

# INDEX

1/ Material Inspection

2/ Substrate Preparation

3/ Setting Systems

4/ Technical Information

5/ Mosaic Installation

6/ Cleaning & Maintenance

7/ Submersion Guidelines

8/ Metal Care

9/ Recycled Glass

material testing  
metal testing  
setting systems

Thank You for selecting *Maison Surface*

These instructions are provided as a general guideline for installing *Maison Surface*; some installations require different or more detailed specifications. An experienced professional tile installer who is familiar with the following procedures should perform the work. Please read and understand these instructions before beginning any work.

# 1 Material Inspection & Receipt

Damage that is apparent upon delivery must be noted on the freight carrier delivery receipt.

Immediately upon delivery please review the shipment for accuracy of materials ordered, including quantity, quality of color and for any shipping damage.

All claims must be presented in writing to Maison Surface and any delivery carrier within five days of receipt of materials. We require photos of the material in the original packaging both of the damage and of the shipment as a whole.

Please understand that in all cases, no allowance can be made after installation; therefore, please inspect all materials prior to installation.

1. Upon deliver, open and inspect each box of mosaic tile. Do not remove any product from the original packaging prior to the last step of the installation, setting the material. Handle with extreme care. Cut on the side of the packaging and slide the tile out using two hands on a level surface. avoid flexing any of the packaging as it will chip or crack the edge of the tile. All packages are required to sit on a level surface out of the elements and in a conditioned space.
2. Lay out the entire design and ensure that the pattern is complete and correct in original packaging.
3. Make sure you have ordered enough overage for your project . We charge a 30% surcharge for orders that were too short from first order.

note- Material should be installed by pulling from all crates or boxes to ensure optimal blending of shade variation.

**WARNING:** It is the responsibility of the customer to ensure that the mosaic is complete and correct, and that the colors blend properly to meet expectations. Any concerns should be addressed prior to installation. It is our strict policy that installation constitutes acceptance.

# 2 Substrate Preparation

The performance of a properly installed thin-set tile application is dependent upon the durability and dimensional stability of the substrate to which it is bonded. The following recommendations are from the Tile Council of North America's 2016 TCNA Handbook for Tile Installation and are general in nature -www.tileusa.com-

Floors	Interior			Exterior		
	CBU	Mortar	Concrete	CBU	Mortar	Concrete
Wood Sub-Floor	F144-12	F145-12 F141-12	N/A	N/A	N/A	N/A
Concrete (slab on grade)	N/A	F111-12 F112-12	F113-12	N/A	F122-12*	F112-12
Concrete (Elevated or post tensioned)	N/A	F111-12	N/A	N/A	F122-12*	N/A

\*this method is not recommended for freeze-thaw applications. proper drainage and a pre-sloped waterproof membrane, meeting ANSI A118.1m, are required BELOW the mortar bed.

Walls	Interior			Exterior		
	CBU	Mortar	Drywall	CBU	Mortar	Drywall
Wood Studs	W244C-12 W244F-12	W231-12	W243-12	W244E-12	W231-12	N/A
Metal Studs	W244C-12 W244F-12	W241-12	W243-12	W244E-12	W241-12	N/A
Solid Backing (Masonry)	N/A	W222-12	N/A	N/A	W222-12	N/A

Specialty	CBU	Mortar
Bathtub Walls **	B412-12	B411-12
Shower Receptors/Walls**	B415-12	B414-12
Countertops	C513-12***	C511-12

\*\* wood or metal studs

\*\*\* use only Cementitious Backer Unit (CBU) or Fiber Cement Board

# 2 Substrate Requirements

- Shower receptor floors require the waterproofing below the mortar bed be sloped ¼" per foot towards the drain and the drain weep holes be unobstructed per TCA B414-12 and B415-12.
- All mortar beds shall cure no less than 7 days prior to mosaic tile installation.
- Membrane meeting ANSI A108.02-3.8 (2010) is required behind CBU in exterior and wet applications. A108.02-3.8.4 (2010) high solids, cold applied membrane: ASTM C836 shall be used only with opaque glass tile.
- All joints on CBU shall be taped with the CBU manufacturer's recommended mesh tape and allowed to cure 48 hours prior to installation.

## Unacceptable Substrates

- Single-float mortar bed walls not employing curved scratch coats.
- Poultry netting (chicken wire) or metal lath less than 2.5 lbs. per square yard in wire reinforced mortar beds.
- Wood products, such as plywood, luan, MDF, MDX, press board and composites.

## Substrate Variations

When installing tiles adjacent to thicker materials, the substrate must be brought up to a level such that the tile can be installed with the recommended amount of setting material and be flush with surrounding surfaces. This should be accomplished in one of three ways depending on the variation of depth.

For variations between 1/8" to 1/4"

Use one of the required setting systems and a notch trowel size that will render the desired depth of setting material after the notches have been flattened. Flatten the notches and allow setting material to cure for 72 hours prior to installing the tile.

For variations between 1/4" to 3/4"

Build up 1/4" or 1/2" cementitious board units (CBU) using the recommended setting material and cure 24 hours prior to installing the tile.

For variations between 3/4" to 1-1/2"

Floated mortar beds (sand and cement mixtures ANSI A108.1B cured 7 days)

# 3 Setting Systems

All materials should be used according to manufacturer's instructions. If the mosaic includes glass tiles, please note that due to the translucent nature of glass, the color of the bonding material will impact the ultimate look of the tile. We recommend the use of specific white bonding mortars; some mixed with specific latex admix. See the following list for required thin-set and follow manufacturer's recommended cure times for all setting materials. Pools, spas and all submerged applications require a minimum 21-day cure time after grouting and before submersion or exposure to heavy water use.

Although we require the use of highest performing setting materials for installing our products, occasionally, due to the transparent and/or light translucent nature of some of our products, visible effects, also known as "ghosting", may occur behind glass tiles. This is not considered a manufacturing problem with the glass tile.

## When mixing setting and grouting materials:

1. Measure liquid and powder per manufacturer's recommendations.
2. Machine mixing will provide more consistent results.
3. Do not exceed 300 rpm or manufacturer's recommendations.
4. Setting and grouting materials need to slake (set) 10-15 minutes after mixing and be remixed before use.

# 3 Setting Systems

## Acceptable Setting Systems (White)

- Custom Building Products: MegaFlex Crack prevention Mortar
- Custom Building Products: MegaLite Crack Prevention Mortar
- Flextile: 52 Versatile Floor Mortar
- Hydroment™ ReFlex Ultra-Premium Latex-Modified Thin Set Mortar
- Kerakoll: H40 Tenax Single Component Thin-Set
- Laticrete: 254 Platinum Multipurpose Thin Set Mortar
- Mapei: Adhesilex P10 mixed with Keraply mortar additive
- TEC (H.B. Fuller): Super Flex Premium Performance Universal Latex-Modified Thin-Set Mortar
- FOR GLASS TILE (LeMer ):Litokol Litoelastic
- FOR MIRROR (Meero): CRL Gunther Ultra Bond Mirror Mastic- a neutral cure(non acidic) mirror mastic.
- FOR GUNMETAL (Geometro): Litokol LitoElastic Epoxy

## Unacceptable Setting Systems

- Organic adhesive (mastic) – due to yellowing and low bond strength
- Epoxy – due to low flexibility, as well as degeneration in UV sunlight

## Movement Joints

Movement joints are essential for the success of most tile installations. Follow recommendations on Movement Joints EJ171-07 in the "2008 TCA Handbook for Ceramic Tile Installation." Movement joint requirements will vary depending on substrate, climate and size of installation. An architect or design professional should be consulted when specifying the exact number and location of each movement joint. Saw-tooth joints are not recommended. Certain application may require a different type of sealant.

## Acceptable Flexale Joint Fillers

- Hydroment: Chem-Calk 900 One-Part Urethane Sealant
- Kerakoll: Sigibuild PU Poly-Urethane Sealant
- Laticrete: Latasil 100% Silicone
- Silaflex: 1A or 2C Polyurethane-based Sealant

# 3 Setting Systems

## Grout

Install grout mix according to manufacturer's instructions. Due to the impervious quality of glass, the grout will take longer to begin setting-up. For initial cleaning of grout from the tile face, use clean, dry cheesecloth. This wicks additional moisture from the grout and avoids washing out the joints. Use on a clean, damp sponge for the final cleaning and smoothing of the joints. For final polishing of excess haze use a clean, soft cloth.

### Acceptable Grouts

- Custom Building Products: Prism SureColor Grout
- Custom Building Products: Fusion Grout
- Custom Building Products: Polyblend Sanded Tile Grout
- Flextile: 600 Polymer Sanded Floor Grout
- Hydroment: Sanded Ceramic Tile Grout
- Kerakoll: Fugabella 2-12
- Laticrete: 1500 Series Tile Grout or Equivalent
- Mapei: Ker200 Series and Ker700 Series Ultra/Color
- Tec: AccuColor Premium Sanded Tile Grout
- Litokol Starlike grout or Customs Prism

an Acrylic grout admix can improve freeze-thaw resistance. check manufacturer's recommendations.

### Anti-Fracture/Waterproofing Membranes

- Aquafin 1K and 2K/M: Cementitious waterproofing system
- Custom Building products: RedGard Waterproofing and Crack Prevention Membrane
- Hydroment: Gold Anti-fracture and waterproofing membrane
- Laticrete: 9235 waterproof & anitfracture membrane
- Tec: T1-324 Triple-Flex waterproofing/crack isolation membrane
- Xypex: Concentrate

**NOTE:** Maison Surface does not recommend membranes directly behind the setting material when installing translucent or transparent glass tile.

# 4 Technical Information

## Cutting

Maison Surface products can be cut to meet job site dimensions with the use of a high-quality wet tile saw. We recommend a continuous, smooth-rim diamond blade designed for cutting glass, such as the 10" Alpha Vetro, the 10" daltool glass tile blade, 10" Felker GB-10, or the 1-" MK 215-GL. These blades can work also on stone and metal tiles in the mosaics. Special glass mosaic tile nippers (available from a stain glass supply shop) work well when hand cutting our mosaic tile.

### Note: Cut tile Face Up

To dress (smooth) the cut edges of the glass, stone or metal tile use a #120 lapidary (tile rub stone) or 220 thru 600 grit PVA polishing pads available from Alpha Professional Tools or MK Diamond. Do not contact the face of the tile during dressing as the will damage the tile surface.

## Drilling

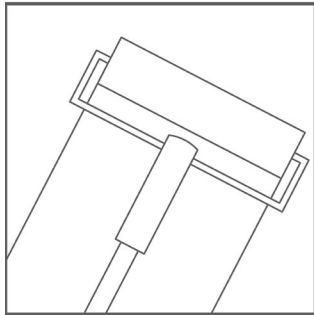
Solid blocking for the anchoring of fixtures such as a shower door, towel bar, etc. shall be installed prior to installing the substrate. The diameter of all drilled holes shall be ¼" larger than the diameter of the fastener to allow the fastener to pass through the mosaic tile and substrate without making contact.

To successfully drill the mosaic tile, a water swivel and fractional core bit work best. Prior to using a fractional core fit, mark and drill a shallow pilot hole using a carbide or diamond tipped masonry drill bit. Start pilot holes slowly to avoid excess heat. Connect water source and open water control valve on swivel until water trickles out. Hold firmly and begin drilling slowly. Gradually increase the speed. Continue with steady pressure until desired depth is achieved.

always use safety equipment while drilling.

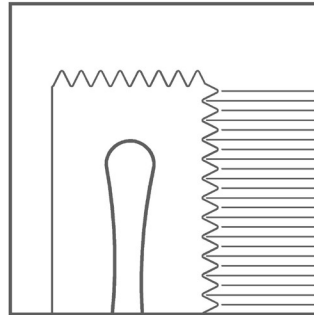


# 5 Mosaic Installation



## step 1

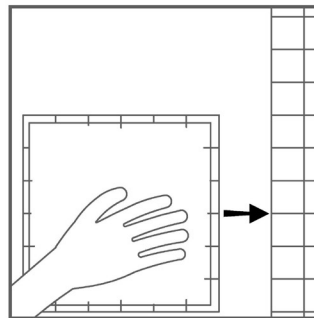
Apply a crack insulation membrane over substrate per the membrane manufacturer's instruction. Using the flat side of a trowel to initiate the bond coat. Firmly apply the setting material to the substrate.



## step 2

With additional setting materials, using a 1/4" x 1/4" V-Notch trowel, comb horizontal, full notches in one direction to establish the proper depth of the setting bed.

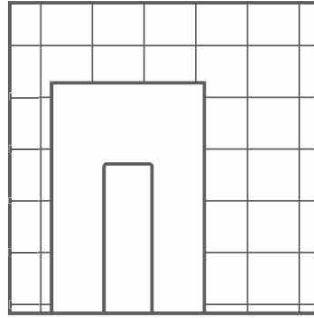
*\*only necessary if there is translucent glass*  
Using the flat side of the trowel, flatten the notches to achieve a smooth, consistent setting bed approximately 1/8" thick.



## step 3

Apply sheets into the setting bed (tile tape side towards you), using light, even pressure to establish contact and eliminate any voids. Apply each subsequent sheet so that grout joints line up and a consistent field is maintained.

**\*\***Prior to setting each sheet, check the setting bed for skinning (slight drying of the thin set surface). If skinning occurs, remove thin set and repeat steps 2 and 3. Pay particular attention to the joints between sheets to eliminate any sheet pattern.



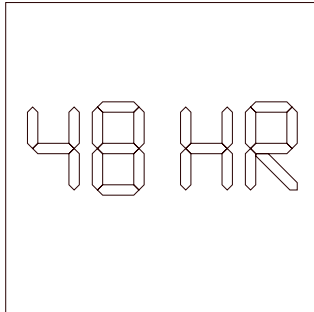
## step 4

To achieve a uniform surface:  
glass and small piece mosaics= tap lightly using a rubber grout

Large pieced mosaics= use a wooden beating block and a hammer.

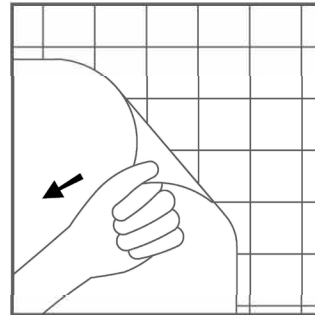
*\*To unify transitions tap from one sheet to the next.*

# 5 Mosaic Installation

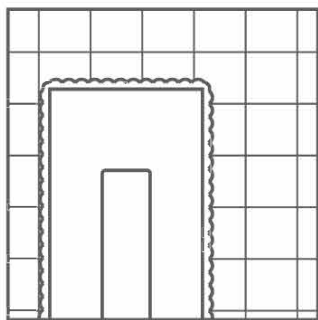


**step 5**  
Cure a minimum of 48 hours prior to cleaning and grouting.

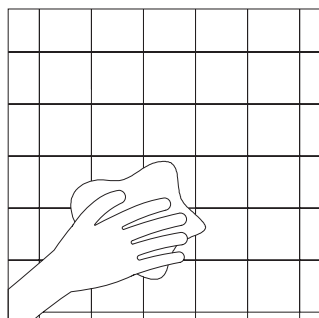
\*Check setting materials manufacturers specifications for recommended curing time.



**step 6**  
After approved setting time you may remove excess thin-set from grout joints with a razor knife if necessary. Peel the face tape, starting at the corner if applicable. Clean any tape residue with a damp sponge.



**step 7**  
Use grout mixed per manufacturers instructions. When grout joints are 1/32" or less, use a non sanded grout. Apply grout with a rubber float, forcing grout into joints until full. If the mosaic contains both stone and glass (or metal), expect the grout to dry and set faster around the stone. Due to the impervious nature of glass and metal, grout will take longer to set than with more porous materials such as stone.



**step 8**  
Allow grout joints to take initial set (turn dull). For initial cleaning use clean, dry cheesecloth. This method wicks additional moisture from the grout and avoids washing out the grout joints.

**step 9**  
Allow grout joints to set up a second time (turn dull) and smooth.

**step 10**  
For final polishing of excess grout haze use a clean, soft cloth.

# 6 Cleaning & Maintenance

When using cleaning products follow manufacturers directions and use personal protection equipment.

- It is suggested that the mosaic stone be sealed using a penetrating sealer specific for interior use prior to grouting.
- Care should be taken to protect the mosaic. Cleaners that contain harsh abrasives should be avoided. Anything acidic or products containing ammonia and/or bleach may cause damage to the stone. It is recommended that a neutral pH-balance cleaner be used to care for the natural stone mosaic. Please refer to the cleaner manufacturer's recommendations for any cleaning product used to care for the mosaic.

## General Cleaning

- Warm water and liquid dish soap or a neutral PH cleaner.
- Tubs and showers: DESCUM Soap Scum Remover & Renovator.
- For Metal & Glass Use a wet Micro fiber cloth  
No Abrasives (soft scrub only)

# 7 Submersion Guidelines

The application in swimming pools with reinforced concrete structures includes a number of preliminary checks and inspections of the same structure in order to ensure adequate durability.

1. The underground concrete structures must be waterproofed on the outer walls before covering the excavation in order to prevent negative water pressure that could have an impact on the inner surface.

2. The concrete structure requires an aging period of about 6 months to complete all hygrometric shrinkages & in order to be considered dimensionally stable.

3. It is necessary to perform a static test on the raw structure by filling it with water in order to accelerate the processes of structural adjustment and check its water-resistance against any losses that then can be solved properly.

4. The walls and floors inside the pool must be rectified with suitable polymer-modified cement mortars in order to regulate the laying surface avoiding the use of excessive amounts of adhesive that would make the application difficult if not impossible.

5. In order to ensure a total sealing of the pool, it will be necessary to apply suitable two-component cement based waterproofing mortars before installation such as Elastocem or Coverflex or in dispersion such as Aquamaster.

6. Thinset: Litoelastic recommended double coating.

7. Grout: we recommend the use of a two-component epoxy mortar such as Starlike® which ensures high mechanical & chemical resistance and lasting durability due to its lack of absorption properties.

The use of Starlike® epoxy mortar is mandatory in thermal spas or pools containing seawater.

# 8 Metal

Maison Surface metal is real metal and is considered to be a living finish. As the metal ages, it will take on its own natural look. To avoid damaging the metal finish and to protect the natural beauty of the finish, please follow the Care Instructions carefully.

## Clear Coated Finishes

These finishes have a protective coating and will protect the finish from water spots and the natural effects of aging.

- This coating helps to protect the finish from water spots and the natural effects of aging.
- Never use harsh cleaners (such as Lysol®, Pine Sol® or Bleach), soft scrub cleaners.
- Harsh chemicals may damage the clear coat.
- To avoid water spots, dry all surfaces with a soft cloth. For cleaning and added protection use
- Stain-Proof™ Original by Dry Treat as a barrier between clear coat and moisture.

## Stone, Metal & Glass Units

All mesh-backed products must be grouted. Failure to do so will result in degradation of the setting material and/or pieces lifting or falling out. Mesh-backed mosaics depend on the application of grout for their strength and resistance to the elements. Wipe off all excess grout and do not allow grout to dry on the mosaic surface. Non-abrasive GOJO® hand cleaner may be applied before grouting as a grout release and to remove grout haze on all surfaces after grout dries. See grout manufacturer's specifications for proper grout. We recommend using an appropriate sealer such as Stain-Proof™ Original by Dry Treat ([drytreat.com](http://drytreat.com)) after mosaic is grouted. Stone sealer or enhancer will not keep metal from aging naturally.

**Warning: Mosaic Blends installed above a cooktop, outdoor kitchen or fireplace must be set 5 to 6 inches above and 3 to 4 inches back from heat source and have a minimum 2-inch set back from the profile (face of the tile). Failure to do so may result in damage and will void the warranty. Heat source includes oven vents and fireplace blowers.**

# 8 Metal

## Installation

All tile may be used for wall application. Low relief and field tile is recommended for floor applications. Tile with high relief may not be suitable for floor applications in traffic areas. Metal tile may be used in a shower or pool AREA (NO SUBMERSION), in a bathroom or kitchen backsplash and on a range hood. All tile can be easily cut or mitered using a wet or dry saw.

Metal tile cut or mitered using a wet saw should be wiped dry with a soft cloth to prevent spotting. Use non-abrasive GOJO® hand cleaner sparingly with extra fine steel wool to remove water spots and unwanted green patina.

Unsanded grout should be used. Mask off tile to eliminate grout on all relief pieces and avoid scratching the finish. Using a small brush and water only, remove excess grout from tile before it dries. Towel dry to avoid water spots. All grout must be removed from the surface before it dries to eliminate damaging the finish. Non-abrasive GOJO® hand cleaner may be applied lightly before grouting as a grout release and to remove grout haze on all surfaces after grout dries.

Note: If using epoxy grout, all metal tile must be masked off. Using a solvent to clean residual epoxy grout can damage the finish.

Stain-Proof™ Original by Dry Treat ([drytreat.com](http://drytreat.com)) is recommended to seal entire area. Stone enhancers, sealers and cleaners may be used and will not prevent metal from aging. Polishing paste and abrasive polishing products are not recommended.

**Warning: Unsanded grout is the recommended grout. Sanded Grout will scratch the surface.**

# 9 Recycled Glass Testing Results

## Thermal Stability

Test Items	Test Method	Test Results
Thermal Stability	With reference to GB/T 7697-1996	No cracking or breakage on the surface of all test specimens
Thermal Shock Resistance	ISO 10545-9:2013	Fully resistance
Frost Resistance	ISO 10545-12: 1995/Cor 1 : 1997	Fully resistance

Specimen dimensions: 20mm x 20mm x 7mm, 50pcs

## Coefficient of Friction

Test method: GB/T 4100-2006 Annex M Determining the Coefficient of Friction of Ceramic Tile Specimens: 170mmx170mm, 3pcs, all test samples were cut from the products with the size of 320mmx320mm

Test Items	Test Results
Coefficient of Friction for Dry Surface	0.77
Coefficient of Friction for Wet Surface	0.50

## Resistance to Surface Abrasion

Test method: Refer to ISO 10545-7:1996 Ceramic tiles-part 7: Determination of resistance to surface abrasion for glazed tiles  
Specimens: mosaic  
Test Results: After 1500 revolutions, visual failure occurred.

## Chemical Resistance

Test method: GB/T 4100-2006 Annex M Determining the Coefficient of Friction of Ceramic Tile Specimens: 170mmx170mm, 3pcs, all test samples were cut from the products with the size of 320mmx320mm

Aqueous test solutions		Test Results	
Household chemicals	Ammonium chloride solution, 100g/l	Visual examination	Class: GA
Swimming pool salts	Sodium hypochlorite solution, 20mg/l	Visual examination	Class: GA
Low concentrations acids & alkalis	Hydrochloric acid solution, 3%(V/V)	Visual examination	Class: GLA
	Citric acid solution, 100g/l	Visual examination	Class: GLA
	Potassium hydroxide solution, 30g/l	Visual examination	Class: GLA

# 9 Recycled Glass Testing Results

## Test Results of ROHS Directive

Tested Elements	Results (ppm)
CADMIUM (cd)	ND
LEAD (cd)	ND

ppm= parts per million  
ND= Not Detected

## Radioactivity of Building Materials

RADIOACTIVITY OF BUILDING MATERIALS WERE EVALUATED IN ACCORDANCE WITH GB 6566-2010, TYPE A DECORATION MATERIALS.

Tested Elements	Results
RADIUM-226 Radioactivity Rate Activity, Bq/kg	4.906
THORIUM-232 Radioactivity Rate Activity, Bq/kg	2.999
POTASSIUM-40 Radioactivity Rate Activity, Bq/kg	48.61

### TYPE A DECORATION MATERIALS

Requirements	Results
IRRADIATION < 1.0	< 0.1
EXTERNAL IRRADIATION < 1.3	< 0.1

RADIOACTIVITY OF BUILDING MATERIALS CONFORM TO REQUIREMENTS SPECIFIED IN GB 6566-2010, TYPE A DECORATION MATERIALS.

## Recycled Content of Material

THE FACTORY DECLARES THAT THE CONTENTS OF ENAMEL GLASS MOSAIC ARE SILICA (SiO<sub>2</sub>) AND ZIRCONIUM SILICATE; AND ALL MATERIALS ARE RECYCLED FROM COLLET. NO OTHER NEW RAW MATERIALS ARE ADDED DURING THE MANUFACTURING PROCESS. THE RECYCLED CONTENT OF MATERIALS IS 98%.

## Water Absorption

Group No.	Test Method	Test Results (%)	
1	ISO 10545-3:1995	1.00	Average: 0.67
2		0.43	
3		0.49	
4		0.57	
5		1.09	
6		0.66	
7		0.51	
8		0.61	
9		0.63	
10		0.72	

Specimen dimensions: 20mm X 20mm x 7mm, 9pcs in each group

## Resistance to Stain

Group No.	Test Method	Green Staining	Iodine 13g/L	Olive Oil
1	ISO 10545-14:1995	5	5	5
2		5	5	5
3		5	5	5
4		5	5	5
5		5	5	5

Specimen dimensions: 20mm X 20mm X 7mm, 15pcs



# 9

## Recycled Glass Testing Results

ISO 13006:2012 Ceramic tiles -Definitions, classification, characteristics and ,marking

Properties	Test Method	Requirements	Results	Verdicts
Physical property				
Water absorption percent mass fraction	ISO 10545-3: 1995/Cor. 1 : 1997	Eb>10% Individual minimum 9%	11.7% 11.2%- 12.2%	P
Thermal shock resistance	ISO 10545-9:2013	Test method available	Fully resistance	-
Frost resistance	ISO 10545-12: 1995/Cor 1 : 1997	required	Fully resistance	P
Chemical Property				
Resistance to staining				
a) Green staining agent in light oil	ISO 10545-14:2015	Minimum Class 3	Class 5	P
b) Red staining agent in light oil	ISO 10545-14:2015	Minimum Class 3	Class 5	P
c) Olive oil	ISO 10545-14:2015	Minimum Class 3	Class 5	P
Resistance to chemicals & swimming pool salts				
a) Household chemicals: Ammonium chloride, 100g/L	ISO 10545-13:2016	Minimum GB	A	P
b) Swimming pool salts: Sodium hypochloric solution, 20mg/L	ISO 10545-13:2016	Minimum GB	A	P
Resistance to low concentrations of acids and alkalis				
a) Hydrochloric acid solution, 3% (v/v)	ISO 10545-13:2016	Manufacturer to state classification	LB	-
b) Citric acid solution, 100g/L	ISO 10545-13:2016	Manufacturer to state classification	LA	-
c) Potassium hydroxide, 30g/L	ISO 10545-13:2016	Manufacturer to state classification	LA	-
Resistance to high concentrations of acids and alkalis				
a) Hydrochloric acid solution, 18% (v/v)	ISO 10545-13:2016	Test Method available	HB	-
b) Lactic acid, 5% (v/v)	ISO 10545-13:2016	Test Method available	HA	-
c) Potassium hydroxide, 100g/L	ISO 10545-13:2016	Test Method available	HA	-
Lead & Cadmium release				
a) Lead release, in mg/dm <sup>2</sup>	ISO 10545-15:1995	Test Method available	<0.01	-
b) Cadmium release, in mg/dm <sup>2</sup>	ISO 10545-15:1995	Test Method available	<0.002	-

1. P(ass): Test item does meet the requirement.
2. F(ail): Test item, does not meet the requirement.
3. - : Verdict was not carried out

## Recycled Glass Metal Testing Results

Name of Sample	Stainless Steel Mosaics	Nominal size (N)	31cmx26.5cm
Nature of Surface	Glazed (GL)	Work size (Sw)	310mmx265mmx8mm
Group	BIII	Description of Samples	The samples are sound, intact and fit for test.
Mark of Samples	SS130D	Quantity of samples	30 Pieces
Test Standard	ISO 13006:2012 Ceramic tiles -Definitions, classification, characteristics and marking Annex L Dry-pressed ceramic tiles Eb > 10 % Group BIII		
Conclusion of Test	The results conform to the requirement of Annex L of standard ISO 13006:2012 with respect to the test items.		

# 9 Recycled Glass Setting Systems

All materials should be used according to manufacturer's instructions. If the mosaic includes glass tiles, please note that due to the translucent nature of glass, the color of the bonding material will impact the ultimate look of the tile. We recommend the use of specific white bonding mortars; some mixed with specific latex admix. See the following list for required thin-set and follow manufacturer's recommended cure times for all setting materials. Pools, spas and all submerged applications require a minimum 21-day cure time after grouting and before submersion or exposure to heavy water use.

Although we require the use of highest performing setting materials for installing our products, occasionally, due to the transparent and/or light translucent nature of some of our products, visible effects, also known as "ghosting", may occur behind glass tiles.

## When mixing setting and grouting materials:

1. Measure liquid and powder per manufacturer's recommendations.
2. Machine mixing will provide more consistent results.
3. Do not exceed 300 rpm or manufacturer's recommendations.
4. Setting and grouting materials need to slake (set) 10-15 minutes after mixing and be remixed before use.

# 9 Recycled Glass Setting Systems

## Acceptable Setting Systems (White)

- Custom Building Products: MegaFlex Crack prevention Mortar
- Custom Building Products: MegaLite Crack Prevention Mortar
- Flextile: 52 Versatile Floor Mortar
- Hydroment™ ReFlex Ultra-Premium Latex-Modified Thin Set Mortar
- Kerakoll: H40 Tenax Single Component Thin-Set
- Laticrete: 254 Platinum Multipurpose Thin Set Mortar
- Mapei: Adhesilex P10 mixed with Keraply mortar additive
- TEC (H.B. Fuller): Super Flex Premium Performance Universal Latex-Modified Thin-Set Mortar
- FOR METAL (Geometro): Litokol LitoElastic Epoxy

## Unacceptable Setting Systems

- Organic adhesive (mastic) – due to yellowing and low bond strength
- Epoxy – due to low flexibility, as well as degeneration in UV sunlight

## Movement Joints

Movement joints are essential for the success of most tile installations. Follow recommendations on Movement Joints EJ171-07 in the “2008 TCA Handbook for Ceramic Tile Installation.” Movement joint requirements will vary depending on substrate, climate and size of installation. An architect or design professional should be consulted when specifying the exact number and location of each movement joint. Saw-tooth joints are not recommended. Certain application may require a different type of sealant.

## Acceptable Flexale Joint Fillers

- Hydroment: Chem-Calk 900 One-Part Urethane Sealant
- Kerakoll: Sigibuild PU Poly-Urethane Sealant
- Laticrete: Latasil 100% Silicone
- Silaflex: 1A or 2C Polyurethane-based Sealant

# 9 Recycled Glass Setting Systems

## Grout

Install grout mix according to manufacturer's instructions. Grout should be full and uniformly finished. Due to the impervious quality of glass, the grout will take longer to begin setting-up. For initial cleaning of grout from the tile face, use clean, dry cheesecloth. This wicks additional moisture from the grout and avoids washing out the joints. Use on a clean, damp sponge for the final cleaning and smoothing of the joints. For final polishing of excess haze use a clean, soft cloth.

### Acceptable Grouts

- Custom Building Products: Prism SureColor Grout (can go in pools)
- Custom Building Products: Fusion Grout
- Custom Building Products: Polyblend Sanded Tile Grout
- Flextile: 600 Polymer Sanded Floor Grout
- Hydroment: Sanded Ceramic Tile Grout
- Kerakoll: Fugabella 2-12
- Laticrete: 1500 Series Tile Grout or Equivalent
- Mapei: Ker200 Series and Ker700 Series Ultra/Color
- Tec: AccuColor Premium Sanded Tile Grout
- Litokol Starlike (for LeMer)
- Litokol Starlike grout or Customs Prism (for Gunmetal - Geometro)

An Acrylic grout admix can improve freeze-thaw resistance. Check manufacturer's recommendations.

### Unacceptable Grout

- Epoxy Grout – due to low flexibility, as well as degeneration in UV sunlight
- Non-sanded grout – due to shrinkage
- Consult grout manufacturers before considering blue, green or red grout in submerged applications.

### Anti-Fracture/Waterproofing Membranes

- Aquafin 1K and 2K/M: Cementitious waterproofing system
- Custom Building products: RedGard Waterproofing and Crack Prevention Membrane
- Hydroment: Gold Anti-fracture and waterproofing membrane
- Laticrete: 9235 waterproof & anifracture membrane
- Tec: T1-324 Triple-Flex waterproofing/crack isolation membrane
- Xypex: Concentrate

**NOTE:** We do not recommend membranes directly behind the setting material when installing translucent or transparent glass tile.