

Microcement Application Guide

CIMENTART
MICROCEMENT

APPLICATION
GUIDE

CIMENTART®
MICROCEMENT



Committed With the enviroment

Microcement Application Guide

The purpose of this manual is to clarify any questions you may have regarding applying Microcement. It is necessary that Professional Microcement applicators and customers read it.

You can contact us through the email info@grupocimentart.com, to resolve any other doubt or question.

This manual has different sections:

- CimentArt products for surface preparation
- Surface preparation
- Application
- Base Microcements
- Finishing Microcements
- Sealers
- Varnishes
- How to make a non-slip Microcement flooring
- Repair a Microcement
- Tools to apply Microcement
- General data
- Precautions

Microcement is not a product, it is a working system with different products applied step by step. All the steps in Microcement are important, the preparation of the surfaces, the correct application of the products, the finishing, precautions, maintenance, etc.

Using this manual, you will have a guide to avoid possible problems or later claims, which, in most cases, can be avoided.

It is important that any professional read it before doing any work.

All our materials can be applied to interior and exterior walls, floors and ceilings and can be applied on an infinity of supports such as:

- Plastic paint.
- Cement, lime mortar, gypsum and plaster.
- Wood and plasterboard.
- Tile, ceramic and porcelain floor.
- Marble, stone and granite.
- Different panels like MDF, Viroc, Wedi, Aquapanel, etc.

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It is important not to forget that the Microcement is a covering to decorate. Its purpose is to decorate interiors and exteriors. We have had in recent years demands to apply it on roofs, garages, roads, swimming pools, interior wells, car workshops, industrial warehouses or large supermarkets, etc. Microcement is not a product for these areas.

The Microcement is perfect for homes, terraces, shops, offices, etc. If you are unsure whether to apply the Microcement or not, compare it with a similar decorative coating. As a comparison (and example): Would you put a wooden parquet inside a pool, on a roof or in a garage? With Microcement it is the same, with some exceptions.

SURFACE PREPARATION- CIMENTART PRODUCTS

The CimentArt products that we recommend in this manual for the correct preparation of different supports are:

- Cem Plus: cement mortar for facades or to regularize surfaces.
- CementDry CimentArt: waterproofing mortar.
- Epox Joints: epoxy varnish to stop capillary moisture.
- Fiberglass mesh: mesh to reinforce Microcements.
- Primer: adhesion promoter.
- Microcement Base: preparation coating.
- Konkret Microcement Base: preparation coating for high traffic floors.
- Aqua Base Microcement: preparation coating, ready to use and 100% waterproof for baths and showers.

CEM PLUS

Cem Plus CimentArt is a white bi-component mortar, ideal for covering facades, covering channels, regularizing or filling floors, up to 2 cm, both indoors and outdoors.

Its use is perfect to regularize a surface between 3 mm to 2 cm, as preparation, to then apply Microcement, floating flooring or tiles.

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Cem Plus applied on facades will be more durable than traditional cement. It is a breathable two-component cement.

Apply a coat of Primer CIMENTART and wait for dry completely (3 to 6 hours).

Mix manually or by mechanical means 5 kg. of CEM PLUS Mixing Resin for each container, until obtaining a perfect homogenization. Wait 5 minutes and mix again.

Apply a 3mm layer up to 2 cm with a steel trowel. To achieve a thickness between 1 to 2 cm, you can do it in several layers. It can be reviewed with the sponge when the product begins to harden.

Once dry, it can stay like this, it can be sanded with 40 grit and in the case of facades, it can also be painted with any plastic exterior paint.

CEMENTDRY

CementDry CimentArt is a 2-component waterproofing mortar. Once dry, it is water repellent, ideal for making waterproof coatings. Does not allow passage of water and creates a moisture barrier.

CementDry CimentArt can be easily applied to interior and exterior walls and floors and is weather resistant.

It is used to waterproof concrete, precast block fences, cement mortars, swimming pools, terraces, basements, elevator shafts, rafts, retaining walls, balconies, etc. Product suitable for waterproofing drinking water tanks.

To achieve total waterproofing with CementDry, the thickness should be 5mm.

Apply a coat of Primer CIMENTART and wait for it to dry completely (3 to 6 hours)

Mix manually or by mechanical means 5 to 5.5 kg. of CIMENTART Mixing Resin for each container, until obtaining a perfect homogenization. Wait 5 minutes and mix again.

Apply with a brush, roller or steel trowel a first layer of 2-3 mm and let dry between 2 to 4 hours.

Apply a second coat in the same way, until the maximum thickness of 5 mm is achieved. Do not apply layers less or greater than 5 mm.

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For a smoother finish, lightly spray the last coat with water and run the steel trowel again. Do not abuse by spraying.

The cleaning of the tool is done with water.

CIMENTART EPOX JOINTS

CimentArt Epox Joints is a two-component, 100% solids epoxy varnish that can be applied to stop the capillary moisture on walls and floors, interior and exterior.

It can be applied on all types of supports such as concrete, cement, gypsum, ceramic, tiles, tiles joints, etc.

It can be applied even with a certain degree of humidity on the substrate (concrete humidity <8%). Its application on ground floor or terraces is ideal to stop the capillary humidity coming from the subsoil. CimentArt Epox Joints is indicated as a blocker for capillary moisture or residual moisture in tile joints, pipes chases, voids, gaps or cracks.

The product is supplied in two components, its dissolution with any other product is not recommended, since it would lose its hardness and waterproof properties.

Mix the two components, by mechanical means, until obtaining a perfect homogeneous mixture, in the following proportions: 2.5 parts of CIMENTART EPOX JOINTS Component A to 1 part of CIMENTART EPOX JOINTS Component B.

Apply a coat with a roller (or a small roller or brush if you apply it in the joints), in an orderly way and without spreading the product too much, making sure to cover all the joints, without leaving puddles.

Apply drainage areas or tile joints very well, where water can penetrate or moisture can escape.

Wait to dry. In areas with a high percentage of humidity, apply a second coat.

Always apply in well ventilated areas.

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Although CimentArt Epox Joints has a high degree of chemical resistance, we do not recommend its use as an aesthetic final finish, because the product yellows over time, especially outdoors. In rafts it must take at least 15 days to obtain a final drying before filling.

The tools are cleaned with solvent.

FIBER GLASS MESH CIMENTART

CimentArt fiberglass mesh is recommended to reinforce resistance in Microcement pavements.

It is always placed on all pavements, on walls that the cement or gypsum are irregular and on walls that have tile or marble joints, etc.

Once the CimentArt fiberglass mesh has been placed, it is a non-slip material, which helps the application of any CimentArt Microcement Base and is especially flexible and resistant.

Spread the CimentArt fiberglass mesh on the surface where the Microcement is going to be applied later, in a stretched way, so that there are no folds.

Once spread, apply the Primer CIMENTART to ensure that it adheres and does not move while applying. Applying Primer CIMENTART will make the fiberglass mesh stick to the surface. The fiberglass mesh will be better glued if the surface does not have absorption (eg: on tiles). On absorbent surfaces (for example: cement or gypsum) it will be less stuck, because they are surfaces with more absorption.

The Primer purpose is to create adhesion between the surface with the Microcement, it is not to glue Fiberglass Mesh, although on some surfaces it does glue it.

PRIMER PLUS CIMENTART

Primer Plus CIMENTART is a concentrated adhesion promoter, used to improve the adherence of CIMENTART Microcement and Micro Mortars, and of any cement-based, gypsum or lime-based product in general, on any type of absorbent or non-absorbent material and supports. It has a great Tack (stickiness once dry).

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On all pavements or walls with joints, first place the CIMENTART Fiberglass Mesh and then apply CIMENTART Primer. On completely smooth walls, it is not necessary to install the CIMENTART Fiberglass Mesh.

Apply directly to the surface, avoid spilling the product and spreading evenly, without applying the product in excess.

Once the Primer CIMENTART has been applied, wait 30 minutes or until it is completely dry to the touch. It is applied by brush or roller with short hair or also projected with an airless system.

Tool cleaning is done with water.

PRIMER STD

CIMENTART Primer Plus is a adhesion promoter that is used to improve the adherence of CIMENTART Microcement and micro mortars, and any cement-based product, plaster or lime in general, on surfaces with a high degree of absorption (plasterboard, gypsum, cement, concrete, mortars in general, etc.).

On all pavements or walls with joints, first place the CIMENTART Fiberglass Mesh and then apply CIMENTART Primer. On completely smooth walls, it is not necessary to install the CIMENTART Fiberglass Mesh.

Apply directly to the surface, avoid spilling the product and spreading evenly, without applying the product in excess.

Once the Primer CIMENTART has been applied, wait 30 minutes or until it is completely dry to the touch. It is applied by brush or roller with short hair or also projected with an airless system.

Tool cleaning is done with water.

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PRIMERS AND FIBERGLASS MESH - APPLICATION GUIDE:

	All floors	Irregular walls cement or gypsum	Plaster walls completely smooth	Tiles, marble	Plaster board	Countertops	Smooth paint
Primer PLUS							
Primer STD							
Fiber glass Mesh							

SURFACE PREPARATION

The surfaces must be resistant. It must be perfectly dry, hardened and clean of dust, oils and any other material that prevents a correct adhesion of the product.

It is necessary to have a completely rigid support, without movement or expansion. If there are surfaces with mortar or plaster in poor condition, hollow or badly glued tiles or paint in poor condition, these defective areas must be removed, repaired and wait for their complete drying, before starting the application.

The Microcement cannot be applied to walls or floors that have a humidity higher than 6%. It also cannot be applied on plaster or cement supports that are freshly made. These areas with wet substrates or capillary humidity cause the Microcement to not achieve maximum hardening, stains come out, affect the finish varnish, can cause color changes and even peel off the Microcement.

To apply Microcement on freshly made cement, concrete or gypsum, you must wait a minimum of 3 to 4 weeks to dry the applied coating, harden and completely expel the internal humidity.

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If you are going to apply Microcement on tiles, these must be completely glued. If hitting them with your hand (as if knocking on a door) sounds hollow, the tiles should be removed, apply Primer CimentArt, fill the gaps with cement mortar and apply the Microcement on a solid and straight surface. If it is only a badly glued tile, it must be removed and filled with cement mortar before apply Microcement.

If you are going to apply the Microcement on paint, it must be in perfect condition, without chipping or parts that are easily removed.

Never apply Microcement in pavements or showers where there may be puddles of water, inside swimming pools, ponds, jacuzzis (general areas where water is retained).

Never apply Microcement on surfaces that have been painted with solvent paint or solvent epoxy.

In new construction works, if you are going to level a pavement with cement or self-leveling cement, we recommend mixing the cement with CimentArt Mixing Resin, rather than with water and adding glass fibers to the mixture. We also make a perimeter joint on the wall, so that the cement does not touch the wall, this helps prevent cracking.

Reminder: the CimentArt Microcement never cracks, if it cracks it is because the support where it was applied has cracked, this is always and without exceptions.

APPLICATION ON TILES WITH WIDE JOINT

On surfaces that have joints of 2 mm or more, (deep or wide), apply a coat of Primer PLUS CimentArt on that joint and wait to dry completely. Cover all the joints with a CimentArt Microcement Base and leave to dry completely.

Then spread the fiberglass mesh and apply a coat of Primer Plus CimentArt to the entire surface and wait to dry, before beginning the normal application of CimentArt Microcement Base.

Apply the necessary Microcement Base layers until a complete covering of the entire surface and until the joints are not visible.

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APPLICATION ON PLASTERBOARD OR COMPLETELY SMOOTH WALLS

If the application is made on completely smooth walls or on plasterboard, you do not need Microcement Base or Fiberglass Mesh. This greatly reduces the price of materials and the time to do the job is half. Of course you can also place these products if you want.

If the application is on completely smooth and uniform colored walls (for example, a plaster wall, sanded and vacuum-cleaned), apply a coat of Primer CimentArt directly and begin the application of the finishing Microcement, with 2 to 3 layers, depending on the product, until the entire wall is completely covered.

If the application is made on new plasterboard walls, they must be completely finished (plastered, sanded and clean of dust). First apply a coat of plastic paint similar to the color chosen for the Microcement. This layer will make a uniform color and remove the absorption. It will also help you detect plaster faults and be able to correct them before starting the application of Microcement. After the coat of paint is dry, apply a coat of Primer CimentArt and apply the finishing Microcement, 2 to 3 coats, depending on the product, until the entire wall is completely covered.

Sometimes printed plasterboard brand ink or marks made with markers, can be seen on the finished Microcement.

Paint these marks with a water-based enamel paint before you begin.

In the corner of a plasterboard wall with the floor, or in the corner of a floating wooden floor or parquet, with a Microcement wall, you should always place a skirting board or any element that covers that joint.

OUTDOOR MICROCEMENT APPLICATION WITH ICE OR SNOW ACCUMULATION

The Microcement can be applied outdoors, except in areas with very low temperatures in winter and especially where snow can be stored for several days (for example, terraces that are outdoors and do not have any type of roof or cover).

We do not recommend the application of Microcement in those situations with low temperatures, ice or snow, for two reasons: the supports where the Microcement is applied, with these temperature changes, expand and contract a lot and can get to fracture and see this crack in Microcement and the second reason is because the final protective layer of polyurethane varnish can be affected and even damaged, if the Microcement is for several days under snow or water.

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CAPILLARY MOISTURE

If there is capillary moisture, you cannot apply any Microcement. Normally a ground floor (without an air chamber below) or any old construction, always has capillary moisture.

If the Microcement is applied to cement or gypsum substrates with this problem, darker stains can come out due to this rising humidity and the Microcement will deteriorate over time.

If you apply Microcement on tiles or marble (with joints) where there is capillary moisture, over time these joints will be marked (usually they will be darker) on the tiles.

In both cases, the Microcement can also peel off or blisters appear.

On all terraces, outdoor areas, ground floors, edge pools, etc., you should always do a treatment for humidity, even if it is not visible. It is cheaper to prevent the problem than to repair after the job is done. If the support that has moisture is cement, you can apply both CementDry and Epox Joints.

On gypsum or plaster walls, with or without paint, you have to completely remove all the gypsum, until you see the complete brick, exceeding 50 cm above the humidity mark, clean the dust and apply Primer CimentArt, let it dry and then apply CementDry.

If the support that has moisture is tiles, marble or has joints, Epox Joints will be applied.

To stop the humidity with CementDry you need a layer of ½ cm, less it does not work. It is also not necessary to apply more than ½ cm layer.

To stop the humidity with Epox Joints, first fill all the joints in the tiles that are empty, wait to dry and then apply Epox Joints.

Aqua Micro Cement, being a 100% waterproof product, should never be used to make treatments for moisture. Always before you have to do the treatment to stop moisture and then any of our Microcements can be applied.

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SURFACES GUIDE WITH HUMIDITY AND RECOMMENDED PRODUCT:

	Tiles	Cement	Gypsum	Plaster	Marble	Paint wall	Cement shower	Tiles shower
CementDry		✓	✓	✓		✓	✓	
Epoxy Joints	✓	✓			✓		✓	✓

APPLICATION OF MICROCEMENT OVER WATERPROOFING MEMBRANES

Waterproofing membranes are widely used in construction and renovation.

They are intended for general waterproofing of:

- Pitched roofs (ventilated or insulated roofs)
- Under tiles as protection against water
- Wind and moisture barrier
- Showers

Waterproofing membranes consist of a central layer (usually geotextiles, felt, or high-density polyethylene) covered with layers of polypropylene or non-woven technical veils on both sides.

Once installed, these waterproofing membranes are designed to adhere cementitious mortars or ceramic adhesives, not to directly apply decorative finishes. Therefore, applying microcement directly over them is never recommended.

Technical reasons: Microcement requires a rigid and continuous substrate, while the membrane is flexible, has some deformability, and does not guarantee direct chemical adhesion.

This also applies to older waterproofing membranes, such as asphalt roofing felt.

These are the risks of applying microcement directly over a waterproofing membrane: cracking, blistering, and detachment.

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The correct solution and work system, after the waterproofing membrane is in place, would be as follows:

- Apply a layer of adhesion promoter.
- Apply a 1/2 to 1 cm thick layer, in two coats, of a cementitious mortar or a flexible cementitious adhesive mortar (fiberglass reinforcing mesh can be placed between coats).
- Once this leveling layer is dry, apply the microcement.

Can CimentArt Aqua Microconcrete 100% waterproof be applied in a shower without first installing a waterproofing membrane?

Technically, yes, it is possible. CimentArt Aqua Microconcrete is a continuous, waterproof surface coating designed specifically for showers.

To apply CimentArt Aqua Microconcrete, it is essential to ensure there is no structural movement to prevent micro-cracks from appearing in the substrate. The junctions with the wall/floor and drain must be perfectly sealed and free of any possibility of future cracking or movement. This requires respecting the drying times of the substrates (cement mortars, self-leveling compounds, etc.).

If you follow CimentArt's shower flooring system 100% (laying fiberglass mesh, applying a bonding agent, two coats of Aqua Base Microcement, micro-concrete, one coat of sealer, and two coats of two-component varnish), you can complete the job without a waterproofing membrane, as the CimentArt Aqua range allows for this.

However, this does not invalidate or replace the fact that the most professional solution will always be the double system (membrane + mortar + CimentArt Aqua Microcement).

MICROCEMENT SINKS

The sinks, applied with Microcement, are fashionable and very aesthetic. The important thing is that the drain in the sink is always lower than the micro-cement, so that the water does not stand or puddle. The slopes have to be well built if the sink has been made of brick or wood or some panel.

We recommend without exceptions for these works the Aqua line, Microcement ready to use 100% waterproof.

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MICROCEMENT ON COUNTERTOPS

You can apply Microcement on a kitchen or bathroom countertop, the important thing is to use a waterproof wood or MDF. Also if you use more than one panel (because the countertop length is too long)

there is a joint between the panels. This union or joint of two panels or boards cannot have any type of movement between them.

You can also build the countertop using Wedi panels, marble, stone or granite, or bricks and cement. After finishing the Microcement in countertop, the precautions are the same as in a wooden countertop: do not place a hot pot or pan and do not cut food with a knife directly on the Microcement.

SWIMMING POOLS

Although some pools were made with our Microcement in the past, today the Microcement is not recommended in a pool for two reasons: Microcement is a highly decorative coating, therefore it is not recommended to apply it inside a pool submerged under water.

Changes in pH water and the products used for water maintenance, whether they be fresh water (chlorine) or sea water (bromine), are very corrosive and can affect the last layers of polyurethane varnish.

At CimentArt we offer you CemPool, a 4-component coating ideal for swimming pools. Its cream-colored finish offers a spectacular turquoise green color in the water.

FIREPLACES AND BARBECUE

You cannot apply Microcement inside barbecues or fireplaces.

The Microcement can be applied where heat or fire does not directly affect the Microcement. In these situations, where the Microcement receives constant heat, it is possible that over time it may turn yellow or darken.

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FLOORS WITH RADIANT HEATING

Microcement can be applied on floors with radiant heating.

In fact, it is one of the best coatings that can be placed on a floor with radiant heating because it has a maximum thickness of 3 mm, it is perfect so that the floor does not lose heating power and there will be less energy consumption.

A tile, parquet or laminate flooring can be more than 1 cm thick and obviously radiant heating takes much longer and much more energy consumption to reach the desired temperature.

Once the pipes for radiant heating have been installed, it is covered with a minimum layer of 4 cm, of cement mortar or a self-leveling mortar and wait at least 1 month before applying the Microcement.

Before placing these mortars, it is necessary to place a perimeter expansion joint (it is necessary to have 5 to 8 mm) around the perimeter of walls and door frames, so that these mortars do not have contact with the wall. The reason for this perimeter expansion joint is because when the radiant heating is turned on, the floor expands (almost 1mm per m²). If this expansion joint is not present, the pavement will always crack and these cracks will be noticeable in the Microcement.

A fine expansion joint must also be made under each door or in critical areas such as corridors or L-shaped areas or very large areas (from 25 to 30 m²), to avoid cracks in the floor.

These joints should never be covered with cement or Microcement and a skirting board will always be placed on the wall to hide them. The joints under the doors can be covered with elastic putty, in a color similar to Microcement.

Finally, before starting the Microcement application, the radiant heating must be turned on to its maximum temperature, for several hours, and then switched off again. This operation must be done for several days (4-5 days) to see how the underfloor heating works before applying Microcemento and to check if cracks appear.

Reminder: CimentArt Microcement never cracks, if it cracks it is because the support where it was applied has cracked, this is always and without exceptions.

Never apply Microcement with radiant heating on.

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MICROCEMENT STAIRS

The Microcement is the perfect material to coat and/or to renovate stairs.

Usually the stairs are one of the most troublesome elements to reform on a house as it takes a lot of work to remove old steps and if a coat of other material like ceramic, marble, wood is done over the steps the result is a little step next to the actual floor which is awkward.

Equally, in the presence of a wooden or metallic stair rail is really difficult to coat even if the earliest coating is removed.

The 2 – 3 mm thickness of Microcement is perfect to coat stairs and the joint between the stairs and the floor, because it's really fine it's almost unnoticeable when stepping on it.

Surfaces with an old granite or marble are perfect surfaces for the application of Microcement as they have a high level of hardness and its corners are not liable to break over the time.

If the application is done in a new work we recommend use a hidden metallic stucco corner bead for a lasting finishing and therefore the avoidance of any breakage of the corners on the surface where the Microcement will be applied (normally the steps on a new work are done with bricks and plaster, cement mortar or smooth concrete steps with cement mortar). On these cases, it is always recommended to use the stucco corner bead to attain a better finishing and durability of the corners of the steps.

In the case of stairs that have marble or granite, this material is perfect for applying Microcemento and does not need stucco corner bead placement.

In some cases, the marble step protrudes approximately 2 cm from the vertical riser. In this case you can place a tile in that hole, to be easier to apply, having an exact 90 degrees.

In all cases, we recommend that the corners of the stair be rounded with sandpaper and not exactly 90 °.

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MICROCEMENT IN PARKINGS OR INDUSTRIAL CENTERS

It is not recommended to apply Microcemento in industrial buildings, parking lots, shopping malls, highways, etc, because it areas with a large traffic of cars, with heavy machinery and where pallets are moved that can hit and scratch the Microcement.

If you want to build a private garage, we recommend the Konkret Base, finished with Hard varnish. The precautions that you have to take on this pavement are to avoid dragging objects, not to enter with the car skidding, turning the steering wheel quickly or with sudden movements and to avoid that the tires are very hot. If you have a motorcycle, the easel can scratch or damage the Microcement, put a plastic protector where you keep the motorcycle in the garage.

OUTDOOR COLORS MICROCEMENT

Microcement CimentArt has no color changes or apparent changes in color, over time, in interior applications.

Outdoors we guarantee the non-detonation of our range of light colors, not recommending the use of médium or intense colors, because they can be deteriorated over time by atmospheric agents.

CHASES AND JOINTS WITH DIFFERENT MATERIALS

In some cases, especially in a reform, there may be different types of materials attached, such as: cement with tile. This joint with different materials tends to crack. We recommend that you always apply Primer CimentArt in the joints, before applying the cement, gypsum or the material you use to fill the chase. This will help to have a better adherence between different supports.

Also add that the absorption that will be in the different materials will not be uniform, this affecting the application and drying of the Microcement. In these cases, apply Epox Joints CimentArt, before beginning the process of applying the Microcement.

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MICROCEMENT APPLICATION ON SUPPORTS THAT ARE ALREADY CRACKED

We can find cement or self-leveling supports or joints of different materials such as a rub (for example: chase on a tile filled with cement), which are already cracked before starting the application of Microcement. In these cases, extra preparation work must be done before applying the Microcement.

In the case of large fissures in a pavement, it is necessary to make some horizontal cuts to the fissure, every 30 cm, with bone or infinity shape (∞) and place iron clips. Then apply Primer CimentArt in the cut area and fill with Epox Joints CimentArt.

In the case of small cracks or fissures in the joints of different materials (for example: chase on a tile, filled with cement), fill the crack directly with Epox Joints CimentArt.

These methods are very functional, but in no case can we guarantee that the fissure will reopen.

AREAS THAT RECEIVE WATER

In the case of areas that are exposed to water like showers, kitchen or bathroom counter-tops, baths, sinks, terraces, etc., make sure the inclinations are well made and that there aren't puddles or areas where the water sits.

CimentArt Microcement SL offers the AQUA line products (water proof micro-cement 100% ready to be use) a total waterproof guaranty on areas that are expose to water (as the ones describe don the above paragraph).

The traditional bi-component micro-cement must no be use on these areas.

BASE MICROCEMENTS

TRADITIONAL BASE MICROCEMENT

The Traditional Base Microcement CimentArt is a coating used to regularize walls and as a preparation to apply a finishing Microcement. It is mixed with the CimentArt Mixing Resin and is applied in layers of 0.7 mm to 1 mm thick, with trowel pressure.

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It can be applied on all types of supports such as concrete, plasterboard, cement, gypsum, marble, granite, porcelain tiles, tiles, etc. whether indoors or outdoors.

You can perfectly apply the Traditional Base Microcement in outdoors, if later it is finished with any Aqua line Microcement (100% waterproof), We do not recommend finishing it with traditional 2-components Fine Microcement, because it is not waterproof.

The only reasons why this coating does not achieve the necessary hardness is: the mixing proportions were not respected (3 parts of Comp A + 1 part of resin) or each layer was not applied with the recommended thickness.

Normally 2 coats are applied.

As the last coat is applied, spray lightly with water and smooth with the trowel to achieve a smoother finish. Do not abuse by spraying

KONCRET BASE CIMENTART

KonCret CimentArt Microcement Base is the coating for all floors, where greater resistance is needed. Is used to regularize floors and as a preparation to apply a finishing Microcement. It is mixed 2 line Microcement (100% waterproof), We do not recommend finishing it with traditional 2-components Fine Microcement, because it is not waterproof.

The only reasons why this coating does not achieve the necessary hardness is: the mixing proportions were not respected (4 parts of Comp A + 1 part of resin) or each layer was not applied with the recommended thickness.

Normally 2 coats are applied.

As the last coat is applied, spray lightly with water and smooth with the trowel to achieve a smoother finish. Do not abuse by spraying.

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AQUA BASE CIMENTART

Aqua Base Microcement is a ready-to-use, 100% waterproof coating used to regularize floors and walls and as a preparation to apply a finishing Microcement in baths and showers. This Microcement base is ideal for areas that receive water, such as a shower and outdoor areas.

It can be applied on all types of supports such as concrete, plasterboard, cement, gypsum, marble, granite, porcelain tiles, tiles, etc. whether indoors or outdoors.

Is applied in layers of 0.7 mm to 1 mm thick, with trowel pressure.

The only reasons why this coating does not achieve the necessary hardness is because water was added (+ 5% only in cases where the product is drier because the container is open for a long time) or it was not applied with the recommended thickness (0.7 to 1 mm).

Normally 2 coats are applied. As the last coat is applied, spray lightly with water and smooth with the trowel to achieve a smoother finish. Do not abuse by spraying.

APPLICATION GUIDE FOR BASE MICROCEMENTS:

	Indoors walls	Outdoors walls	Indoors floors	Outdoors floors	Showers	Pool edges	Kitchen Countertops	Bathroom countertops
Base 2 comp								
Base Konkret								
Base Aqua								

HOW TO SAND BASE MICROCEMENT

All of our Base Microcements are sanded after the final coat is complete and dried, prior to application of the finishing Microcement.

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The sandpaper used will be 40 grit. Superior sandpaper grits will not get a good sanding. The sanded base must be completely smooth, without showing any imperfections in the application.

Poor sanding of the Microcement base will make the fine Microcement not look good, it will use more product to cover the imperfections, and when using more product, there will be more layer in the finishing Microcement, leaving the material softer.

DIY sanders are not suitable for sanding a large area of micro-cement base. You will need a professional sander machine with coupling to a vacuum cleaner to collect dust.

For floors of more than 25 m², it is best to rent a polishing machine with a sanding disc. These machines achieve perfect planimetry and save time. As an example: 100 m² of Microcement base on a pavement, 2 workers with two manual DIY sanders, it is very difficult that, in 8 hours, they can finish sanding 100 m². With a polishing machine, in 1 hour approx 1 person has the job done, leaving the Base Microcement completely smooth.

After each sanding process, thoroughly vacuum the dust and / or remove it with a slightly damp cloth.

FINISH WITH MICROCEMENTS

Once the substrate has been prepared, sanded and sucked well, you can continue with the application of any of our finishing Microcements.

The support where we are going to apply, the smoother it is and the less imperfections we have, much better will be the finishing Microcement that we are going to apply now.

TRADITIONAL FINE MICROCEMENT 2 COMPONENTS. MARBLE FINISH:

The Fine Microcement is mixed with the CimentArt Mixing Resin in the following proportion: 1.5 kg of Fine Microcement + 1 kg of CimentArt Mixing Resin. It is better to mix small amounts and use little by little, since the product has a lot of performance and dries quickly.

2 coats are applied. Each layer must have a maximum of 0.1 mm.

Microcement Application Guide

If the application will be made on Base Microcement, you do not need to apply Primer CimentArt.

If the application will be made on completely smooth and / or painted walls, apply a coat of Primer CIMENTART and then begin the application of traditional Fine Micro Cement (in this case you must apply a minimum of 3 coats).

The Application is made with short and semi-circular movements, never with long movements. The application is made with the CimentArt plastic trowel. If you apply with the steel trowel, you will see dark burned stains and these stains do not come out with the sandpaper.

Each coat should be completely smooth and flawless. If it is not perfect, you should sand between coats to remove those imperfections with 150 grit sandpaper. If necessary, you can apply a 3rd coat. Once the last coat dries, sand it with 150 to 200 grit sandpaper, softly, without pressing and without much insistence.

The objective of sanding is to remove small imperfections, not to polish the Microcement.

Vacuum the dust. Never clean the dust with a damp cloth, on any finishing Microcement.

Finish with 1 coat of STD Sealer and 2 coats of any of our Varnishes.

The last layer should always be done without stops and avoid drying areas in the Fine Microcement applied and continue, because that "joint" of dry Microcement with wet Microcement will be seen.

The last layer must be done quickly and can never stop in the middle and continue later. If the surface is large and dries (faster than our performance to apply), we need more people applying the Microcement.

The only reasons why this coating does not achieve the necessary hardness is because the mixing proportions were not respected (1.5 kg of Fine Microcement + 1 kg of resin) or each layer was not applied with the recommended thickness (0.1 mm).

ICEM: MICROCEMENT READY TO USE. MARBLE FINISH:

ICem Microcement is a ready-to-use product, you don't need to mix with another product. We recommend mix it with the electric mixer before starting the application.

Microcement Application Guide

If the application will be made on Base Microcement, you do not need to apply Primer CimentArt.

If the application will be made on completely smooth and / or painted walls, apply a coat of Primer CIMENTART and then begin the application of iCem Microcement (in this case, you may need to apply a 3rd coat).

2 coats are applied. Each layer must have a maximum of 0.1 mm.

As you go through applying with each coat, you can spray water lightly and this will help make it smoother, flawless and will have higher product performance. Do not puddle or abuse by spraying.

The Application is made with short and semi-circular movements, never with long movements. The application is made with a steel trowel.

Each coat should be completely smooth and flawless. If the coat is not like this, you must also sand, between coats, to remove those imperfections with 100 grit sandpaper.

Once the second coat dries, sand it with 120 to 150 grit sandpaper, softly, without pressing and without much insistence.

The objective for sanding is to remove imperfections, not to polish the Microcement.

Vacuum the dust. Never clean the dust with a damp cloth, on any finishing Microcement.

Finish with 1 coat of STD Sealer and 2 coats of any of our Varnishes.

The last layer should always be done without stops and avoid drying areas in the iCem Microcement applied and continue, because that "joint" of dry Microcement with wet Microcement will be seen.

The last layer must be done quickly and can never stop in the middle and continue later. If the surface is large and dries (faster than our performance to apply), we need more people applying the Microcement.

The only reasons why this coating does not achieve the necessary hardness is because water was added (+ 5% only in cases where the product is drier because the container is open for a long time) or it was not applied with the recommended thickness (0,1 mm).

Microcement Application Guide

AQUA QUARTZ, HOMOGENEOUS OR BURNED FINISH:

Aqua Quartz Microcement is a ready-to-use product, you don't need to mix with another product. We recommend mix it with the electric mixer before starting the application. This Microcement is 100% waterproof, ideal to apply it in areas that receive water.

If the application will be made on Base Microcement, you do not need to apply Primer CimentArt.

If the application will be made on completely smooth and / or painted walls, apply a coat of Primer CIMENTART and then begin the application of Aqua Quartz (in this case, you may need to apply a 3rd coat).

2 coats are applied. Each layer must have a maximum of 0.1 mm.

This Microcement has a uniform color. It does not have marbling effects. Pressing with the trowel can create burned effects. These burnt effects also appear if there are imperfections in the surface where it is applied.

As you go through applying with each coat, you can spray water lightly and this will help make it smoother, flawless and will have higher product performance. Do not puddle or abuse by spraying.

The Application is made with short and semi-circular movements, never with long movements. The application is made with a steel trowel.

Each coat should be completely smooth and flawless. If the coat is not like this, you must also sand, between coats, to remove those imperfections with 100 grit sandpaper.

Once the second coat dries, sand it with 100 to 150 grit sandpaper, softly, without pressing and without much insistence.

The objective for sanding is to remove imperfections, not to polish the Microcement.

Vacuum the dust. Never clean the dust with a damp cloth, on any finishing Microcement.

Finish with 1 coat of STD Sealer and 2 coats of any of our Varnishes.

Microcement Application Guide

The last layer should always be done without stops and avoid drying areas in the Aqua Quartz Microcement applied and continue, because that "joint" of dry Microcement with wet Microcement will be seen.

The last layer must be done quickly and can never stop in the middle and continue later. If the surface is large and dries (faster than our performance to apply), we need more people applying the Microcement. The only reasons why this coating does not achieve the necessary hardness is because water was added (+ 5% only in cases where the product is drier because the container is open for a long time) or it was not applied with the recommended thickness (0,1 mm).

AQUA MICROCONCRETE. FINISHED CONCRETE THIN

Aqua Microconcrete CimentArt is a ready-to-use product, you don't need to mix with another product. We recommend mix it with the electric mixer before starting the application. This microconcrete is 100% waterproof, ideal to apply it in areas that receive water.

If the application will be made on Base Microcement, you do not need to apply Primer CimentArt.

If the application will be made on completely smooth and / or painted walls, apply a coat of Primer CIMENTART and then begin the application of Aqua Microconcrete.

2 coats are applied. Each layer must have a maximum of 0.5 mm.

This Microcement has a uniform color. It does not have marbling effects. Pressing with the trowel can create burned effects. These burnt effects also appear if there are imperfections in the surface where it is applied.

As you go through applying with each coat, you can spray water lightly and this will help make it smoother, flawless and will have higher product performance. Do not puddle or abuse by spraying.

The Application is made with short and semi-circular movements, never with long movements. The application is made with a steel trowel.

Each coat should be completely smooth and flawless. If the coat is not like this, you must also sand, between coats, to remove those imperfections with 100 grit sandpaper.

Microcement Application Guide

Once the second coat dries, sand it with 100 to 150 grit sandpaper, softly, without pressing and without much insistence.

The objective for sanding is to remove imperfections, not to polish the microconcrete.

Vacuum the dust. Never clean the dust with a damp cloth, on any finishing Microcement or microconcrete.

Finish with 1 coat of STD Sealer and 2 coats of any of our Varnishes.

The last layer should always be done without stops and avoid drying areas in the Microconcrete applied and continue, because that "joint" of dry Microcement with wet Microcement will be seen.

The last layer must be done quickly and can never stop in the middle and continue later. If the surface is large and dries (faster than our performance to apply), we need more people applying the Microconcrete.

The only reasons why this coating does not achieve the necessary hardness is because water was added (+ 5% only in cases where the product is drier because the container is open for a long time) or it was not applied with the recommended thickness (0,5 mm).

AQUA NATURE. NATURAL CEMENT FINISH.

Aqua Microconcrete CimentArt is a ready-to-use product, you don't need to mix with another product. We recommend mix it with the electric mixer before starting the application. This Microconcrete is 100% waterproof, ideal to apply it in areas that receive water.

Apply 2 coats at the same time in this way: Apply the first coat of Aqua Nature in a thin layer of 0.7 mm, with pressure with the trowel and cover a surface of 1.5 m² to 2 m² maximum. Never apply thicknesses greater than 1 mm.

Immediately afterwards apply a second coat over the first coat, the first coat is still fresh (undried). We call this application method fresh on fresh. Lightly spray the last coat with water to achieve a completely smooth finish with the steel trowel. Do not abuse by spraying.

Joining the first layer with the second layer will give a final thickness of approximately 1 mm (maximum). Never apply larger thicknesses because will lose hardness.

Microcement Application Guide

If the application will be made on Base Microcement, you do not need to apply Primer CimentArt.

If the application will be made on completely smooth and / or painted walls, apply a coat of Primer CimentArt and then begin the application of Aqua Nature.

This Microcement has a uniform color that imitates a natural cement.

As you go through applying with each coat, you can spray water lightly and this will help make it smoother, flawless and will have higher product performance. Do not puddle or abuse by spraying.

The Application is made with short and semi-circular movements, never with long movements. The application is made with a steel trowel.

The two layers applied with the fresh on fresh system must be completely smooth and without blemishes. Once the coat dries, sand it with 80 to 120 grit sandpaper, softly, without pressing and without much insistence.

Once the second coat dries, sand it with 80 to 120 grit sandpaper, softly, without pressing and without much insistence.

The objective for sanding is to remove imperfections, not to polish the microconcrete.

Vacuum the dust. Never clean the dust with a damp cloth, on any finishing Microcement or microconcrete.

Finish with 1 coat of STD Sealer and 2 coats of any of our Varnishes.

The last layer should always be done without stops and avoid drying areas in the Aqua Nature applied and continue, because that "joint" of dry Microcement with wet Microcement will be seen.

The last layer must be done quickly and can never stop in the middle and continue later. If the surface is large and dries (faster than our performance to apply), we need more people applying the Aqua Nature.

The only reasons why this coating does not achieve the necessary hardness is because water was added (+ 5% only in cases where the product is drier because the container is open for a long time) or it was not applied with the recommended thickness (1 mm in total, in the two layers applied with the fresh on fresh system).

Microcement Application Guide

AQUA STONE. NATURAL STONE FINISH

Aqua Stone CimentArt is a ready-to-use product for walls, you don't need to mix with another product. We recommend mix it with the electric mixer before starting the application. This product is 100% waterproof, ideal to apply it in areas that receive water.

Apply a single white layer of Aqua Stone, 1.2 to 1.5 mm maximum thickness in zones of 1 to 2 m² maximum, with a steel trowel and start texturing. Texturing should be done immediately after application before Aqua Stone begins to harden.

To do this, we need to use the CimentArt Texture Roller.

Wet the CimentArt Texture Roller with water and pass it over the applied surface from top to down on walls, a distance of 25 to 30 cm maximum. This is the distance that the moistened roller runs, if you continue for a longer distance, the roller can stick.

Wet the CimentArt Texture Roller again with water and continue for another 25 to 30 cm, and so on.

Once the texturing is finished in that area, continue applying the 1.2 to 1.5 mm layer of Aqua Stone for another m² to 2 m² and texturing in the same way.

Aqua Stone is always applied in the same way; it is applied and textured immediately, another area is applied and textured, a wall or floor is never fully applied and then textured.

With Aqua Stone without drying we achieve the effects of natural stone. If Aqua Stone hardens we cannot do the texturing.

The texturing is done without any pressure. If the texture roller sticks to Aqua Stone, wait a few minutes and try again.

Pigmentation process: Once the textured layer of Aqua Stone has completely dried, we wet a sponge trowel with the CimentArt Mixing Resin (with the chosen color) and pigment with the sponge, with short circular movements, the Aqua Stone. Once this application dries, we repeat the operation one or two more times until we like the finish.

Do not do this pigmentation process with the sponge in a uniform way, make areas darker and other areas lighter.

Microcement Application Guide

Be careful that the more layers of pigment with the sponge, the Aqua Stone will have a darker color.

Also, if you spread the CimentArt Mixing Resin a lot with the sponge, the finish color will be lighter. Make a sample (in a part where it is not visible) until you control this process.

If the application will be made on Base Microcement, you do not need to apply Primer CimentArt.

If the application will be made on completely smooth and / or painted walls, apply a coat of Primer CimentArt and then begin the application of Aqua Stone.

The application is made with short and semi-circular movements, never with long movements. The application is made with a steel trowel.

Aqua Stone does not sand, you can use a spatula to remove (or use sandpaper) any larger peaks (especially on floors, before the pigmentation process).

Sealer is not applied on Aqua Stone. Finish the application with 2 coats of any of our Varnishes.

The layer and texturin should always be done without stops and avoid drying areas in the Aqua Stone applied and continue, because that "joint" of dry Microcement with wet Microcement will be seen.

The last layer must be done quickly and can never stop in the middle and continue later. If the surface is large and dries (faster than our performance to apply), we need more people applying the Aqua Stone.

The only reasons why this coating does not achieve the necessary hardness is because water was added (+ 5% only in cases where the product is drier because the container is open for a long time) or it was not applied with the recommended thickness (1,5 mm maximum).

Microcement Application Guide

FINISHING RANGES AND WHERE TO USE EACH MICROCEMENT

	Tradicional Microcement	Aqua Quartz	MicroConcrete	Senses	Nature	Stone	iCem	Metallic	Oxide	Solid Color
Homogeneous or Uniform Color		✓	✓		✓					✓
Marbled or Color Variations	✓			✓		✓	✓	✓	✓	
Smooth finish	✓	✓		✓			✓	✓	✓	✓
Medium Texture Finish			✓							
Rough Texture Finish					✓	✓				
Natural Stone Finish						✓				
Indoors floors	✓	✓	✓	✓	✓		✓	✓	✓	✓
Indoors walls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Showers and Areas that Receive Water		✓	✓	✓	✓	✓				
Exterior Walls	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Exterior Floors		✓	✓	✓	✓					

CIMENTART SEALERS

CimentArt has 3 different water based Sealers:

Microcement Application Guide

STD SEALER:

Clear pore sealer, ready to use. A layer is applied by roller on all the Microcements, once finished, sanded and vacuumed (except on the Aqua Stone and the Metallic Sealer), before the application of the Varnish.

It can also be applied with a sponge, using semicircular movements. Be sure to cover the entire surface, without bubbles, and the entire application of STD Sealer is completely even, with no unsealed areas.

METALLIC SEALER:

Sealer ready to use, 100% waterproof, with metallic or pearly effects. It can be applied on any Microcement or paint with a steel trowel or roller (on Fine Microcement or very smooth walls) or by roller or sponge on other surfaces.

2 coats are applied.

Applied on walls, the Metallic Sealer is finished (it does not need to be applied after the WB Polyurethane Varnish).

If applied on floors, you need to apply on the Metallic Sealer 2 layers of WB Polyurethane Varnish.

Never apply HARD varnish over Metallic Sealer.

ACTIVITY SEALER:

Activity Sealer is a liquid to create oxide effects. This product "burns" the Microcement and creates oxide effects.

It can be applied on any color in the Traditional Microcement. Mix the Activity container (125 ml) with 125 mm of water and then apply with semicircular movements and very thin layers, with a sponge. It can also be applied by spray.

It is always applied on the complete system: Traditional Microcement Base + Traditional Fine Microcement or iCem.

Microcement Application Guide

Never apply it on Fine Microcement or iCem, without having previously applied Base Microcement.

Never apply the Activity on Aqua Microcement (the Activity has to penetrate inside Microcement and the Microcement Aqua does not have any absorption), nor on the Metallic Sealer.

Normally 2 to 3 coats of Activity are applied until the desired finish is achieved. It is important wait to dry completely between layers.

After 24 hours applying the last coat of Activity, with a dry cloth or absorbent paper, you have to rub the entire surface to remove the excess (Activity in excess is always there). Once the excess is removed, apply two coats of Sealer STD. Once the last coat of STD Sealer dries, you can finish with 2 coats of water-based polyurethane varnish.

Some whitish spots may appear when applying the Varnish. Go on, these whitish spots disappear afterward.

CIMENTART VARNISHES

CimentArt offers 2 types of varnishes for the final finish. All our varnishes are 2 components, which must be mixed:

WB POLYURETHANE VARNISH - WATER BASED:

Two-component water-based polyurethane varnish, with 4 different finishes: gloss, satin, matte and extra matte. It is applied with a roller on floors and walls, indoors and outdoors.

It is mixed in these quantities: 5 parts of Comp A (polyurethane varnish) and 1 part of Comp B (polyurethane hardener).

To achieve greater hardness in floors of shops, cafes, offices, etc. You can make a mixture of 4 parts Comp A (polyurethane varnish) and 1 part Comp B (polyurethane hardener).

2 coats are applied with a roller and once finished, clean the roller with soap and water.

Microcement Application Guide

SB HARD VARNISH - SOLVENT BASE:

Bi-component solvent-based polyurethane varnish, with 3 different finishes: gloss, matte and satin. It is applied by roller or spray gun on interior and exterior floors, which need greater resistance due to the high traffic of people, shops, cafes, etc. This varnish can also be applied on walls.

It is mixed in these quantities: 2 parts of Comp A (polyurethane varnish) and 1 part of Comp B (polyurethane hardener).

2 coats are applied with a roller and once finished, clean the roller with thinner.

With any of them, be sure to apply the varnish as evenly as possible with the roller, without bubbles and completely uniform, do not leave areas without varnish.

Always apply 2 coats in thin 0.1mm coats well stretched. Never apply thicker layers of varnish (applied with a thick layer will be softer). One layer is not enough.

A Hard Polyurethane Varnish should never be applied over a water-based varnish. Hard varnish contains solvents and can remove water based varnish. If you want to apply Hard Polyurethane Varnish on a water-based varnish, you must sand the water-based varnish as much as possible to remove it.

RECOMMENDED VARNISHES FOR USE

CimentArt recommends using the following varnishes:

On walls you can use any type of water-based varnish (gloss, satin, matte or extra matte). You can also use Hard varnish.

We know that matte and extra matte finishes are now in fashion. On floors, we always and without exception recommend a gloss varnish finish, either water-based or solvent-based. Any floor with a matte or extra matte finish, be it Microcement, tiles or wood, will always have a worse cleaning.

Microcement Application Guide

MAKE AN NON-SLIP FLOORING

With the CimentArt Microspheres in the Polyurethane Varnish, you can create non-slip pavements, obtaining the C3 Certificate (the highest level of anti-slip).

To create a floor with the highest degree of anti-slip (C3) add to Comp A of any of our Varnishes 200 grams of Microspheres. Then add Comp B, mix the two components, and apply 2 to 3 coats of bi-component Varnish with Microspheres.

To create a floor with a medium degree of anti-slip (C2) add to Comp A of any of our varnishes 100 grams of Microspheres. Then add Comp B, mix the two components, and apply 2 to 3 coats of bi-component Varnish with Microspheres.

To create a floor with a low degree of anti-slip (C1) add to Comp A of any of our Varnishes 50 grams of Microspheres. Then add Comp B, mix the two components, and apply 2 to 3 coats of bi-component Varnish with Microspheres.

These Microspheres create non-slip pavements, but also make cleaning the pavement difficult. When the pavement is smoother, it is easier to clean and when it is rougher, it is more difficult to clean.

REPAIR A MICROCEMENT

If it is a Microcement with superficial scratches and dirt, most of the time, it is enough to do a good deep cleaning with a non-abrasive (non-scratching) scouring pad and with degreasing soap. Then you can apply an acrylic wax.

If the varnish layer is too scratched, you can sand the area until the scratches disappear and varnish again with a small roller (in the sanded area) if it is a small area and it has been less than 6 months since the application ended). If more than 6 months, you must apply the varnish throughout the room, so that no differences are noticed.

If it is to cover a small blow or a hole in the wall (for example the hole to place a picture), etc., apply Microcement in the hole, sand it and apply a Sealer and Varnish with a brush.

These small repairs can be noticed.

Microcement Application Guide

If the repair is large, (for example: an electrical chase on the wall, to put a socket or the Microcement is very scratched and bumps) you have to sand the entire surface with 40 grit, apply Primer and apply 2 to 3 coats of the Finishing Microcement throughout the area, until everything is completely covered, finishing with layers of Sealer and Polyurethane Varnish. You do not need to put the Fiberglass Mesh and apply the Base Microcement.

APPEARANCE OF CRACKS IN A FINISHED MICROCEMENT

Cracks may appear in a finished Microcement. It is always because the Surface under the Microcement has cracked (in the case that the support is made of cement, concrete or self-leveling cement) or the tiles have come off (in the case of tiles, marble, etc.). There are no exceptions to this.

Sometimes a month of drying a layer of cement or self-leveling cement is not enough and can crack after this time, due to temperature changes or construction movements.

Also sometimes the mixes of cement and sand with water are not always the same, some have more cement or water than others. This bonding of different cement mixes can be problematic and facilitate cracking over time. The union of dry cements with fresh cements also tends to crack.

The solution is to remove the Microcement (about 10-15 cm on each side of the fissure) and then makes some horizontal cuts to the fissure, every 30 cm, with bone or infinity shape (∞) and place iron clips. Then apply Primer CimentArt in the cut area and fill with Epox Joints CimentArt.

Then you can apply the Microcement throughout the room. If you apply the Microcement only the repaired area you will notice a lot the difference with the rest of the room.

Reminder: the CimentArt Microcement never cracks, if it cracks it is because the support where it was applied has cracked, this is always and without exceptions.

APPLY MICROCEMENT ON MICROCEMENT

Microcement can be applied over an old Microcement.

Microcement Application Guide

If the old Microcement is in good hard condition, sand it well with 40 grit sandpaper and apply Primer CimentArt and then apply the finishing Microcement coats. You do not need to install a new Fiberglass Mesh and Microcement Base.

If the old Microcement is not in good condition, or is peeling off, remove it and start applying the new Microcement with all the steps.

MICROCEMENT APPLICATION TOOLS

The tools to apply Microcemento are:

- Protective tape
- Scissors and / or cutter.
- Spatulas.
- Steel trowel for all Microcements, except Traditional Fine.
- Plastic trowel, for Traditional Fine Microcement.
- CimentArt texture roller for Aqua Stone
- Esponja o llana de esponja, para el Oxido y Aqua Stone. También se puede usar para aplicar el Sellador Metallic.
- Sponge or sponge trowel, for Oxide and Aqua Stone. It can also be used to apply Metallic Sealer.
- Brushes and microfiber roller (short hair), for Primer, Sealers and Varnishes.
- Paint tray.
- Electric mixer.
- Measuring glass or digital scale.
- Electric sander and vacuum cleaner.
- Lija 40 for all Base Microcements.
- Sandpaper between 100 to 200, for the rest of Microcements.
- Scourers to clean the tool.

All Base Microcements are applied with a steel trowel. The best trowels to apply Microcemen have round corners, like stucco.

The traditional 2 component Fine Micro Cement is always applied with a Plastic Trowel. These plastic trowels are difficult to buy. Tile joint trowels or PVC trowels are not good to apply.

We have these trowels for sale and their recharges to replace.

Microcement Application Guide

The plastic trowels wear out as the application progresses. If some kind of plastic "threads" start to appear or scratch the Fine Microcement when applying, lightly sand the plastic edges with 150 sandpaper and you can continue using.

The rest of the finishing Microcements are applied with the steel trowel, (with rounded edges). You can also use the plastic trowel, but it will wear out quickly.

There are different thicknesses on the steel blades. They range from 0.2mm to 2mm. For finishing Microcements, with more thickness in the trowel blade, you can make more burnt effects on the Microcements.

With less thickness on the trowel blade, the finish will be more uniform.

We recommend for steel base Microcements with thicker blades (from 1 to 2 mm) and for the others finishing Microcements, with softer blades (from 0.3 mm to 0.7 mm).

To apply Microconcrete we recommend a 1 mm thick blade.

The rollers must be microfiber or short hair. They achieve a better finish and have less material expense than a roller with long hair. Remove loose "hairs" on the roller before you start, as these stick to the sealant or varnish.

All the trowels are cleaned with water and scourer.

Cleaning the used rollers with Primer or Sealer is done with water.

To clean the rollers used with the water-based Varnish, Metallic Sealer or the Activity is always done with water and hand soap.

To clean the used rollers with HARD varnish, it is always done with solvent.

BASIC RULES

There are some general rules to always comply with in CimentArt application systems:

Microcement Application Guide

In each Microcement application, the protection tape must be placed and removed in each layer, whenever possible. Failure to do so will be a delay and a loss of quality in the corners where it is placed.

Removing the tape with dry Microcement is very difficult. This rule also applies to polyurethane varnishes, as the application progresses, remove the tape at the same time that you progress in the application and apply new tape for the next layer.

The main mistake in not obtaining a Microcement flooring with maximum hardness is not applying the layers with the recommended thickness, in each product. Whenever we hear about a pavement it was not hard, it is for this reason. The Microcement layers must be applied by pressing with the trowel. Base Konkret is the only base microcement recommended for floors

Microcement joints with other materials (for example, the Microcement wall joint with a bathtub), always place silicone. As they are different materials, temperature changes cause them to dilate differently and can crack through that joint.

Microcement cannot be applied if there is humidity, from recently applied cements or plasters or capillary humidity. Moisture must be treated first before applying any Microcement.

DRYING TIME

The drying time will depend on the temperature, ventilation and humidity in the room.

Never place a direct heater on the Microcement or varnish and always wait for drying with natural ventilation. You can place a fan in the center of the room.

Never speed up the drying process by other means. In winter you can place a dehumidifier to reduce humidity in the environment.

APPLICATION TEMPERATURES

With extreme temperatures of heat, wind, drafts or very dry supports there will be a faster drying of products, with a reduction in the time of application.

Microcement Application Guide

Therefore do not apply at temperatures below 5°C or above 35°C. Do not apply with risk of frost or rainy weather. Do not apply the product if there is humidity in the environment greater than 50% or there is strong wind.

PRECAUTIONS

OTHERS WORKS AFTER APPLIED AND FINISHED MICROCEMENT

Sometimes, Microcement professionals have a very short execution time. The Microcement has a series of steps and drying times that cannot be accelerated or shortened, let alone remove layers, to shorten the work time.

Microcemento is always the last job in a home renovation or construction, except for plumbers or paint touch-ups. After the Microcement the furniture is placed.

Once the application is finished, it must be allowed to dry completely for at least 4 days, to carry out other works such as painting touches, placing skirting boards, etc. and 7 days before moistening or cleaning with water.

It is not possible to carry out masonry, aluminum work, place air conditioning, place scaffolding, welding work, place unprotected stairs, drag tools or objects, etc.

The result will always be disastrous. These works must be completed before the Microcement application.

There is a great lack of knowledge about our product (many people think that it is an unbreakable material or has the hardness of a diamond). Add that if some work must be done to place the furniture, lamps, curtains, etc. care must be taken and double cardboard must be placed on the pavement.

If you place ladders or scaffolds, the double cardboard is not enough, you have to place flat woods to support the legs of the scaffold or ladder.

You have to show these data to customers and in our experience it knows it's not always like that and in the end, in some cases the result is bumps and scratches on the pavements. The "fun" of it is that sometimes they "blame" the damage to the lack of hardness in the Microcement, or the Microcement applicator, when these situations can always be avoided.

Microcement Application Guide

Always and without exceptions, once you have finished the Microcement application, you must deliver or mail the document to the customer: PRECAUTIONS AND MAINTENANCE OF MICROCEMENT CIMENTART. This document is visible and is downloadable on the web www.grupocimentart.com.

FURNITURE

Is very important a good furniture selection to be use on the Microcement floor.

Never place furniture with legs under the following characteristics: pointed, rounded, with rigid plastic protectors, etc... because it concentrates the totality of the weight in only one point and it can mark the Microcement.

The legs of the chairs, tables or furniture must have a wide and straight termination and must always have felt protectors.

All the rigid plastic protectors on the leg of the furniture must be remove and use felt protectors in their place.

Completely avoid dragging the furniture or the household appliances through a Microcement floor.

They must put plastic protectors that cover the entire movement of chairs or tables with wheels or office chairs.

There is more information in the document PRECAUTIONS AND MAINTENANCE OF MICROCEMENT CIMENTART on the web www.grupocimentart.com.

Microcement Application Guide

Creator's note: I have condensed in this manual and summarized part of my experience and tests for 12 years, researching, developing formulas, manufacturing and applying Microcement.

I want to thank all CimentArt's staff, CimentArt Distributors, many Microcement Professionals, raw materials suppliers and other brands, who have contributed their knowledge and experience to obtain all this data.

I wish you could use it, Juan Aranda.

CIMENTART MICROCEMENT SL. Our systems and work methods base on the investigations undertaken and years of expertise. We guaranty that our products are manufacture, package and label in accordance with the rule ISO 9001:2015.

Not liability shall be assume if the result is affect by factors out of our control.

The final user must test that the provided product fulfills the necessities, by doing a prior test on each need it case

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The following additions to this technical sheet cancel the previous publications.

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