



LE GEMME

Introduction

Crystal Cold

Crystal Warm

Deep Sea

Deep Steel

Pinky Winky

Polar

Polar Gold

Purple Rain

Quarzite White

Quarzite White Silver

Red Passion

Rubino Intenso

TRANSLUCENT

Black Cosmic

Black Cosmic Gold

SOLID

 Amazonite Ametista Blue Tiger Eye Golden Tiger Eye Imperial Black Lapis Malachite 52 Opus Black 53 Opus Black Gold Opus Black Silver 58 Red Jasper Rodonite 62 Sodalite *Turchese*





introduction

Nel 2016, "Valmori Ceramica Design Srl" si arricchiva del progetto "Le Gemme".

Il programma prevedeva l'inserimento nella gamma prodotti, sino ad allora esclusivamente ceramici, di una nuova linea (Le Gemme) dedicata a pietre semi-preziose composte da pietra naturale e da elementi sintetico-artificiali.

La finalità del progetto era favorire l'introduzione della bellezza della pietra naturale in specifiche aree tecniche non ancora esplorate prima. Oggi, grazie alla positiva esperienza de "Le Gemme", abbiamo deciso di sviluppare questo progetto di successo, creando "Riflessi by Valmori": nuovo brand interamente dedicato a lastre in pietra naturale e ri-composta, materiale affine alla ceramica, ma di un livello di bellezza estetico dato dalla natura e non dai macchinari industriali.

Il programma non si compone più di soli 9 articoli, dapprima presenti nella collezione "Le Gemme", ma con l'aggiunta di altre 19 pietre, da un totale complessivo di 28 lastre di pietre dalla bellezza unica per progetti esclusivi e lussuosi.

Lastre aventi misura massima di 310x180 cm . 1 / 2 / 3 cm di spessore a seconda dell'impiego d'uso. line "Le Gemme". and so on. only one item.

During 2016, "Valmori Ceramica Design Srl" started to offer to costumers the new line "Le Gemme".

This new stunning program has been thought to expand the range of the factory, that until this collection has ever sold only ceramic / stoneware items.

"Le Gemme" was a collection in which the products were composed by a sophisticate mix of natural stones and synthetic/artificial elements.

We wanted to explore the beauty of the natural stones and mixed them with innovative synthetic products like resins and so on.

Today, thanks to the positive experience of our line "Le Gemme", we have decided to launch the new brand "Riflessi by Valmori", completely dedicated to this kind of materials: natural stones mixed with synthetic components, to give the natural beauty effect and the technical features of the porcelain stoneware in only one item.

Once the program involved 9 types of stones, now we have added 19 different stones/colors, to create a catalogue composed by 28 slabs; giving to the designers the chance to realize unique ambients and interior projects.

Slabs available with a maximum size of: $310x180 \text{ cm} - 122^{\circ}x71^{\circ}$. 1/2/3 cm of thickness, according to the use.



Black Cosmic Gold





Black Cosmic





Black Cosmic Gold



Black Cosmic Gold



Black Cosmic



Crystal Warm







Crystal Warm

Deep Sea





Deep Stee







Deep Steel

Pinky Winky



Pinky Winky

Polar

Polar Gold

Polar

Polar Gold

Purple Rain

Purple Rain

Quarzite White

Quarzite White

Quarzite White Silver

Red Passion

Rubino Intenso

Ametista

Blue Tiger Eye

Golden Tiger Eye

mperial Black

Malachite

Malachite

Opus Black

Opus Black Gold

Opus Black Silver

Opus Black Silver

Jasper Red

58

Rodonite

Turchese

Sodalite

Turchese

Proprietà fisiche

Physical properties

CARATTERISTICHE NORMA VALORE MEDIO FEATURES AVERAGE VALUE NORM MIN.2 JOULE FOR 1,2 cm THICKNESS MIN.3 JOULE FOR 2 cm THICKNESS RESISTENZA ALL'IMPATTO TS EN ISO 14617-9 IMPACT RESISTANCE CARICO DI ROTTURA TS EN ISO 14617-2 40-70 N/mm2 BREAKING OF RUPTURE RESISTENZA ALL'ABRASIONE TS EN ISO 14617-4 MAX 3 cm ABRASION RESISTANCE RESISTENZA SUPERFICIALE N 101 SCRATCH HARDNESS (MOHS) RESISTENTE *RESISTANT* RESISTENZA ALL'ACQUA UNI EN ISO 10545-3 WATER RESISTANCE

| S.N0 | TEST TEST | RISULTATI RESULTS | |
|------|--|--|----------------|
| | | LE GEMME 10 mm | LE GEMME 20 mm |
| | | TRANSLUCENT | SOLID |
| 1 | ASSORBIMENTO ACQUA WATER ABSORPTION | 0,67% | 0,10% |
| 2 | DENSITÀ DENSITY | 2,63 g/cc | 2,30 g/cc |
| 3 | RESISTENZA ALLA COMPRESSIONE COMPRESSIVE STRENGHT | 128,4 N/mm² | 102,2 N/mm² |
| 4 | EFFETTO DI CALORE HEAT EFFECT | SURFACE OF TILE BECOME BLACK HEATING ABOVE 100°C | |
| 5 | RESISTENZA ALL'ACIDO ACID RESISTANCE | NO EFFECT OBSERVED ON SURFACE WHEN DIPPED IN 3% HCL SOLUTION | |

Imballi

Packing

| FORMATO LASTRA SLAB SIZE | 315X180X2cm <i>124"X70"X0,78"</i> | 120X120X1cm <i>48"X48"X0,39"</i> | 60X60X2cm <i>24"X24"X0,78"</i> | 60X60X1cm <i>24"X24"X0,39"</i> |
|--|--------------------------------------|-------------------------------------|-----------------------------------|-----------------------------------|
| FORMATO CASSA CASE SIZE | 320X198X99cm approx 126"X78"X39" | 137X153X40cm approx 54"X60"X19" | 76X76X68cm 30″X30″X26″ | 76X76X68cm 302X30"X26" |
| PESO CASSA CASE WEIGHT | 1500 kg approx | 600 kg approx | 400 kg approx | 400 kg approx |
| LASTRE PER CASSA SLABS PER CASE | 5 | 12 | 18 | 26 |
| CASSE PER CONTAINER CASES PER CONTAINER | 5 | 32 | 63 | 63 |
| LASTRE TOTALI TOTAL SLABS | 25 | 384 | 1134 | 1638 |
| PESO TOTALE TOTAL WEIGHT | 8 tons approx | 20 tons approx | 26 tons approx. | 26 tons approx |

Procedure of cutting handing and installation

Do your prepwork

- Semi Precious stone cut only wet (with water). In either case, it's a mess, so set up a work area, with 2. tables or flat surface on floor that can support the stone, where the work won't affect other areas of the home.
- Cutting wet (which will probably require buying or renting a wet-cutting saw) will create a slurry that needs to be hosed off. Cutting dry creates a dust cloud that will travel.
- Ear, eye, and dust protection are 5. essential.
- The primary cutting tools for sto- 6. ne are a circular saw or an angle grinder. (same use of granite/ 7. marble stone)

Materials needed

Seam setter, 4' level, angle grinder with diamond blade, caulk gun, acrylic caulk, shims, painter's tape, measuring tape, two-part epoxy for nonporous applications, cardboard or similar material for template (optional), proper protective equipment, utility knife, jab saw, pencil, granite sealer, granite cleaner, soft cloth.

How to cut a semi precious stone slab

- Set up stone on a stable work sur-1 face and clamp it down.
- Measure and mark the cut line. To minimize chip-out, cover the cut line with blue tape. Remeasure and mark the tape.
- 3. If using a circular saw, blue-tape the shoe of the saw to minimize the risk of metalon-slab scratchina.
- If using a grinder DO NOT remove 2. 4. the quard. A face shield is recommended.
 - Set up a straightedge guide like a shoot board.
 - Using an angle grinder is a fre- 3. ehand-cut method.
 - Whichever tool you use, keep the tool moving, but do not force the tool. This will minimize chip-out and deliver the cleanest cut. If the tool is really laboring, make the cut in two passes.
 - Some installers back-cut the slab. In other words, they make a 2-inch kerf at the finished end of the cut, so the slab doesn't significantly chip or break upon completion of 6. the cut.
- Use an angle grinder with polishing pads to clean up the saw marks on the cut edge and to "break" or micro-bevel the 90-dearee cut edge to soften it. Pads start at 50- grit and go up to 3000 or more depending on the smoothness and sheen desired.
- The process is mainly the same 10. to cut granite/marble countertop for a sink. To transition directions, holes are drilled in each corner of the slab at the sink location and plunge cuts are necessary to enter the slab surface.

General recommendations

Employers who are engaged in the handling and storage of slabs must prevent caught-by, struckby, and/or crushed-by hazards in their workplace. The following are general recommendations:

- Pre-plan work to identify the hazards, safe work practices, and the equipment that will be used to perform the work safely.
- Develop and implement safe stone slab handling procedures for transporting, loading and unloading slabs from containers and storage areas.
- Provide mechanical handling equipment appropriate to the task.
- Inspect material handling equipment before use to assure that it is in good condition. Defective equipment must be immediately reported and repaired or replaced before use.
- Instruct and train employees on 5. the proper material handling procedures.
 - Ensure that employees follow safe stone slab handing procedures.

Recommendations for storage

The following recommendations will minimize the potential hazards associated with "stone racks" and other storage racks for storing stone slabs:

- 1. Design storage racks to withstand the loads and forces imposed on them.
- 2. Design a storage rack system to secure slabs from shifting, sliding and collapsing, or provide secondary bracing or a restraint system to secure slabs from shifting, sliding and collapsing.
- Ensure that the "slab racks" are 3. properly installed. Inspect each component to ensure that poles can be inserted into the holes.
- Maintain the rack, ensuring that 4. no debris or other objects interfere with the insertion of the poles used with "slab racks."
- 5. Develop and implement procedures for the placement and removal of slabs from the racks, keeping employees out of danger zones.
- 6. Do not allow employees to use damaged storage racks.
- 7. Inspect the storage racks prior to loading. Ensure that the racks are properly installed. Look for:
- Cracked welds; •
- Cracked structural members:
- Deformed or bent structural members:
- Splits in wooden supports:
- Areas that show that the rack has been damaged or overloaded; and
- Poles or other uprights not seated • properly in sockets or holes.

The following recommendations will minimize the potential hazards asso-

ciated with handling and transporting stone slabs:

- Avoid manual lifting of stone slabs where possible. Use mechanical aids (slab dollies, suction li- 8, fts, scissor clamps, etc.). Lift only loads that can be safely handled. Use the proper material handling equipment, such as an overhead crane with appropriate approved attachments, or a forklift truck equipped with appropriate and approved boom attachments and lifting devices, or other equipment loading of slabs.
- Place the clamp on the secure area of the stone when moving and/or lifting a slab with a scissor clamp. Placing the clamp over a weak vein can cause the stone to break and fall. Clamps should be used only on grade "A" marble and other solid stones without flaws, open seams, or cracks, Assure that a suction cup is rated to lift these types of finishes when moving unpolished slabs with a suction cup lifter.
- Do not use scissor clamps on equipment operating on uneven surfaces.

5.

Never stand under, near or in the 6. fall shadow of a slab when moving it with an overhead crane. Use a tag line to control slabs being supported or moved while suspended from a crane cable to prevent them from falling or toppling.

Recommendations for handling and in-house transport of stone slabs

- 7 Always walk at the end of the slab. Never walk in the "fall shadow" of a slab. The "fall shadow" is the area on both sides of the slab where the slab could land and topple if it were to fall.
- Assure that dollies used to move stone slabs are designed to support the weight of the slab.
 - Have employees walk on either 9. end of the dolly to support the slab.
 - 10. Raise the load only as far as necessary to clear the road surface or obstacles when using powered industrial trucks
- to assist with the unloading and 11. Only handle loads within the rated capacity of the truck when using powered industrial trucks.
 - 12. Remove the supports and bracing from the stone slab bundles inside shipping/storage containers using a sequence that does not allow for the other slabs to shift or collapse.

Procedure of fixing tiles and slabs

Tile Installation Procedure

A successful tile installation guarantees years of trouble-free performance and increases your home's value and beauty. To properly install tile follow the steps below:

Surface Preparation

Tile may be installed over most structurally-sound substrates. Make sure all surfaces to be tiled are clean, smooth, dry and free of wax, soap scum and grease. Any damaged, loose or uneven areas must be repaired, patched, and leveled. Remove all moldings, trims, appliances, etc. which may interfere with the installation. Door jambs may be undercut for tiles to slip under.

- Layout: When tiling walls, tubs, or shower areas, begin by finding the center point of the wall. Use a level to draw a plumb line in the center of the wall. Align a row of loose tiles across the bottom of the wall from the center line, leaving uniform joints between tiles.
- Setting Tile: Variation of shade and texture is an inherent characteristic of tiles/slabs. For a blended effect, mix tiles from several cartons as you set. It is important to use the correct adhesive for a particular substrate (surface) in order to ensure a proper bond. Before setting your tiles, select the correct adhesive. Once you have chosen the proper adhesive or mortar, read all instructions and precautions on the package before using. Mix thin set or mortar according to the directions on the package. Mix only enough to be used within 30 minutes. Pre-mixed wall tile adhesives can be applied directly from the can without mixing. Determine the appropriate type of trowel (V or square-notch) and the right size (depth of notches) for the type of tile you are setting. Refer to the setting material package for recommendations.
- Grouting Joints: Before grouting joints, the tile should be well-set to prevent breaking the bond. Refer to the adhesive package for specific time. Generally, you should wait about 24 hours before grouting. Remove all the spacers used for setting. Determine the grout color of your choice. For best results, choose on the color-coordinates with the tile. Remove excess grout from the surface immediately with edge of float. Tilt float at a 90 degree angle and scrape it diagonally across the tiles. Continue the process of compacting, then scraping off excess, until you have grouted for approximately 30 minutes or when the mixture begins to stiffen.

Floor tiles adhesives are heavier and thicker than the wall tiles but you can use same adhesives for wall 1cm or 2cm slabs. They are also more resilient to vertical pressure. It is therefore important that you go for a strong floor tile adhesive when buying your flooring supplies. Tile adhesives are either in powder form or in the form of ready-mixed pastes. Powdered adhesives require mixing with water. They turn into a slurry, which provides a strong bond. They are suitable for floor tiles. On the other hand, ready-mixed pastes are usable without any prior preparations. They serve best in securing wall tiles.

Importance of tile adhesives

Optimum setting time of tile adhesive allows tiles to be easily adjusted within a certain period. It makes tiles being laid in line and gives the aesthetic final look. Applying tile adhesive with notched trowel provides full spread on the back of tiles and will reduce many problems like broken tiles esp. on the corner, water seeping, and stain or efflorescent. Full contact of the adhesive on tiles' back and substrate provides strong bonding strength and long-lasting tiling work. A white cement mixture (for flooring) for tile installation requires many different things that need to be in a perfect ratio. It is not very easy and also takes a lot of time. But Tile Adhesive, which is made especially for this purpose, comes completely prepared. Everything that needs to be mixed comes already mixed in the bag. This saves a lot of time and effort. Laving tiles by using tile adhesive with notched trowel requires less amount of material. The adhesive layer is a lot thinner than the mixture of sand-cement, and this leads to a lighter load to the building structure. A good guality tile adhesive is a premixed cementbased powder that is easy to apply and requires no curing. This does away the curing need and saves time in tiling work. The importance of tile adhesives in a nutshell-

- Fast and efficient •
- Easy to use, only mix with water
- Better bonding strength •
- Applicable on existing tiles, many special substrates like polished cement, dry wall system, etc.
- Thinner layer
- Due to its low shrinkage property, it gives excellent adhesion.
- It is very flexible for accommodating the thermal and also physical movements. •
- It requires almost no amount of curing and needs no mechanical or hacking of the surface.
- The floors where tile adhesive is applied can be usable only after 24 hours.
- No backing surface and soaking of any tile are required in any way.

LE GEMME

LE GEMME

Rubino Intenso

Imperial Black

Opus Black Silver

