Microcement Wall and Shower

Instructions
Technical Data

SAFETY FIRST KEEP OUT OF REACH OF CHILDREN. AVOID EYE CONTACT. SEEK IMMEDIATE MEDICAL ATTENTION IF INGESTED OR EXPOSED TO EYES. AVOID PROLONGED EXPOSURE TO SKIN. WEAR SAFETY GOGGLES AND GLOVES WHEN WORKING WITH PLASTER. WEAR OSHA APPROVED RESPIRATOR WHEN WORKING WITH DRY MIXES OR WHEN SANDING PLASTER. FOR MSDS (MATERIAL SAFETY DATA SHEET), VISIT WWW.5STARFINISHES.CA
GENERAL

Our Microcement Wall plaster is developed with the latest in polymer admixture technologies all blended with high quality white cement, Pozzolan, Microfiber technologies, marble flour, Hydrophobic additives and Polymers all with graded silicas. This line of plaster comes in a white basecoat and a fine and x-fine topcoat grade that are useful in creating polished or medium texture finishes. These also come in a light gray meant to mimic the natural look of light concrete, and a white base that can be colored with our powder tints.

This line of plaster is more easy to work with and is applied more like our venetian plasters and does not have a liquid or more fluid consistency. In order to achieve this the plaster psi strength is decreased and should not be used on floors or countertops etc. Our Microcement wall can be used on interior walls and exterior walls and especially shower stalls or ceilings where a more workable plaster is required. Microcement should be applied in a minimum of 2 coats over our interior or exterior supplied quartz stone primer, extreme primer plus, or epoxy primers for exteriors etc. This product is strong, highly modified, and comes in a dry bag mix that does not require any additives other than water. Do not use on horizontal surfaces, only for vertical areas.

Recommended for areas that are stable, sound and not flexible with moving joints.

CAUTION: Kerdi Foam board is not compatible with our Microcement system. These boards are generally too flexible for larger walls and have limited impact resistance for thin veneer coatings. We recommend Densglass, Blue Aqua Board, and Hardi Backer board as the three best options for backing. We recommend the use of Ardex 8 + 9 waterproofing due to its strength and crack prevention and limited risk of delamination. Always prime your walls with our leplex primer prior to installing Ardex 8 + 9 to ensure a clean cohesive bond without any dust acting as a bond breaker. DO NOT use kerdi sheet membranes on floors or walls as they delaminate easily and have bubbles and other risks that are not compatible with our Microcement System.

Specifically designed and recommended for commercial and residential shower walls, ceilings,

fireplaces, backsplashes etc

COVERAGE

Depending on surface conditions, a 20 kg of Basecoat will cover 120-200 sq ft one coat, and 20 Kg of Topcoat Fine will cover 200-300 sq ft one coat. Topcoat X-Fine will cover 250-350 sq ft one coat.

APPLICATION

Use our ultra flexible stainless-steel trowel to apply the basecoat product and our small or medium plastic burnishing plaster trowels, or Bianko polishing trowels for topcoats.
This product should be mixed to a consistency of Venetian Plaster.

SUITABLE APPLICABLE SURFACES

Apply Microcement over substrates that are clean, cohesive, free of contamination and as follows:

Gypsum Drywall: (Interiors Only) Drywall should be taped and smoothed to a level 4 finish. Use our Quartz primer watered down 30% over new drywall to help seal and consolidate the surface. Then apply a second layer of Quartz primer without adding any extra water to provide a surface that will provide a permanent bond to our plasters and perfect junction between drywall and plaster. Standard PVA primer can also be used if a painting company is coming in before you. You can apply only one coat of quartz primer. Let dry at least 1 hour prior to application or until dry to the touch.

Existing painted substrates: Always prime first with a recommended primer. If the surface is oil based or glossy, use a high adherence primer for bonding to difficult surfaces. Then apply one coat of our quartz primer prior to application and let dry at least 1 hour or until dry to touch.

Existing texture: It is recommended to remove the texture via sanding or grinding, or to cover it up first with drywall compound etc to ensure a smooth and problem free substrate. Then prime with our quartz primer with 30% water, and one coat of quartz without adding extra water. Under certain circumstances you could cover existing texture with Microcement as it can build up when mixed to a thicker consistency.

Shower over cement board: Apply one coat of our quartz primer with 50-100% water, then one coat of the same primer undiluted. Apply all external corner bead, either using EIFS plastic corners, found at stucco yards, with or without fiberglass reinforcing attached to the edges, or metal drywall corners. It is not recommended to use paper faced angles. You can screw and fix the angles properly at this point using cement board screws specific for this purpose. Apply primer to all angles before applying your first coat of Microcement. Apply two coats of Microcement ensuring a smooth and even finish. Once dry apply two coats plus mesh over any transition areas of Ardex 8 + 9 waterproofing.

Many contractors have the entire area finished by a drywaller using Proset 60 and
metal externals etc and bring the finish to a paint ready surface prior to our arrival. We then prime the walls with our Leplex concrete binding adhesive and then apply the ardex waterproofing, mesh and tape etc.

If there are no areas requiring angles etc and they are flat walls, you can simply waterproof with Ardex 8 + 9 first and then apply Microcement. We do not recommend Redguard or any roll on products that do not contain a cementitious component.

You can also decide to simply mesh over all edges with stucco adhesive mesh tape or alkaline eifs mesh to form stronger rounded edges that are flowing and hand made.

Interior tiles on walls: Check all tiles are affixed to the substrate and there are no loose, popped, or broken tiles. If there is any chance the tiles are not properly installed, then you must remove the tiles and should not proceed as the Microcement will use these as its substrate. Clean and scrub the tiles and ensure they are very clean. Then apply our Extreme primer plus, Mapei eco-prim or any other primer designed for tile over tile priming. Please check and test your primer and ensure it is strong enough for your application.

Exterior walls: If the surface is previously painted, acrylic stucco, California stucco etc, then check the integrity of the surface, pressure wash and scrape clean any loose areas. If there is mold or mildew remove with appropriate cleaners and apply a stain blocking primer. Then apply one coat of our exterior quartz primer coarse or fine prior to applying Microcement. If the surface is new brown coat, ensure it has dried for at least 30 days, then apply one coat of our exterior fine quartz primer diluted, and then one coat of undiluted primer prior to applying Microcement.

Fireplace: We recommend for all zero clearance fireplaces to use drywall and finish with proset 60 for all layers except the last layer which can be all purpose compound. For non zero clearance only use hardi backer board or densguard around the opening and do not use Durock cement board as it can spider crack and is not a good substrate. Match the seams up nicely and finish all areas with only metal beads, and tape in all joints and use Proset 60 for all basecoats and finish with one layer of all purpose compound. Then apply one layer of our Quartz primer diluted with 50% water, and then apply one layer full strength of Quartz primer. Apply our 9 inch wide adhesive mesh around entire opening covering all joints where cement board meets drywall and apply one layer of Microcement wall and Shower Basecoat. Apply a second layer of Basecoat the following day. Proceed with two more layers of Microcement fine, x-fine or one layer of fine followed by one layer of Synergy. Seal with Stain shield, Poly seal, or Poly seal + Poly WB.

NOTE: Please always consider if the use of a moisture epoxy barrier is required, as moisture can cause delamination, blistering, discolored wet areas or general failure. In many cases it is highly advised to apply epoxy vapour membranes to the exterior concrete, concrete board, plywood etc to ensure no rising damp occurs on your exterior vertical surfaces.

PRODUCT PREPARATION All surfaces must have even absorption rates for the final appearance to look uniform. It is crucial to ensure the correct primer is used and to not try and cover over drywall or cement stucco with our product that has not been primed.

Never use more than one dry mix for an entire wall surface as the color for the mix will not match perfectly. Please add 1 part water to 1 part powder tint first to hydrate the tint fully prior to adding into the Microcement. Always use the same amount of water for each mix of your topcoat of plaster. Never mix water into the plaster if its thicker during application as this will cause the plaster to change color due to a higher hydration rate. Doing this will cause the material to dry to a different color. You must mix only what is needed and mix the entire material using some extra water at the start to ensure the mix will be wet enough as it starts to set later in the bucket. Never spray water over the setting product as your working on the wall, as this also will cause staining and lighter and darker areas that are inconsistent with the natural look of the plaster. It is not bad practice to spray with water however, and this technique can be used if the sample board reflects this finish prior to install.

MIXING

Mix one bag of plaster with around 25-30% water, mixing the product thicker to begin, and adding water until you reach the desired consistency. The product should hang on your trowel but still easily spread on your base coat applications. The topcoats of plaster can be mixed thinner to allow for easier application, especially the topcoat x-fine. Do not mix topcoats too thin as this will not cover over the basecoat properly.

PRODUCT APPLICATION

First Coat of Basecoat: It is best to try and keep the plaster thin in most instances, but there are many times where you may want the first coat rough, that will help create a certain look on a second coat, or to cover rougher surfaces, tiles, or to embed fiberglass mesh. Use a trowel for application. The product can build to higher thicknesses when mixed thicker and can easily cover mesh and corner angles etc.

Second Coat of Basecoat: Apply the plaster with a flexible venetian trowel and thick enough to cover over all imperfections forming a smooth base layer for your topcoats to go over. You can scrape the basecoat down if there are raised edges etc, and using our flexible 3mm basecoat trowel will help laying these first

two coats down. A stiff trowel leaves lines and does not follow the imperfections making it difficult to make a smooth second coat. This layer is the most important layer for your entire system.

The second layer of Basecoat should be mixed a little thinner, and then applied over the entire shower wall leaving excess on the wall. Then use the plastic burnishing trowel to start closing the pore, pinholes, and smoothing the entire wall out to create a perfectly smooth and closed basecoat. I tend to spend a lot of time on the second basecoat as this is the most important layer to get all your pores and pinholes closed on. If you close the wall off and burnish it with the plastic trowel, the topcoats will be extremely easy to apply and you wont have many pinholes to close in your final layers.

Third Coat Topcoat Fine or X-Fine; Apply the third coat working in small sections, either right to left for left handed people, or left to right for right handed, so that you are always working into a wet edge. This layer should be tinted to your desired color and can be Fine or X-fine. If your Basecoat is not as smooth as you would like, it may make sense to use the Fine for your third layer and finally use the X-fine for your last layer. You can also choose to use the Fine as a topcoat or X-fine for both topcoat layers. This layer should be applied again with the flexible 3 mm trowel, and will be worked into the basecoat filling the pores and creating a more smooth colored surface. Finish each wall by smoothing and burnishing with the plastic burnishing trowel to close all pores and pinholes and create a perfect surface before moving on to the next wall surface.

Fourth Coat Fine or X-Fine: Apply the plaster as per the system developed in your sample board, and as the plaster dries, you can lightly sponge it, compress with the edge of the plaster trowel, and or use the face of the trowel for a different style of compression, creating more higher and lower spots of varying colors. Be careful using the face of the trowel as darkening of the plaster occurs very quickly.
Microcement is a natural plaster and will dry with subtle light and dark sections depending on the application technique. You should use an Inox 5mm or 6mm burnishing trowel for this last application. If the product is white, it is best to lightly apply the product with the steel trowel, and then compress and smooth with one of our Plastic trowels or a plastic stucco trowel found at stucco suppliers.
My favorite application tool now is to simply use the plastic burnishing trowel for the application and burnishing on the last coat, as I find it provides the best finish possible. A lot of time should be spent on this last layer, and like tadelakt, you should slowly burnish, close and polish to ensure no pin holes are present to achieve a perfect water tight finish. Continue to burnish the wall as it dries to get a more compact and polished surface.

Polished finish: On the last coat as the plaster dries to a clay like dryness, burnish plaster with edge of trowel obtaining smooth marble like finish.
Shower over cement board: Apply at least two coats of Basecoat and two coats of Topcoat Microcement over the Ardex 8 + 9 waterproofing, to the desired look as per your sample board allowing dry time between each coat.

Over tiles: Apply one coat of Microcement Basecoat so that it covers the tile grout lines but is not excessive in thickness. This coat can embed fiberglass mesh on horizontal or vertical areas. We recommend our adhesive EIFS alkaline fiberglass mesh. It is important to have the mesh covered enough so that there are no bubbles sticking through the base coat. If bubbles do occur, you can scrape them off before the second coat, but its better to have a perfect base coat. It is not as important to embed mesh on vertical surfaces but horizontal surfaces can benefit from mesh if its installed properly and does not act as a bond breaker. If you have large windows, or areas that may flex around the shower or tub base etc, always install mesh in these areas to try and minimise cracking due to substrate movement. You can also apply mesh twice and do three basecoat layers if you prefer with mesh between the first and second layer.

Apply a second layer of basecoat and ensure you can no longer see any joint lines from the tiles etc and the base is one uniform looking floor. A third layer may be required to achieve a perfect finish prior to your topcoats.

Apply 2 more layers of Topcoat over the basecoat tinted to a color from our chart . You can apply the

product thin, or thicker, and create texture or polish it with the trowel.

TOP COATS: The dried finish can be sealed only with topical sealers, either one or two component. We recommend using our two-component water-based polyurethane, or a single coat of our high wear polyurethane. If the area in question is strictly a decorative interior wall, then wax, concrete stains or glaze sealers can be an option.

Exterior Surfaces: 1 part water to 1 part Polyseal in 1 layer, followed by 1 layer of Poly seal Undiluted allowing the Polyseal to dry to a clear film before overcoating. All Polyseal layers can be applied the same day. Do not apply Polyseal while still white in areas as these will remain cloudy after drying out. Please allow this to completely dry and do not seal until the next day as this product must cross link over night. Apply 1 layer of Poly WB the same day once the Poly seal has dried and then allow to dry over night. Apply one layer of High wear 90s or a second coat of Poly WB semi gloss water based polyurethane. Using the Poly wb under the High wear greatly reduces the chance of color enhancement compared to only using poly seal.

Interior Walls or Backsplash: Interior walls you can apply only poly seal in one or two layers, or for more
protection you can apply two layers of poly seal and two layers of poly wb. Applying the poly seal before the Poly Wb reduces any color enhancing of the Poly wb. For the more washable backsplash you can apply one layer poly seal diluted one to one with water, followed by 1 layer of poly seal undiluted, and one layer of poly wb. The the following day apply Hi wear 90s after allowing the poly wb to dry over night.

Commercial/Residential Showers: Apply one layer of poly seal diluted one to one with water, then 1 more layer of Poly seal undiluted allowing it to dry between each coat and become clear. Allow Poly seal to dry at least 30 min to an hour and apply one layer of Poly wb semi gloss. Allow these sealers to dry overnight and then apply one layer if Hi-wear oil based sealer over entire surface making sure to apply with 10mm no shed roller and working it into every area of the wall and any joints where it meets tiles etc. You can clean the hi wear off surfaces while still wet with Acetone. Do not leave it on any surface as it will not come off once dry. We recommend dry rolling all areas twice with new roller sleeves to remove any excess sealer especially on top of niches and windows etc where drips will begin to form. Please ensure that the tape is all removed prior to sealing and retaped back from any plaster for protection of other surfaces and allow the poly seal and poly wb to layer over any tiles slightly to fully seal all raw edges etc. The Hi wear should also be brought down over tiles and marble. If you do not remove masking the hi wear will color enhance all edges where the presealers did not get to previously. Never apply hi wear over masking tape as it will not remove.
Interior walls and Fireplaces: These areas can be sealed with Polyseal only in one or more layers. No dilution Is required.

NOTE: For all areas in question if you are using the Hi-wear product as your last layer the best option possible is applying poly seal 1-1, then undiluted, and one more layer of poly seal. Allow to dry overnight and then apply one layer of Poly WB and allow to cure fully until the next day. Overcoat with Hi wear the following day ensuring it has been less than 24 hrs which is the recommended window for overcoating Poly wb before it requires sanding for adhesion.

Waterbased concrete stain: You can also choose to apply a product called H & C Colortop sold by Sherwin Williams. This stain can be matched to any of their paint colors and can be applied to the Microcement as a decorative color layer. It is suggested to sponge the color on thinly to ensure the surface remains mottled and has a natural look. This will replace the 1-1 layer of Polyseal, but undiluted Polyseal should be used over the stain. For showers simply replace the first diluted of poly seal with the stain and then apply 3 layers of Poly seal followed by the hi wear layer.

Extra Info: Polyseal can be coated over anytime and can be applied prior to your topcoats without worrying about when to apply the next layer. The Poly WB however has a recoat window max of 24 hours, so it would be advisable to coat the Microcement in the afternoon and then the following morning so you stay well within the range. If the first layer of Poly WB has dried longer than 24 hours, you must

abrade and sand the surface to create a profile for the new sealer to adhere. The most natural look is achieved with Polyseal and Poly WB which will not darken the color of the Microcement to any major extent.

COLORANTS: Plaster can be tinted with our line of dry pigments. Multiple colors can be applied simultaneously for more creative finishes. This product is not compatible with universal tints and will destroy them and create hard lumps of colors in your finished product.
DELIVERY, STORAGE AND HANDLING: Keep materials away from direct sunlight. Store them in original, unopened packages in a dry, dark location at temperatures between 45 and 95 degrees F. Always wear OSHA-compliant eye protection. Wear a respirator to mix, sand or scrape the product. Work only in well ventilated areas. Avoid prolonged skin contact. Avoid working with the material in temperatures below 41 degrees F or above 96 degrees F. Keep away from children. Do not use products older than 3 years. Always test an older product before use to ensure its quality. Read the entire MSDS and product labels.

MIXING: Our dry mix plaster can be mixed to different consistencies depending on the finish you are applying. In the case of basecoat finishes, you would want the mix to be more stiff and with smooth polished finishes the mix should be more wet and thin. Start slow and never add more water than you need at the start, as the mix can become too wet. When using our dry pigments first add them to 1/3 of your mix water and mix with a drill for 1 minute to ensure it is mixed entirely. It is possible to strain the water through a fabric paint strainer as well prior to adding plaster to the water.

If adding all the dry pigment first to the plaster in the case of very large applications, then it is best to mix the product very well and do some tests first to see if the pigment is fully mixed or not.

When mixing, always have some water in the bottom of the bucket first, as this helps in mixing and not getting dry plaster stuck to the bottom of the bucket. It is best to mix the plaster in two buckets broken up first and then combine after mixing and do a final mix so the color is mixed thoroughly. You should use a high speed drill, such as a Makita hammer drill that has a max RPM of 2000. If you use a mixing spade to get the initial mix together, then always use a higher rpm hammer drill after as this faster speeds allow for a vortex to be created and ensures a uniform mix. The plaster will not mix entirely without a higher RPM drill.

POT LIFE: This product will set and has a pot life of roughly 60-180 minutes depending on water temperature, exterior conditions etc.
To order materials, find more tech information and install ideas please visit WWW.5STARFINISHES.CA.
5 Star Finishes Ltd 200 4170 Still Creek Dr, Burnaby, BC V5C6C6
778 682 4287 info@5starfinishes.ca
Made in Canada

To order materials, find more tech information and install ideas please visit WWW.5STARFINISHES.CA.
5 Star Finishes Ltd 200 4170 Still Creek Dr, Burnaby, BC V5C6C6
778 682 4287 info@5starfinishes.ca
Made in Canada

©MMXIX, 5 Star Finishes Ltd™