

# Liquid Metals Installation Guide

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MICROCEMENT

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## DIY Liquid Metals Kit for Oxidised Walls

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Contains metal powder combined with resin and oxidised to give a 100% genuine oxidised metal surface. For use on feature walls only. Not suitable for floors, worktops, tables or wet rooms.

**Wear gloves and face mask when using metals and accelerator.**

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### Preparing Surfaces

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This kit only intended for use on flat surfaces where the chance of movement has been eliminated.

These golden rules apply to the preparation of all surfaces for liquid metals:

- Surfaces should be completely smooth – as if you were going to paint onto them.
- Surfaces should be well consolidated, so that no further settlement or movement is anticipated.
- Never go directly onto natural timber or across cold joints/expansion joints.
- Surfaces should be free from oil stains, dirt and dust.
- Surfaces must be damp-proofed so that no water can get underneath the surface at anytime.
- Allow 0.5-1mm for the finish.

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### Prime

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Use a medium pile roller to apply an even coat of primer to the surface. Leave the primer to dry. This should take around 1 hour.

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### Mixing Metal & Resin

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You will need **3kg of Metal Powder** and **750ml Metallic Resin** to complete **1 coat** over 10m<sup>2</sup>.

Pour the resin into your mixing bucket, followed by 3kg Metal Powder.

Mix thoroughly with a microcement mixer head attachment on a cordless drill. Let the mixture rest for a few minutes before applying.

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### Applying Metal & Resin Mix

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Using a Bi-Flex Steel Trowel, work your way out from one corner creating a random edge pattern. Keep trowel movements small and random, avoid long sweeping arches – as these will show through to your final finish.

Use the grain in the metal as your level – if you apply the metal thicker than the size of the grain, you may not have enough product to complete the area. Run the trowel back over each section that you have put down to smooth it out and remove excess product.

Completely cover each surface without stopping. For complete rooms, start with ceilings, then walls from left to right (or right to left) and then the floor.

Run your finger or a corner trowel along internal corners to push the microcement into the corner and then gently trowel away the excess product.

Different effects will be achieved with different tools, you may want to try using a paint brush or roller instead of a trowel.

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### Applying Accelerator

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Pour the accelerator into a spray bottle and spray it directly onto the metal. You may need to dab the excess off with a sponge to stop runs.

Leave to oxidise. Don't be in a rush, the longer you leave it, the more it will oxidise. If you would like it to oxidise more, you can sand the surface gently with a 240 grit sand paper and apply more accelerator.

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### Neutralising Accelerator

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Once you are happy with the level of oxidation, spray the surface with water and dab with a sponge to remove the excess water and rust. Leave to dry, minimum 24 hours.

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### Applying Sealer Oxhider

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Use a medium pile roller to apply an even coat of Sealer Oxhider to the surface. Leave the Sealer to dry. This should take around 3 hours. Once the 1st coat is dry, apply a second coat and you're done.

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## Professionals Liquid Metals Kits

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Full microcement based system for completing strong, durable, oxidised metal surfaces. Polished Metal Kits for Walls are intended for feature walls only – not for use in wet areas or on floors. Wear gloves and face mask when using metals and accelerator.

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### Preparing Surfaces

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Whilst microcement is very strong, smooth & flexible, it relies entirely on the surface that it's going onto. These golden rules apply to the preparation of all surfaces for microcement and liquid metals:

- Surfaces should be completely smooth – as if you were going to paint onto them.
- Surfaces should be well consolidated, so that no further settlement or movement is anticipated.
- Never go directly onto natural timber or across cold joints/expansion joints.
- Surfaces should be free from oil stains, dirt, dust and excessive laitance.
- Surfaces must be damp-proofed so that no water can get underneath the surface at anytime.
- Allow 0.5-1mm for the finish.

Listed below, are some of the more common surfaces with an explanation of how best to prepare them.

#### **PAINTED OR PLASTERED WALLS**

Must be completely dry.

Sand off any loose paint or imperfections.

Then just go straight on to plastered or painted walls with your primer.

#### **TILES**

Make sure tiles aren't drummy or loose. Take out any which are & relay them.

Fill grout lines with Microdur Base so that the surface is completely level.

Leave 24 hours before priming & meshing.

#### **CEMENT BOARDS, COMPOSITE TIMBER BOARDS & PLASTER BOARDS**

Make sure boards are firmly glued & screwed in place.

Counter sink screw holes. Fill joins between boards & screw holes with MicroDur Base so that the surface is completely level.

Leave 24 hours before priming & meshing.

On boarded floors it may be necessary to use Cemher Aquasell – contact us for details.

#### **COMPOSITE TIMBER TABLES OR WORKTOPS**

Composite timber like MDF, ply or chipboard are good if you're building worktops from scratch.

Make sure they're all glued & screwed firmly together so there's no chance of movement.

Counter sink any screw holes & joins. Fill joins between boards & screw holes with MicroDur Base.

Leave 24 hours before priming & meshing.

#### **CONCRETE & SCREEDS**

Must be fully cured, moisture content less than 5%.

Repair cracks before microcementing. For cracks over 3mm – open up crack, stitch with helix stitching bars. For cracks under 3mm – stitching may not be required. Pour Cemher Aquasell into the cracks and scrape off the excess, this may need topping up to achieve a level surface.

Leave until dry, minimum 12 hours, before priming & mesh.

#### **UNDERFLOOR HEATING**

Ensure underfloor heating has been through a full cycle before installation. Turn off 48 hours before applying microcement. Leave it turned off until 48 hours after microcement has been applied.

Always follow underfloor heating manufacturer's Recommendations.

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### Choosing the Right Primer

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#### **PRIMER TAC for NON-ABSORBENT SURFACES**

Use Primer TAC on all non-absorbent surfaces.

Tiles, marble, quartz and laminate are all non-absorbent.

Always keeps it's tack. So you'll need to wear spiked shoes to walk on it.

#### **PRIMER 100 for ABSORBENT SURFACES**

Use Primer 100 on all absorbent surfaces.

Concrete, screeds, cement board, plasterboard, plaster and composite timbers are all absorbent.

On freshly plastered walls and freshly laid concrete /screeds use Primer 100 mixed with water at a ratio of 50:50 followed by a neat coat of Primer 100.

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## Mixing 1st Coat of MicroDur Base

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You will need **10kg of MicroDur Base** to complete **1 coat** over 10m<sup>2</sup>. Split your MicroDur Base into equal batches of 10kg. Mix no more than 2 batches at a time.

For each batch, measure 2.5l (for walls) – 3l (for floors) Water using a measuring jug.

Pour the water into your mixing bucket, followed by 10kg MicroDur Base.

Mix thoroughly with a microcement mixer head attachment on a cordless drill. Let the mixture rest for a few minutes before applying.

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## Applying 1st Coat MicroDur Base

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Using a Bi-Flex Steel Trowel, work your way out from one corner creating a random edge pattern. Keep trowel movements small and random, avoid long sweeping arches – as these will show through to your final finish.

Use the grain in the microcement as your level – if you apply the microcement thicker than the size of the grain, the finish won't be as strong and will require a lot more sanding. Run the trowel back over each section that you have put down to smooth it out and remove excess product.

Completely cover each surface without stopping. For complete rooms, start with ceilings, then walls from left to right (or right to left) and then the floor.

Run your finger or a corner trowel along internal corners to push the microcement into the corner and then gently trowel away the excess product.

Leave to dry. This should take around 3 hours but may vary depending on temperature and humidity.

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## Mixing 2nd Coat of MicroDur Base

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You will need the same number of batches that you used for your 1st coat.

Mix in exactly the same way as you mixed the 1st coat.

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## Applying 2nd Coat MicroDur

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Apply the 2nd Coat of MicroDur Base in exactly the same way as the 1st coat.

Leave to dry for a minimum of 3 hours, ideally overnight.

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## Sand with 40/80 Grit Sand Paper

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Flatten the MicroDur Base with a 40 or 80 grit sand paper. An orbital sander is ideal, but you can do it by hand.

Use the sand paper to remove ridges and drips that have dried in the microcement.

Vacuum the surface to remove all dust and debris. Do not wet the microcement.

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## Mixing Metal & Resin

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You will need **3kg of Metal Powder** and **750ml Metallic Resin** to complete **1 coat** over 10m<sup>2</sup>.

Mix no more than 2 batches at a time.

Pour the resin into your mixing bucket, followed by 3kg Metal Powder.

Mix thoroughly with a microcement mixer head attachment on a cordless drill. Let the mixture rest for a few minutes before applying.

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## Applying Metal & Resin Mix

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Apply in exactly the same way as you applied the 2 MicroDur Base coats.

Different effects will be achieved with different tools, you may want to try using a paint brush or roller instead of a trowel.

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## Applying Accelerator

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Pour the accelerator into a spray bottle and spray it directly onto the metal. You may need to dab the excess off with a sponge to stop runs.

Leave to oxidise. Don't be in a rush, the longer you leave it, the more it will oxidise. If you would like it to oxidise more, you can sand the surface gently with a 240 grit sandpaper and apply more accelerator.

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## Neutralising Accelerator

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Once you are happy with the level of oxidation, spray the surface with water and dab with a sponge to remove the excess water and rust. Leave to dry, minimum 24 hours.

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## Applying Sealer Oxhider

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Use a medium pile roller to apply an even coat of Sealer Oxhider to the surface. Leave the Sealer to dry. This should take around 3 hours. Once dry, apply a 2nd coat and leave it for 3 hours before applying AquaMax.

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## Mixing AquaMax

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Mix the AquaMax with half of the AquaMax Hardener in a mixing jug and stir gently with a paint stirrer for at least a minute. Leave to rest for a couple of minutes before applying.

Leave the AquaMax to dry for 48 hours before touching. Light use only for first 14 days.

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## Applying AquaMax

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Use a medium pile roller to apply the AquaMax evenly across the entire area.

Apply the AquaMax in an area and then go back over it with the roller to remove any excess product, air bubbles and lines.

Work quickly & randomly keeping the edge wet.

Leave to dry for a minimum of 12 hours before applying the 2nd coat of AquaMax.

Ensure you cover the full area with both coats of AquaMax and use the full amount provided (1l per 10m<sup>2</sup>).

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## Polishing the Metal

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Work over the whole area with a 320 grit sanding disc on an orbital sander, sand all areas evenly so that you achieve a uniform depth across the area.

The 320 grit will expose the metal, where as subsequent grits will polish the exposed metals. Before moving to the next grit ensure you are happy with the level of cut in your work.

Continue to work up the grits, increasing the speed as you go. The following table shows the relative speed for each of the grits.

320/400	low speed
500/800/1000	medium speed
3000/6000	high speed

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## Caring for Microcement Surfaces

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### FIRST 14 DAYS

Like all cementitious products, microcement takes 28 days to full harden. It's at it's softest for the first 14 days after laying. During this time it should only be subjected to light use and light foot traffic.

### FIXING TO MICROCEMENT SURFACES

Microcement can be drilled and screwed into using bits that are suitable for the substrate. Any holes or cuts will need protecting from moisture penetration by either putting silicone into screw holes or by surrounding fixtures & fitting entirely with silicone. Care must also be taken not to scratch the sealers whilst installing fixtures & fittings.

### NO DRAGGING OR DROPPING

Dragging heavy objects over the surface, or dropping them onto the surface is not recommended, as damage could occur. Lift furniture rather than dragging it, and use lids or felt pads to protect flooring from pressure points or abrasive surfaces.

### STAIN RESISTANCE

If water stains appear within the 1st 4 weeks of use, let the stain dry out & reseal immediately. Stains will become permanent if not treated quickly.

### PROLONGED EXPOSURE TO WATER

If water is trapped against the surface for a prolonged length of time it may stain & potentially cause the microcement to blister. It is not advisable to leave wet towels, plant pots, wet shampoo bottles etc. in direct, prolonged contact with the microcement.

# Thank you for choosing Relentless Microcement

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## Feedback

As a small, growing business in a world full of options, we'd sincerely like to thank you for choosing our products.

If you're happy with the quality of products and service, please leave us a positive review on the site that you bought it from, **Google or Facebook**.

Please contact us directly for any queries, concerns or issues. We will make every effort to rectify issues quickly and effectively.

Please email us  
[info@relentlessmicrocement.com](mailto:info@relentlessmicrocement.com)

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## Done a Good Job?

We regularly post work completed by Professional Installers and DIYers on social media and would love to see images of your projects. Please send them to [info@relentlessmicrocement.com](mailto:info@relentlessmicrocement.com) or tag us on social media.



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## Contact Us

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