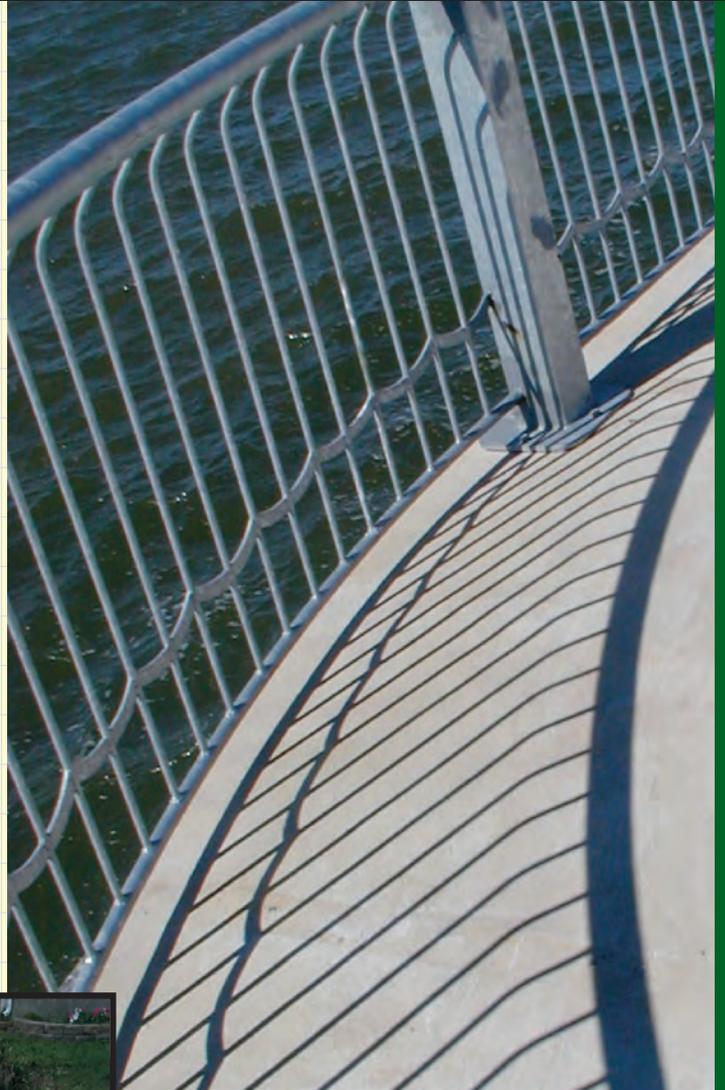


**INSTALLATION MANUAL**

# **MG-KRETE™**

**Compounding the Strength of Concrete**



**IMCO**  
TECHNOLOGIES INC.®

**1-888-818-4626**

**IN-DEPTH GUIDE TO USING MG-KRETE™**

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# WHAT IS MG-KRETE™?

MG-KRETE™ is a cost effective, two component, high early strength, non-shrinking repair mortar. MG-KRETE™ not only repairs damaged concrete but actually restores structural integrity back into the repaired concrete structure.

Once installed MG-KRETE™ provides a much stronger non porous surface that is considerably tougher and more resilient to environmental conditions. It is further resistant to oils, gasoline, salts and UV radiation.

The cost of removing and replacing concrete is substantial and very often inconvenient. MG-KRETE™ has become the most cost effective alternative available.

MG-KRETE™ will aggressively bond to most construction materials however its' intended design is specific to concrete repair.



## Uses for MG-KRETE™

Whether repairing a bridge deck, realigning an airport runway or doing a simple sidewalk overlay

**MG-KRETE™ is the solution.**

## How does MG-KRETE™ Work?

MG-KRETE™ comes in two parts - Part A which is a 50lb. bag of dry mixture and Part B which is a one gallon container of liquid activator.

When the two are mixed together the MG-KRETE™ undergoes an exothermic reaction with the end result is a self priming tenacious concrete repair.

As a result of this process MG-KRETE™ will give off ammonia gas as a by product. These ammonia emissions are greater in high temperature environments and thicker applications. Adequate ventilation is most important when working indoors.

**MG-KRETE™ IS NOT RECOMMENDED FOR RESIDENTIAL INDOOR USE.**

Ask about MG KRETE™ Interior for indoor use

As we are all aware, concrete mixes with water and cures by evaporation. MG-KRETE™ on the other hand **does not** mix with water and cures chemically. It is very important to remember that you **NEVER ADD WATER TO MG-KRETE™**. Water will only reduce the integrity of the repair and may cause it to fail.



### Set Times

On its own MG-KRETE™ will cure effectively in temperatures of 10 degrees Celsius / 50 degrees Fahrenheit or above. Once MG-KRETE™ is mixed it will immediately initiate a cure. When MG-KRETE™ is placed ½" thick at around 20 degrees Celsius / 68 degrees Fahrenheit it will set up in roughly 15 minutes (this is dependent upon other environmental conditions for example sunlight or wind). If the installer requires more working time we suggest using a High Temperature Retarder ( see section on High Temperature Retarder - Page 10 ) or if the installer needs to have MG-KRETE™ set up faster you can use a Low Temperature Accelerator ( see section on Low Temperature Accelerator - Page 8). MG-KRETE™ can be mixed to set up between 10 minutes to an hour depending on the application.

It is important to note that MG-KRETE™ will cure faster on thicker applications than it will on thin applications. The larger the mass the more heat generated by the product and the quicker the cure. Low Temperature Accelerator is very necessary in lower temperatures to ensure that the MG-KRETE™ reaches its expected strengths. It is very important to remove any frost that might be in your substrate with a tiger torch or wheat burner MG-KRETE™ needs to set up within 30 minutes in cold weather applications.

### Bonding Strengths and Capabilities

Once MG-KRETE™ is placed the mix begins to absorb into the substrate causing an intense chemical and mechanical bond with every square inch of concrete repaired ( over 77.2 mPa ).

MG-KRETE™ is very rigid on cure and like concrete does not have much flexural strength. On a full cure it will reach strengths of 11,194 p.s.i... MG-KRETE™ is non porous and above average in its resistance to salts, oils, gas, jet fuels, water and UV radiation.

If using the product in areas where MG-KRETE™ will be in contact with different chemicals contact IMCO Head Office for advise on MG-KRETE™ capabilities with these chemicals. Due to the high strength of MG-KRETE™ it is also highly resilient to mechanical abrasion.

MG-KRETE™ was not designed to repair cracks but is more effective in the repair of large cracks and damaged expansion joints as explained in the Installations Section of this manual. When installed properly MG-KRETE™ will not delaminate from concrete.



## Color

When MG-KRETE™ is initially installed it is darkish brown in color. It will immediately begin to change and depending on the amount of sunlight and moisture exposure will change to a traditional concrete color. To accelerate this process power washing is recommended.

**MG-KRETE™ WILL DRY TO A CONSISTENT COLOR THAT MATCHES CONCRETE AFTER FULL CURE.**

## Chemical Resistance of MG-KRETE™

MG-KRETE™ is an extremely tough product however it is not resistant to highly acidic environments. An acid resistant top coat must be used in these areas. IMCO Technologies Inc. has an extensive product line with material available to protect floors from extreme acidic conditions ( See section on Over coating MG-KRETE™ - See page 17 )

## Concrete Movement and MG-KRETE™

MG-KRETE™ expands and contracts at the same rate as concrete. It is important to understand that MG-KRETE™ is only as stable as the substrate beneath it. Never use MG-KRETE™ to attach two or more slabs. Their independent movement will damage the MG-KRETE™. All existing expansion joints must be replaced (e.g.) Runway - if the original expansion joint was ½ then that width of expansion joint must be returned following the MG-KRETE™ repair.

## Cutting Drilling and Grinding MG-KRETE™

Once cured MG-KRETE™ can be cut, drilled or ground the same as concrete. Depending on the temperature this can normally be done in one hour from when MG-KRETE™ was installed. Many applications will involve the repair of expansion joints before a skim coat is applied. One of the ways to accomplish this is to fill the entire joint, let it cure and re-cut the joint with a concrete saw. It is extremely important to cut deep enough to ensure complete separation of the slabs. If MG-KRETE™ bonds beneath grade movement will still cause the repair to fail.

Another effective way to accomplish the same results is by using Coroplast. Place the Coroplast the same thickness as the present expansion joint prior to making any repairs. The Coroplast should be pushed into the expansion joint as deep as possible so that no bonding occurs beneath grade. The installer would then place MG-KRETE™ up to the Coroplast and as the MG-KRETE™ is headed into its cure the Coroplast would be removed.



*Always replace the expansion joint with the same thickness as the original. MG-KRETE™ will expand and contract the same as concrete and if the expansion joint is not sufficient it will likely destroy the repair*

**For Technical Assistance  
Call: 1-888-818-4626**

# INSTALLATION OF MG-KRETE™



## Installation of MG-KRETE™

MG-KRETE™ finishes much different than concrete. An experienced concrete installer will only require minimal MG-KRETE™ experience to readjust their thinking and successfully complete a concrete repair using the MG-KRETE™ product. The consistency of your mix plays an important role in how the MG-KRETE™ finishes. The benefits of MG-KRETE™ are the ability to slow or accelerate the cure time. You can adjust the set time during the mix phase with the use of Low Temperature Accelerator or High Temperature Retarder. (See Pages 8 - 10) **MG-KRETE™ will tend to stick to the trowel if not enough pressure is applied.** Thicker mixes are easier to get a smooth finish but are difficult to spread to thinner than 1/2". When doing an overlay a wetter mix is more effective. With a little experience and by learning some simple techniques MG-KRETE™ will become the product of choice for all your damaged concrete repairs.



*The warmer the substrate is and the thicker the MG-KRETE™ is, the faster it will cure.*

## Temperature

You must always consider temperature when using MG-KRETE™. Ambient temperature is important but so is the temperature of all materials and surfaces involved in the repair. The temperature of the substrate is the most important factor on how quickly MG-KRETE™ will cure. Quite often the air temperature has warmed up but the concrete being repaired is extremely cold. In this situation the installer may want to add some Low Temperature Accelerator to the mix to assist with the curing process. Consideration must also be taken on the temperature of the MG-KRETE™ Part A and B, the tools used for the install, air temperature and whether the project is in the direct sunlight or shade. When mixing heated product you will be contributing to a faster cure. In high temperatures make every attempt at keeping the product out of the direct sunlight if possible. Regardless the cure can be regulated with the use of Low and High Temperature additives



# COLD WEATHER INSTALLATIONS

## Low Temperature Accelerator

The Low Temperature Accelerator must be used below 10°C / 50°F to ensure a proper cure.

When the temperature of the substrate being repaired is below 10°C / 50°F Low Temperature Accelerator needs to be added to the MG-KRETE™ mix so that it cures within 20-30 min..... To know if the MG-KRETE™ is cured enough you should be able to touch it without making an impression. Use the following tables as guidelines, and adjust your Low Temperature Accelerator amounts based on site conditions.

Remember that thicker pours will require less Low Temperature Accelerator and thin overlays will require more Low Temperature Accelerator in the same working conditions. Consider all the factors involved in the temperature, especially the temperature of the substrate. Your first mix will give you a good indication of how much more or less you should add to the next mix based on how quickly it cures.

**Remember, do not add water.**

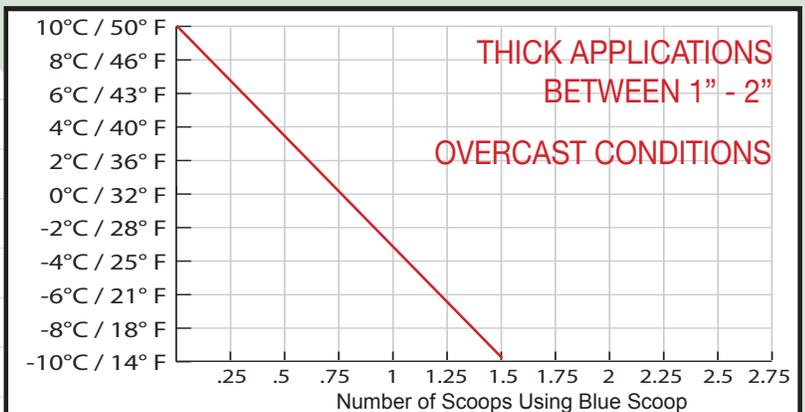
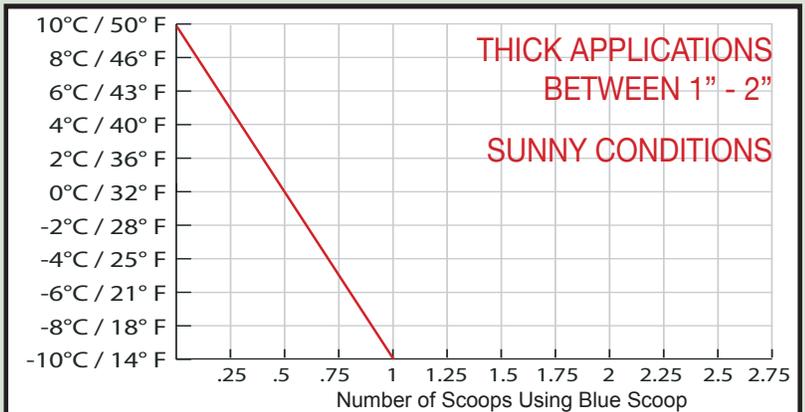
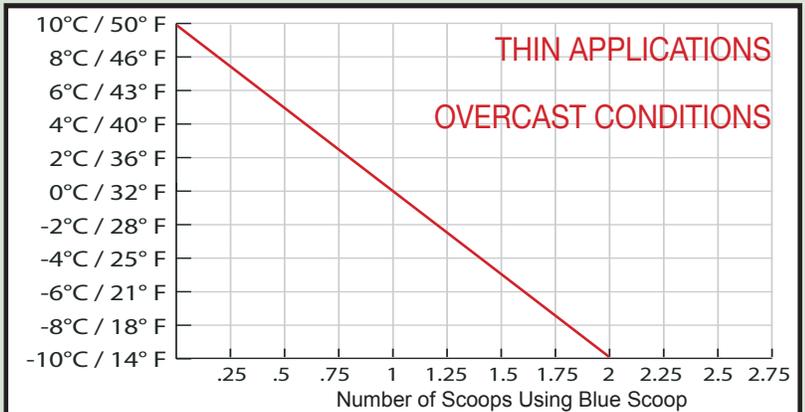
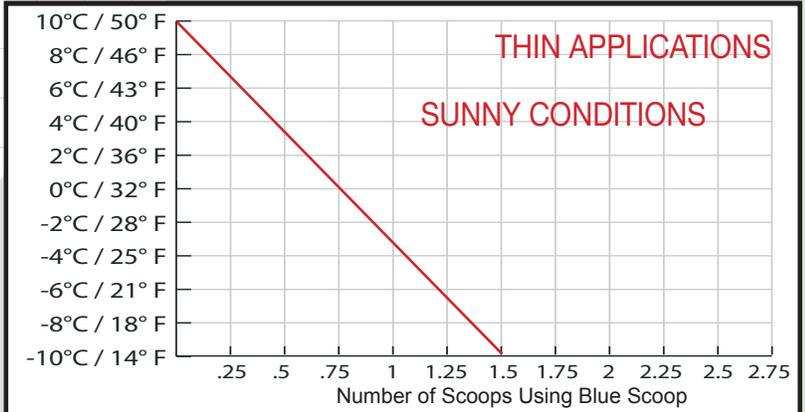
*MG-KRETE™ will cure faster with deeper pours. With lots of Low Temperature Accelerator added to the mix it will set up much quicker in the bucket than spread out on the ground, so it is important to get the mix out of bucket as soon as it is ready!!*

### DESCRIPTION FOR USING THE CHARTS:

Find the chart that is appropriate for the weather and installation conditions. Locate the approximate temperature of the substrate on the chart. Follow the line across to the red line and go straight down from there to determine how many scoops you need (the Low Temperature Accelerator comes with its own blue scoop).

### THICKNESS SIDE NOTE:

For applications thicker than 2", remove a scoop of Low Temperature Accelerator per bag of MG-KRETE™ for every increase in thickness of 1".



# COLD WEATHER INSTALLATIONS

## Low Temperature Accelerator

The Low Temperature Accelerator must be used below 10°C / 50°F to ensure a proper cure.

### Tips for Working in Colder Temperatures

When working in colder temperatures it is very important to remove any frost or moisture in the concrete. Using a tiger torch or wheat burner is the most effective way. Always begin working in areas that are the warmest first. As you go along the other areas will warm up throughout the day. In these lower temperatures it will be necessary to use Low Temperature Accelerator so it is important to remove mix from the pail immediately after mixing before it begins to set up.

*Low Temp Accelerator is mixed into Part B prior to mixing Part A*

### Installing MG-KRETE™ below -10°C / 14°F

It is not recommended that you install MG-KRETE™ in temperatures below minus 10 degrees Celsius / 14 degrees Fahrenheit. Under these conditions it will be necessary to erect a temporary heated shelter that will assist in increasing the air temperature and the substrate temperature above the minus 10 degrees Celsius / 14 degrees Fahrenheit. It is still very important to remove the frost before proceeding with the repair. Following the installation of MG-KRETE™ the area should



continue to be heated for approximately one hour to ensure a reasonable cure. Good ventilation is most important in small enclosed areas. The ammonia gas given off during cure will pose a problem if not well ventilated.

# WARM WEATHER INSTALLATIONS

## High Temperature Retarder

The High Temperature Retarder is used in warmer weather to give the installer more working time with the MG-KRETE™.

**It is important to consider all temperatures, especially the temperature of the substrate before adding High Temperature Retarder to the mix.**

Working in direct sunlight will substantially reduce your working time - sometimes by half compared to working in the shade.

**NEVER LEAVE ACTIVATOR OR POWDER IN SUNLIGHT**

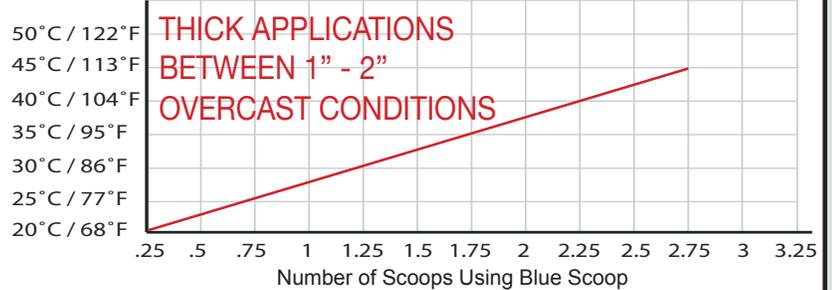
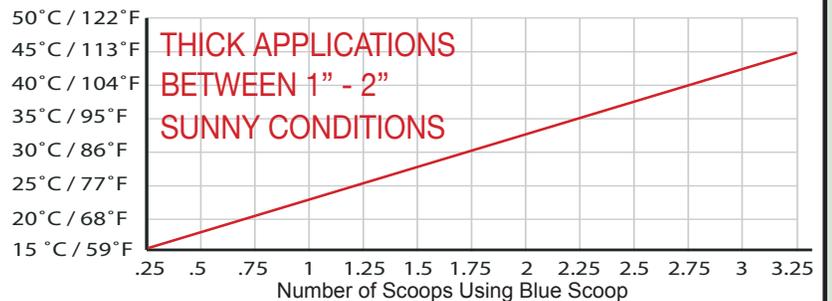
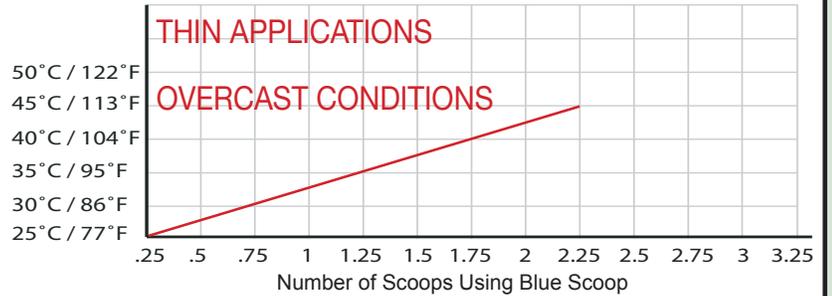
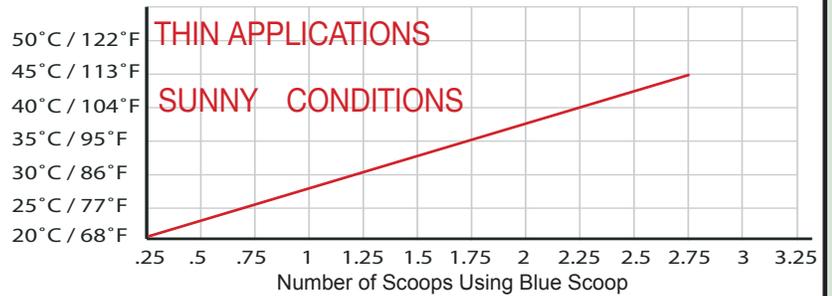
Remember - the thicker the MG-KRETE™ the more heat it will generate and the more High Temperature Retarder will be necessary. Even when using aggregate, MG-KRETE™ will continue to set up rapidly and will require retarder to slow the process.

Use these charts as a starting point. You will learn quickly based on your experience. Setting up - test patches are extremely helpful when learning the product.

### Tips for Working in Higher Temperatures

Store all tools, mixing drills, pails, water buckets out of the direct sunlight and in the nearest shady area. Also keep the bags of dry mix - Part A and the gallon containers of activator - Part B out of the direct sunlight. If the product is over heated it will tend to cure up faster when mixed and become difficult to manage. It is strongly recommended that you mix smaller batches at a time so you can reduce the time spent with each batch. When emptying the pail spread the mix out to reduce the mass subsequently reducing the heat and slowing the cure time.

*High Temp Retarder is mixed into Part B Prior to adding Part A*



#### DESCRIPTION FOR USING THE CHARTS:

Find the chart that is appropriate for the weather and installation conditions. Locate the approximate temperature of the substrate being covered on the chart. Follow the line across to the red line and go straight down from there to determine how many scoops you need. (The High Temperature Retarder comes with its own blue scoop).

# USING MG-KRETE™ INDOORS



MG-KRETE™ can be installed indoors, however it is **NOT RECOMMENDED FOR INDOOR RESIDENTIAL USE.**

Ask for MG-KRETE™ Interior for indoor residential use. MG-KRETE™ will give off ammonia gas during the curing process making it very unpleasant in a residential setting. There have been many successful indoor applications such as garages, warehouses and manufacturing facilities throughout North America which have not been affected by the ammonia gas. These large areas dissipate the gases quicker and are not that detectable. We strongly recommend that good ventilation be available in all areas especially smaller rooms.



**MG-KRETE™ IS NOT RECOMMENDED FOR INDOOR RESIDENTIAL USE.**

# SURFACE PREPARATION

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Surface preparation is another important consideration prior to MG-KRETE™ use. Extensive surface preparation is not required but it is highly recommended. It is important to have a solid, clean and dry surface for the MG-KRETE™ to bond. Make sure all loose concrete, oil and grease has been removed from the surface prior to the installation. If there is or was moisture or frost present, it will be necessary to Tiger torch the concrete to dry substrate to ensure a sound bond. If the substrate is free of loose material, clean and dry MG-KRETE™ will perform effectively. The better the prep - the better the bond.



## Covering Rusted Rebar

Many concrete repairs involve exposed rebar which is rusted and corroded. This rust must be removed to affect a solid bond with the MG-KRETE™. The rebar can either be sandblasted or wire brushed and painted with a rust inhibitor such as Imco's 510A aluminizing primer. This will assist with the bond and eliminate the possibility of rust bleeding through the MG-KRETE™ repair.

## Installing over New Concrete

There are many issues with new concrete daily (e.g.) graffiti damage, footprints, shrinkage, cracking, poorly finished surfaces and incorrect sloping to name a few. MG-KRETE™ has become the leader in these types of repairs. It is recommended that the installer wait at least two weeks before repairing damaged concrete with MG-KRETE™. This will ensure the moisture content is low in the new concrete. If MG-KRETE™ is installed over green concrete it will not bond as well due to the excess moisture still bleeding from the curing concrete.



# MIX CONSISTENCY

MG-KRETE™ can be mixed wet or dry depending on the installation. Usually when installers run into difficulty it is only because they are not using the ideal consistency. When doing a deeper fill it is recommended using a drier mix. If you are not using additives then one jug per bag is effective. When using MG-KRETE™ in depths greater than ¾" the use of a clean dry aggregate is highly recommended, silica sil-9 works best for most applications thicker than ½". NEVER USE LIMESTONE IN YOUR MIX. Up to 40%-50% aggregate can be added to the mix. The aggregate will reduce the heat produced, increase the product yield and allow for easier finishing.

**Do not overload on the Part B. If you use too much liquid (Part B) no aggregate and the temperature is high, MGKRETE™ will push the excess liquid to the surface and it will have a poor appearance on cure.**



## Mixing Methods

MG-KRETE™ mixes extremely well. It is recommended using low RPM drill and a five gallon pail. It is always best to add the liquid - Part B first. Following that, if your intention is use aggregate, then add that and mix so aggregate is completely wet. Then add any additives required such as Imco's color tint, Low Temperature Accelerator and High Temperature Retarder. Now slowly add the dry mix - Part A to the pail at the same time. This will reduce any clumping in the bottom of the pail. MG-KRETE™ does not require excessive mixing. It will begin to set up in the pail if mixed too long and become difficult to manage. Most projects won't require more than a ½ bag at a time when doing overlays. If there is more than one installer, one usually mixes while the other applies. On larger projects and deeper pours a mortar mixer can be used. Again it is important to remember not to mix too long. NEVER ADD WATER TO MG-KRETE™.

**Pails and tools can be washed with water however it is important to dry them before working with the MG-KRETE™ again.**

**NEVER USE LIMESTONE  
IN YOUR MIX**



**NEVER ADD WATER  
TO MG-KRETE™**

# FINISHING TIPS AND TRICKS

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Duct tape, brooms and paint brushes are excellent tools in the application of MG-KRETE™.

Duct taping out the area you are repairing with MG-KRETE™ is the most effective way to have clean professional lines when overlay is complete and the tape is removed. Once tape is taken off you can use a paint brush to blend the wet edges into the existing concrete. MG-KRETE™ will turn a close color to that of concrete and the repair will usually blend in completely. If you happen to over shoot the tape, scrape up the excess immediately.

Following your trowel work some of the ridges will remain. Use a finishing broom to give the MG-KRETE™ a broom finish. Like concrete this will smooth out any minor imperfections.

These tips greatly improve the finished look and provide the customer with a professional looking repair.

***CLEAN LINES LEFT AFTER  
TAPE IS REMOVED***



# REBUILDING CONCRETE

Most damaged concrete needs to be rebuilt before it can be overlaid (e.g.) curbs, sidewalks, stairs, etc. Damaged concrete usually consists of flaking, pitted, broken edges and holes. All need to be filled and repaired before a skim coat is applied. MG-KRETE™ bonds exceptionally well to itself and can be utilized for the rebuild as well as the overlay.

On smaller jobs MG-KRETE™ can be mixed dry enough that it will attach itself to edges that are being rebuilt without having to use forms. Using your trowel as a temporary form with the right consistency of MG-KRETE™ you will be able to slide the trowel away leaving the MG-KRETE™ intact.

On projects of considerable size the use of stationary forms is recommended. Construct forms similar to those you would use with concrete. MG-KRETE™ has unique properties and as a result you can effectively set up temporary forms that can be removed shortly after the installation.

A smooth non porous form is the best. Coroplast stapled to wood, plywood and particle board and OSB are all effective. MG-KRETE™ has tremendous bonding characteristics and therefore can bond to forms very quickly. Once the new structure is rebuilt you can skim coat the entire surface to provide a clean uniform finish.



**TROWELS USED  
AS TEMPORARY FORMS**



**When rebuilding edges be sure to make your mix dry enough so the MG-KRETE™ does not slump.**

## Using Rebar

There are some situations where concrete is too damaged to be repaired. Therefore it has to be removed and replaced. When quick return to service is necessary the use of MG-KRETE™ is ideal. If the new concrete structure requires rebar then the same would apply to MG-KRETE™.

MG-KRETE™ has a flexural strength similar to concrete so rebar would also improve the integrity of the MG-KRETE™ repair under tension.



# COATING OVER MG-KRETE™

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## Over coating MG-KRETE™ with MG-KRETE™

When deeper pours are completed with wetter mixes, a layer of liquid may come to the surface and form a hard film. You will recognize when this film is present if the MG-KRETE™ repair has a glossy appearance. This film will need to be removed with a grinder or other abrasive method before resurfacing. Once this is complete you will be able to resurface.

MG-KRETE™ has remarkable chemical and mechanical bonding characteristics with itself. When overcoating existing MG-KRETE™ it is important to understand that it may be generating more heat than the surrounding surface so material placed over this will set up faster. Make sure to use retarder if done right away.

## Over coating MG-KRETE™ with other Products

MG-KRETE™ is an exceptionally durable and weather resistant product. It is resilient to most chemicals and extremely resistant to abrasion. However in highly acidic areas MG-KRETE™ will require protection. If this type of environment presents itself and a coating is required it is recommended that products manufactured by Imco Technologies be used to ensure compatibility. If MG-KRETE™ needs to be top coated it is recommended that a wait of at least 48 to 60 hours to allow for light off gassing during cure. This gassing has shown to interfere with a successful bond. In some cases MG-KRETE™ can be over coated within a two week period. Please contact manufacturer for details. MG-KRETE™ will reach its full cure in one month and following this most products designed to cover concrete will work effectively with MG-KRETE™.



## Over Coating other Products with MG-KRETE™

Many projects have previously been repaired with different repair mortars.

When prepping these areas be sure to remove all loose and damaged area. MG-KRETE™ has been very successful at bonding to other repair mortars however its design is intended primarily for use on concrete. If coating anything other than concrete it is recommended that you do a test area for capability or contact Imco prior to installation.

### MG-KRETE™

MG-KRETE™ is highly resistant to water so traditional water based concrete paints and stains will not bond very well. If MG-KRETE™ is going to be painted the use of acid stains is recommended, or surface needs to be mechanically abraded or acid etched. Imco manufactures industrial urethanes that can be colored, and will bond with MG-KRETE™ very effectively.



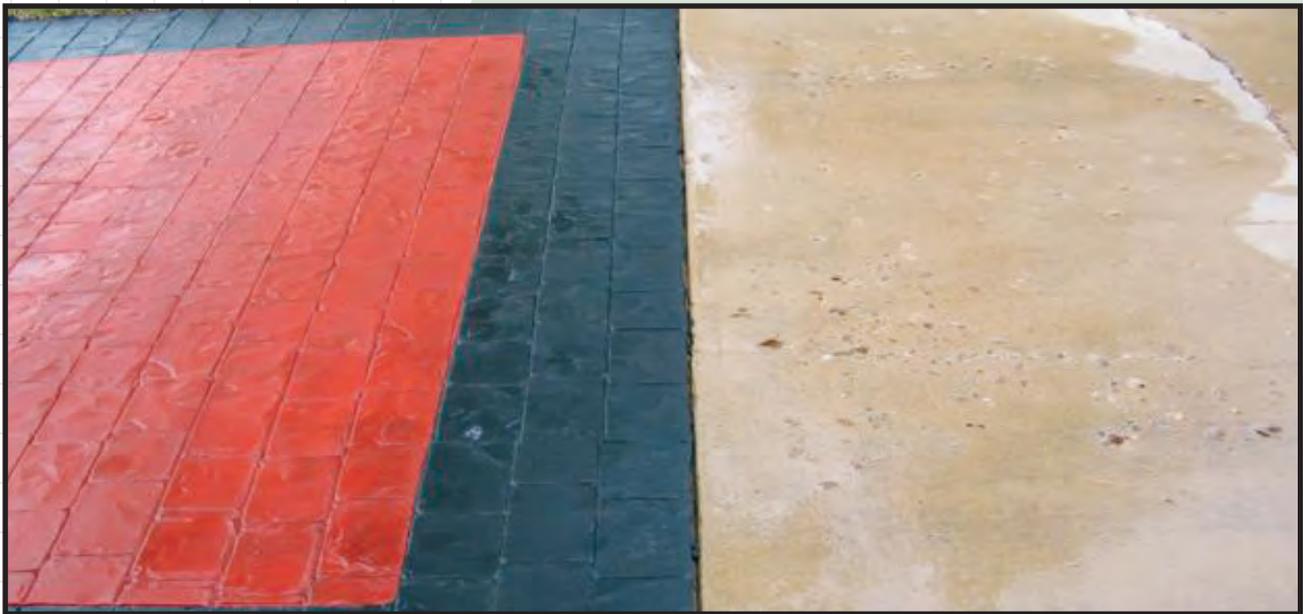
MG-KRETE™



# COLORING MG-KRETE™

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IMCO has a variety of dry pigment colors that can be used to change the finished look of MG-KRETE™. These colored pigments can be added into the initial mixing phase to dye the MG-KRETE™ prior to being applied to the surface. Follow the manufacturers' recommendations for MG-KRETE™ coloring. Interstar is also a recommended pigment. **Ask about MG-KRETE Stamp grade for adding colour.**



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# FIXING TRIPPING HAZARDS

Sunken concrete slabs are very common and often mud-jacking is not feasible. This sinking often creates trip hazards between two slabs. These are easily repaired with MG-KRETE™. First place a tape line using duct tape a distance from the raised slab to where you want the gradual slope to end. Place Coroplast the same thickness as the existing expansion joint. Trowel the MG-KRETE™ to the Coroplast from the height of the higher slab down to a feather edge at the tape line. Broom finish, remove Coroplast and remove tape.

TRIP HAZARD  
BEFORE



TRIP HAZARD  
REMOVED  
AFTER REPAIR



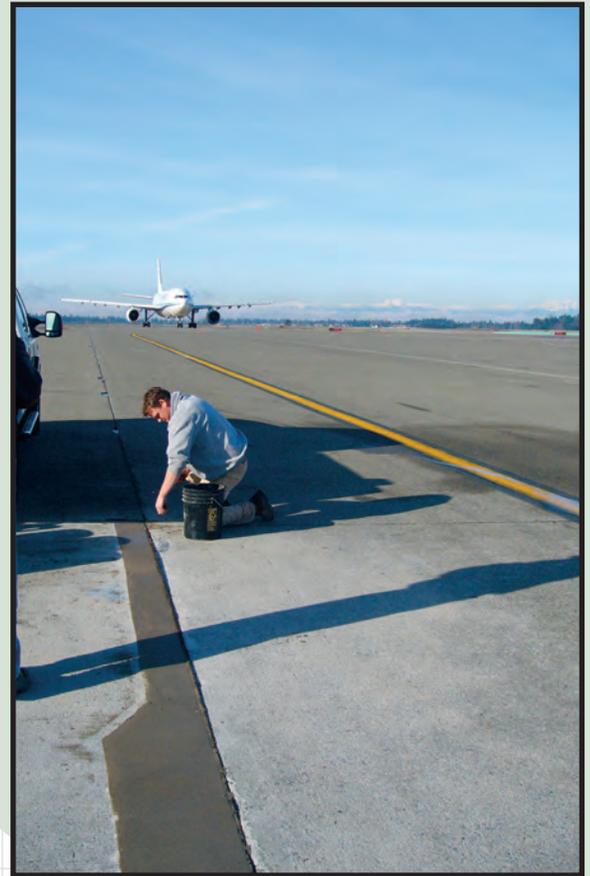
# MG-KRETE™ FLEX INSTALLATIONS

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MG-KRETE™ was originally designed to be remarkably strong and rigid. However it was not intended to be used in areas that experience movement. MG-KRETE™ Flex was subsequently developed to maintain its existing properties while at the same time increasing its flexural strength. It is recommended that MG-KRETE™ Flex be used in applications no less than

½ inch. MG-KRETE™ Flex is ideal for use on bridge decks, roadways, airport runways, large edge repairs and virtually any concrete area prone to movement. MG-KRETE™ Flex is not designed to be placed over expansion joints or existing cracks in the substrate. If used in these applications, failure will occur.

*MG-KRETE™ flex finishes and works the same as the regular MG-KRETE™, so it is recommended to use this product in any areas that require some flexibility.*



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# INSTALLING A THIN OVERLAY

Prior to installing an overlay it is important to fill deeper damaged areas or broken edges first. Once these have set up you can move forward with your overlay. An effective method for installing thin overlays is to produce smaller mixes more frequently. This allows for maximum working time with each mix. Use a five gallon pail and a low RPM drill. You can use a little more than one gallon of Part B liquid to one bag of MG-KRETE™.

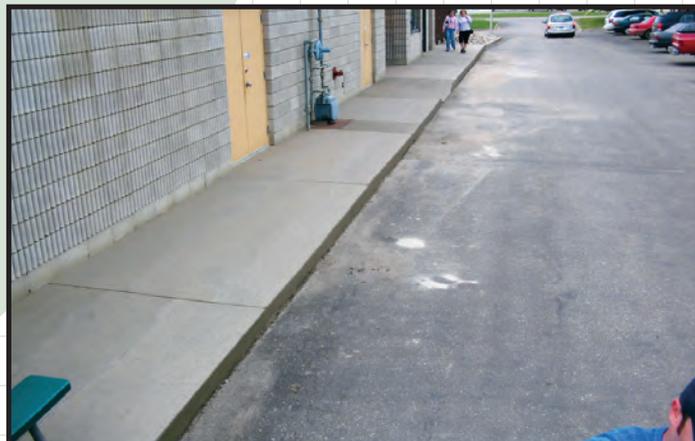


Many installers have great success with troweling half a bag at a time utilizing a second man for mixing only. When installing thin overlays it is important to consider substrate and air temperature and adjust set times accordingly so MG-KRETE™ can be troweled and finished before it begins to cure.



To avoid cold joints is easy if you are able to continually have new mixes ready once you have finished the last one. Simply spread the new mix along the area you just completed and trowel the new mix into the old.

It is important to broom finish as you go to eliminate any imperfections in the repair. Larger areas can be covered at one time if there are a number of installers available. Note you cannot make the MG-KRETE™ smooth like a power trowel finish without having to grind it after.



# RE-SLOPING GRADES WITH MG-KRETE™

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STRING LINES  
WERE FOLLOWED  
TO ACHIEVE THE  
PROPER SLOPE

MG-KRETE™ is very effective when it comes to re-sloping concrete surfaces. Water pooling in garages is usually the biggest problem. To repair sloping issues one needs to acquire the desired slope. This can be done with the use of a simple string line, laser level, level or screed. Rebuild and fill any deep areas with MG-KRETE™ first. Once the desired slope is determined you

will then realize the different depths of the MG-KRETE™ rebuild. Once desired slopes are completed a fairly unattractive finish may be present. Due to different depths and finish re-leveling can easily be accomplished using MG-KRETE™. You can go as deep as required on one side down to a feather edge on the other. A skim coat over these repairs will give a uniform finish.



# THICK INSTALLATIONS

MG-KRETE™ can be successfully utilized to replace entire sections where rapid return to service is necessary. With thicker applications it is important to use a clean, dry aggregate to reduce the heat production with the MG-KRETE™. This will assist in the reduction of bubbling caused by this heat during cure. You can add as much as 40% clean, dry aggregate to the mix. It is also important to remember that limestone reacts negatively with the MG-KRETE™ and should not be used.

***AVOID  
USING  
LIMESTONE  
AS IT  
REACTS  
NEGATIVELY  
WITH  
MG-KRETE™***



# STAIR REBUILDING AND RESURFACING

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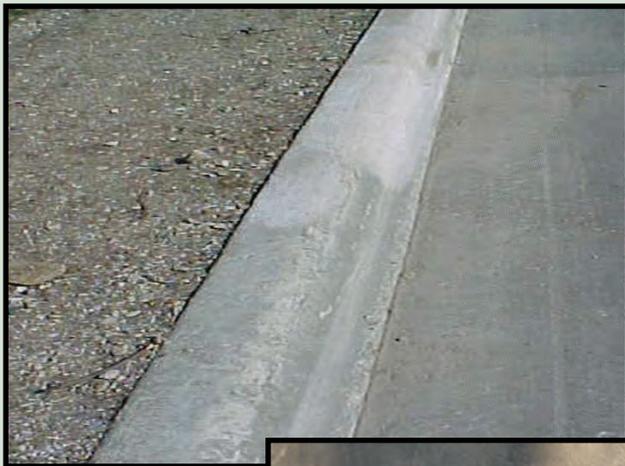
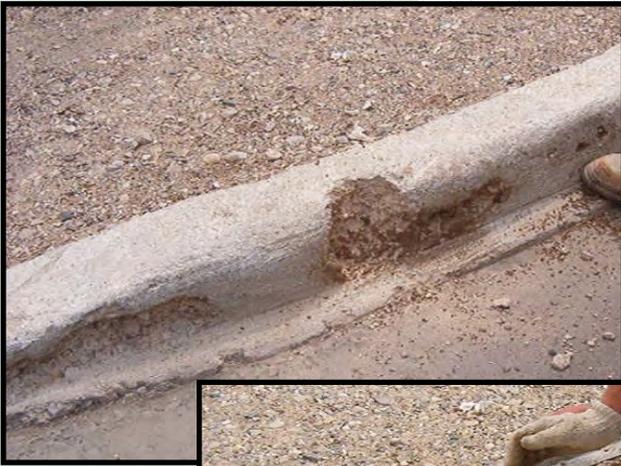
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The cost of removing and replacing stairways is substantial. MG-KRETE™ can effectively restore old into new at a fraction of the cost. If the stairs are damaged and need rebuilding proceed with this step, first (See Page 15) Once the stairs are structurally sound you can move forward with the final skim coat of treads and risers. Although this can be done in any order, many installers complete

the treads first. It is important to ensure a mild slope for water removal. Most applicators simply eye this task. On the point of the stair installers use an edger which allows for a slight rounded edge. Once that is complete the risers are simply brought up with MG-KRETE™ to meet the rounded outside edge of the tread. A paint brush is used to blend the seams together and eliminate any cold joints.



# VERTICAL AND OVERHEAD APPLICATIONS



MG-KRETE™ can be used successfully with all applications. When installing on a vertical surface the consistency of your mix is the most important. If too wet it will tend to slump and run down the wall. On the other hand if it is too dry it is difficult to get it to adhere to the vertical surface.

Installers have had great success by mixing a little less than one gallon of Part B to one full bag of Part A. It is recommended that you experiment with some different mixes until you find one that best suits the application.

Once you determined the appropriate mix do a rough trowel onto the vertical structure similar to doing a stucco wall. Trowel the MG-KRETE™ onto the wall with considerable pressure

Once the area is covered go over it again and give it a smoother finish. Please ensure that the trowels are clean from curing MG-KRETE™. If not, the trowel will tend to pull the MG-KRETE™ off the structure.

**To clean the trowel use water and make sure to dry off before using again.**

# STAMPING MG-KRETE™

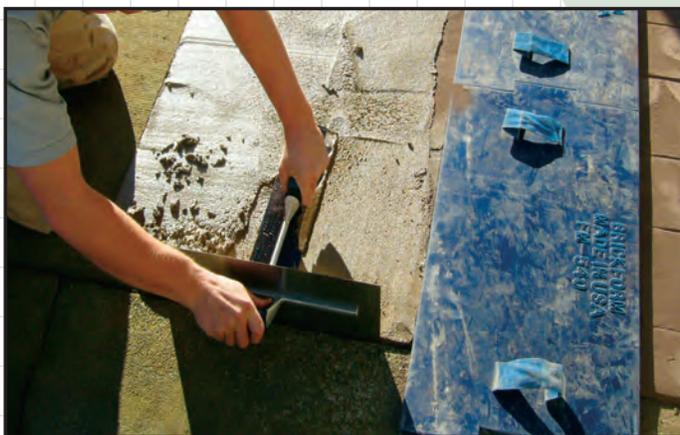
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There are number of manufacturers of stamping pads designed for concrete and all can be used with MG-KRETE™ for creating more decorative patterns. It is important to use a dry release agent to prevent the stamps from sticking to the MG-KRETE™.

When stamping MG-KRETE™ you need to systematically work from one end of the project to other. MG-KRETE™ does cure up rapidly and it is crucial to stamp after applying. The installer may want to increase the cure time with High Temperature Retarder. It is wise to do a test area in order to prepare for the application.

MG-KRETE™ should be mixed thicker-approximately ½” thick. There has to be enough material to take the shape of the stamping pattern. Apply the release agent to the stamp.

Once the mix has been troweled in place immediately place the stamp in position and apply pressure. It is important to extend the MG-KRETE™ 6” past the stamp in preparation for the next section of stamping.



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# CLEAN UP WITH MG-KRETE™

MG-KRETE™ will clean up very well with water before it cures. If left too long however the MG-KRETE™ will cure up on your tools and it will not come off. If you begin to notice a sticky film on your trowel it is recommended that you clean your tools immediately. It is important to completely dry your tools before using again. MG-KRETE™ does not like water.

**INGESTION: If person is conscious, dilute stomach contents with water and induce vomiting. Seek Medical Aid.**

## TROUBLE SHOOTING/FAQ'S

### **MG-KRETE™ is setting up too quickly.**

If you are using the MG-KRETE™ in warmer weather or thicker pours you are not using enough HTR. See HTR section (page 10).

### **MG-KRETE™ is setting up too slowly.**

If you are doing a thinner install, or the substrate is cold you need more LTA. See LTA section (page 8).

### **MG-KRETE™ bubbles after installation.**

This will happen if the MG-KRETE™ gets too hot. This will happen when you do thicker pour without the use of aggregate and if it is too warm. See Deep fill section and HTR (page 10).

### **How soon can I drive or walk on MG-KRETE™ ?**

As quick as 20 min, and as long as one hour depending on temperature, LTA, HTR, thickness, sunlight, etc. If you can't make a small impression in the MG-KRETE™ with a finger nail, then it should be good to walk on. Wait one hour for thin installs in the summer, and 2 hours in the winter. Thicker pours will be ready much quicker in both weather conditions.

### **Can I cover MG-KRETE™ with other products?**

This is not advised until at least 2 weeks to one month See Over-coating section (page 16).

### **Why do I smell ammonia after I have installed MG-KRETE™ ?**

This is a normal by product of the reaction MG-KRETE™ undergoes. As long as the area of install is well ventilated this won't be a problem, and it will dissipate to nothing over 28 days. Most of the ammonia smell will be gone within 72 hours.

### **Can I wet the mix after install to lengthen working time?**

No, once the reaction has started it cannot be slowed with the addition of Part B. Add HTR during the mixing to slow the cure time.

### **Can I start a thicker depth and feather down to almost nothing?**

Yes, however this install can be difficult because the mix consistencies need to be altered as the install gets thinner. It is advised to do all resloping, rebuilding, filling and leveling first, and then skim coat the entire job after. This will give a nice uniform finish.

**CLEAN UP IS THE ONLY TIME WATER IS INVOLVED**

COMPLIMENTS OF

**MG-KRETE™**

**IMCO®**

**TECHNOLOGIES INC.**

**1-888-818-4626**

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**DISTRIBUTED BY:**

Blank box for distributor information.

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