be completely stable, rigid, and free from movement before applying the Chemro Microfloor system.
 - Floors: All floor substrates must be fully supported on unmovable structures.
 - Any softness, movement, or "drumminess" under the floor will lead to cracking, delaminations, or hollow areas in the Microfloor system.
 - Walls: Walls must be structurally sound and rigid.
 - Any structural movement or unstable substrate may cause cracks, detachment, or failure of the microcement coating.
- Applicator Responsibility: It is the installer's responsibility to assess and verify the structural integrity of all substrates before application.
- Substrates showing any signs of movement, flexibility, or instability must be repaired or reinforced prior to microcement application.

Joint Preparation

- All joints in walls and floors must be properly filled and finished according to the manufacturer's guidelines before applying Chemro Microfloor.
 - Joint Compounds: Ensure all joint compounds are fully cured and compatible with the microcement system.
 - Check each joint to confirm that the system will bond properly and perform as intended.
 - Professional Installation Required: Improperly filled or unprepared joints can result in cracking, delamination, or uneven finishes.
 - It is the applicator's responsibility to ensure that all joints are assessed, filled, and finished by trained professionals.

3. Floors

- Concrete Floors: Must be fully cured (at least 28 days).
- Mechanically grind or shot-blast to remove laitance and achieve an open surface profile.
- Remove all dust, grease, and oils.
- Tiles or Existing Coatings: Mechanically roughen the surface to provide a key.
- Clean thoroughly to remove contaminants.
- Wood Floors: Ensure boards are firmly fixed and stable.
- Sand to remove coatings and surface gloss.
- Check WME% is below 15%.

4. Waterproofed Surfaces

- Cementitious Waterproofing: Must be fully cured before applying microcement.
- Apply the first coat of Beton Microcement with embedded mesh on wet area substrates.
- Epoxy Waterproofing: Second coat must be cast with medium sand (<150 µm) for proper adhesion.
- Flexible membranes: Not recommended for microcement systems.
- For other or pre-coated surfaces, contact Chemro for guidance.

5. Additional Recommendations

- All surfaces should have a slight surface roughness to improve bonding.
- Use mesh reinforcement for first coats over waterproofing, timber, or unstable substrates.
- Remove all dust using a vacuum or clean brush before each layer.

Microfloor Microcement System – Application Technique

1. Base Coat Application (If required)

- Once the substrate is fully prepared and the correct coating system is selected, mix the Beton Microcement with its liquid component according to the specific mixing ratio (different base types have different ratios).
- Mix mechanically and ensure the entire pack is combined to achieve a uniform consistency.
- Allow the mixture to rest for a few minutes, then remix before application.
- If mesh reinforcement is required:
 - Apply the first thin coat of base.
 - Before it dries, embed the mesh to ensure proper adhesion.
 - Apply a second coat of base over the mesh while the first coat is still slightly wet to fully embed it.
- Let the base dry for 16–24 hours, and check WME% < 15% before applying the next layer.

2. Coarse Base Smoothing

- If Coarse Beton Microcement is used:
 - Sand down coarse particles with 80-grit rotary sandpaper.
 - Apply one coat of Fine Beton Microcement for a smooth finish.
 - Let dry for 16–24 hours before proceeding to the Microfloor layer.

3. Microfloor Application

- Sand the base with 180-grit sandpaper to remove dust and ensure adhesion.
- Apply the first coat of Microfloor using a steel trowel.
- If a Marmorino effect is desired:
 - Apply the second coat after ~4 hours using the Marmorino technique with a steel trowel.
 - Minor burnishing marks may appear.
 - For a more subtle look, use "no black mark" trowels or plastic trowels.
- Let the Microfloor dry 16–24 hours, and check WME < 15% before sanding and sealing.
 - Sanding: Use 180-grit sandpaper to sand the Microfloor between coats.
 - Dedust thoroughly at all sanding steps, including prior to the topcoat.
- Important: Do not use water on the Microfloor surface or add water to the mixture.

4. Protective Sealer Application (Microgloss / Microsatin / Micromatt)

- All sealers are solvent-based; use proper PPE and ensure ventilation.
- Application technique:
 - Use a short nap 6 mm ultra-microfibre roller and tray for the first coat of Microgloss.
 - Apply the second coat after ~3 hours.
 - If a third coat is required, apply it after another ~3 hours.
 - Maximum time between coats: 24 hours.
 - Microsatin / Micromatt: Mix the two provided components as per the ratio.
 - Apply within 24 hours before the mixture gels.
- Ensure the Microfloor WME < 15% before applying any sealer.
- Curing time: After the final sealer coat, allow 48–72 hours for the surface to cure sufficiently before use.

5. Safety & Precautions

- All PPE (gloves, respirators, goggles) must be worn during mixing and application.
- Ensure ventilation in the work area.
- Do not add water during sealer application.
- Follow full disposal precautions for solvent-based materials according to local regulations.

Important Note

- Always check the recommended coating system for each substrate type in the Microfloor Coating System guide before starting the application.

Disclaimer

Chemro Pty Ltd will not accept responsibility for any colour or look differences. In purchasing from Chemro Pty Ltd, you agree to accept the small risk that there will be a slight variation between the actual colour and pattern amongst different batches, pails and or sample products. In addition, please be aware that colours and textured finishes often vary between batches; for example slightly different shades of 'White', different degrees of shininess, and different looks and feel for material. The data provided within this article is correct at the time of publication, however it is the responsibility of those using this information to check that it is current prior to specifying or using any of these coating/product systems. All recommendations, information, advice, assistance or service for the use of our products, whether given by us in writing, oral, or to be implied from the results of tests carried out by us, are based on the current state of our knowledge. Under no circumstances shall Chemro Pty Ltd be liable for incidental, consequential or indirect damage for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with product(s). Chemro Pty Ltd sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled lab work and must be confirmed by Buyer by testing for its intended conditions of use.

| Category | Substrate | Base Coat | Microfloor (Topcoat) | Protective Sealer |
|----------------|--|---|----------------------|---|
| Interior Wall | Plasterboard (outside shower, not in direct contact with water, not waterproofed) | Chemro Quartz Primer – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Wall | Fibre Cement Sheeting (outside shower, not in direct contact with water, not waterproofed) | Beton Microcement – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Wall | Waterproofed shower areas | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 3 coats |
| Interior Wall | Waterproofed non-wet areas | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Wall | Concrete wall | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Wall | Brick, Block, Masonry and Render | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Wall | Raw MDF, Timber and Plywood | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Wall | Autoclaved Aerated Concrete (AAC) | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Floor | Concrete (fully cured, structurally sound) | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Floor | Tiles (mechanically roughened / keyed surface) | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Floor | Boards, Timber, Plywood | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 2 coats |
| Interior Floor | Tiled/ Waterproofed wet areas (e.g., shower floor, with cementitious waterproofing) | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 3 coats |
| Interior Floor | Waterproofed non-wet areas | Beton Microcement with embedded mesh – 1 coat | Microfloor – 2 coats | Microgloss / Microsatin / Micromatt – 3 coats |

APPLICABLE THICKNESS:

COARSE BETON MICROCEMENT THICKNESS: 1.5-2.5MM

MEDIUM BETON MICROCEMENT THICKNESS: 1-2 MM

FINE BETON MICROCEMENT THICKNESS: 0.5-1MM

MICROFLOOR THICKNESS: 0.3-0.7MM

TOTAL MAXIMUM THICKNESS: 4MM