

MAXIMUMTM

FIANDRE EXTRALITE

LARGE PORCELAIN PANEL MANUAL

GENERAL INSTRUCTIONS

1. SHIPPING

5'x10' panels may be transported vertically (see example A) or horizontally (see example B). Vertical transportation is preferred by using "A-frame" packaging.



Example A
A-frame
With 50 pieces max.



Example B
Flat Crate
With 12 pieces max.



A-frame shown being unloaded from container

- A-frame packaging can hold up to 50 pieces of 5'x10' porcelain panels vertically
- Flat crates can hold up to 12 panels. No more than six flat crates may be stacked on top of each other in a 20 ft. container.
- Full 20 ft. containers contain approximately 150 pieces (Three A-frames).
- Other size packaging:
15"x30", 30"x30", and 30"x60" are regularly packaged in a box and shipped on traditional pallets.
60"x60" are shipped flat on reinforced crates – 24 pcs per crate

2. PRODUCT IDENTIFICATION

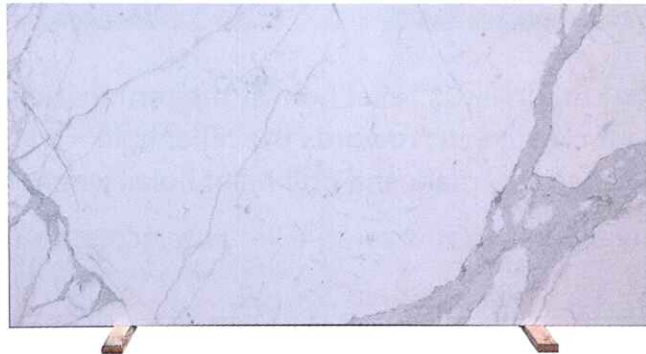
Each full crate will include a product sticker with product description and code along with a packing slip for details of shipment and material.

All smaller shipments will only include the packing slip.

3. HANDLING

When taking delivery of Fiandre, Maximum large porcelain panels, please make sure of the following:

- It is important to examine any shipment to notate any damage on BOL or a claim may be refused.
- If you detect any defect after taking delivery of the panels, and prior to cutting, do not proceed with the processing and contact your sales or customer service representative ask to return the panels immediately.
- Transport of 12 panels or less should be shipped in open A-frame with flat back support.
- When moving the panels vertically, be sure to use proper base support to stand the panels. Two wood blocks about 2" thick and 24" apart from each end of panel is recommended.



- Please use proper tools to move the large porcelain panels. Recommended tools include:
 - A. Suction cup handles
 - B. Free-move by Raimondi or similar
 - C. Forklift pinch clamp by Abaco Machines or similar



Example of suction cup handle being used. Panel weight is approx. 150 lbs and no more than 2 people are suggested to move



Example of forklift boom & pinch clamp

DESIGN AND FABRICATION GUIDE

FABRICATION OF FIANDRE, MAXIMUM LARGE PORCELAIN PANELS

When fabricating Fiandre, Maximum large porcelain panels, a variable speed right angle grinder is strongly suggested to reduce vibration and possible cracking. Diamond blades or diamond drill bits should be used for various cuts.

1. FULL CUTS

The “score and snap” is the preferred method for straight cuts (from one end of the panel to the other) using a recommended tool such as Raimondi Free-Cut or equivalent.



When planning a plunge cut, drill a 1” relief hole at the termination point of the cut, prior to beginning the cut. **Always** cut **towards** the relief hole

When planning a “U” shaped cut, mark and drill relief holes where the cut lines will intersect.

Always make the shortest cuts first.

When planning an “L” shaped cut, mark and drill relief holes where the cut lines will intersect. Always cutting the shortest length first, and cutting towards the relief hole.

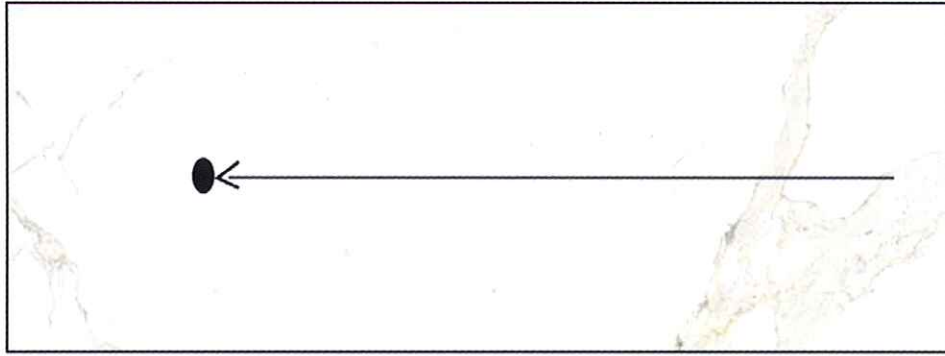
When planning a cut that will be the full length of the panel, either with a plunge cut, or starting at the edge, mark and drill a relief hole at the termination point of the cut, then cut towards the relief hole.

1. PLUNGE CUTS

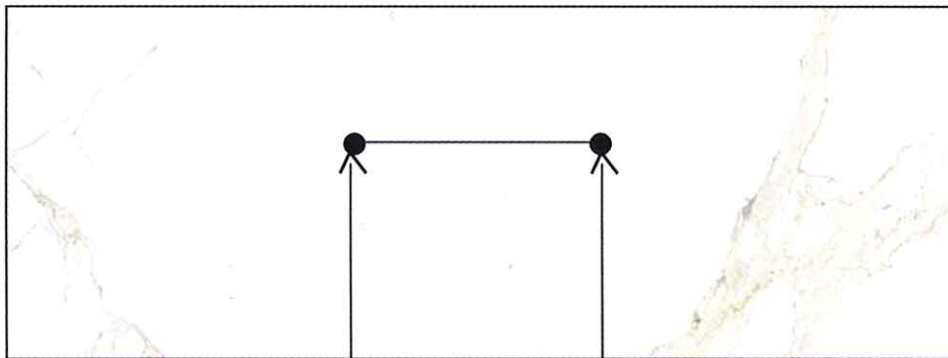
When making a plunge cut, drill a relief hole 1” in diameter near the end of the cut.

IMPORTANT: *always* cut toward the relief hole.

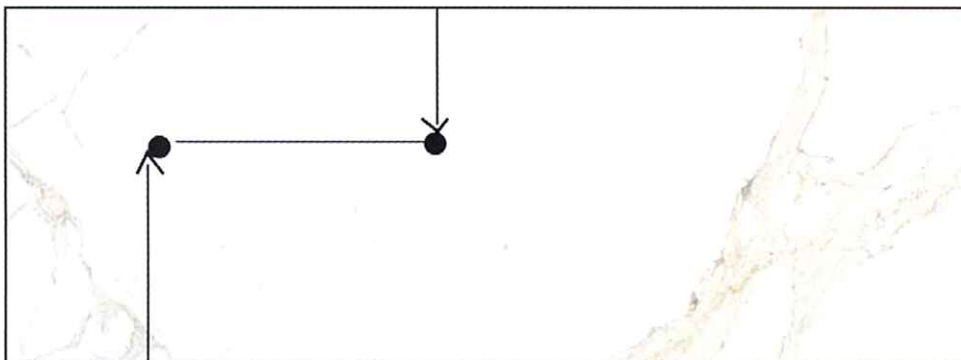
(Please see following images)



When cutting a “U” shaped piece, mark, and drill relief holes where the cut lines intersect, always making the shortest cut first.



When cutting an “L” countertop, drill relief holes where the cut lines intersect, always making the shortest cut first.



3. KITCHEN / VANITY CABINETS

Prior to installing counter tops, care should be taken to check the cabinets and base units for the following: Strong and stable - All units are fastened to both the wall and between the base units.

Cabinets are leveled properly. The top of the cabinets must be plumb, true, and flat. Make sure that the level does not vary more than 1/16" over 10'. Remove any nails, screws or sharp edges from the surfaces where the tops would be placed.

4. INSTALLATION OF COUNTER TOPS

No two kitchen counter tops are the same; however there are some general guidelines for installing Fiandre, Maximum large porcelain panel counter tops. You must insure that there is proper support for the counter top. The base support installation for the counter top depends if it is existing or new.

Rarely will all the walls be perfectly square. Please make allowance for such imperfections prior to cutting.

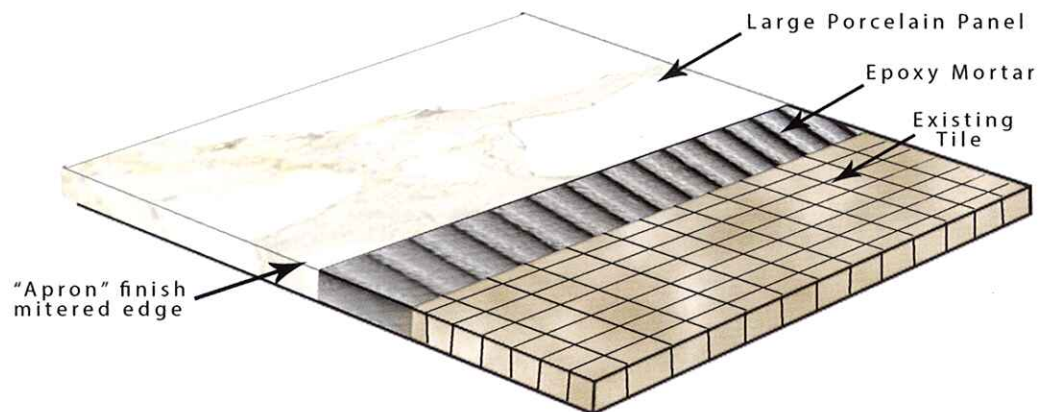
Counter tops should be placed on a very sound and solid frame or a base which is perfectly plumb, level and true.

There are various ways to apply our panels for a counter top. Large porcelain panels can be installed over existing tile, stone, or other solid surfaces. New installation over MDF, cement board, Kerdi board, etc. is also suitable.

Please follow the suggested instructions for your preference of installation.

A. OVER EXISTING TILE/STONE/OTHER SOLID SURFACES

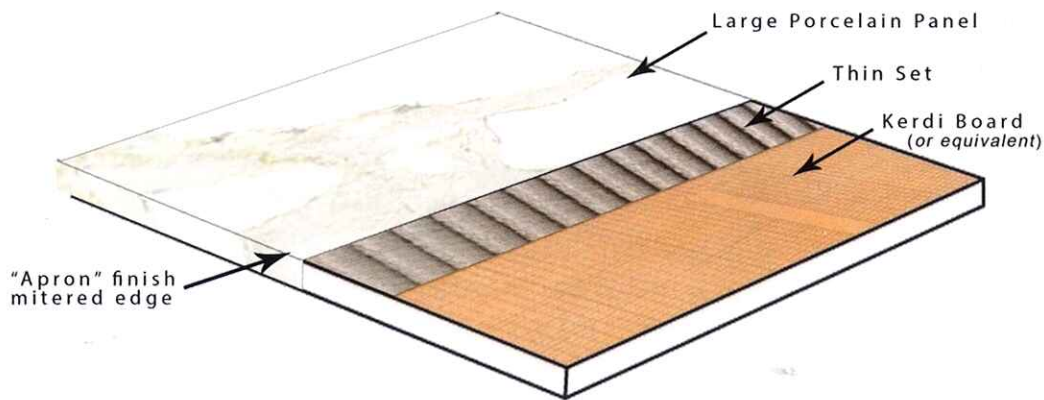
Fiandre, Maximum large porcelain panels are ideal for placement on top of existing tile, stone, or solid surfaces. The surface area must be clean from debris. An epoxy mortar or equivalent is recommended to adhere the porcelain panels to the existing surface.



B. NEW INSTALLATION

The complete surface area of the counter top must be supported over the kitchen cabinets with full width self-supporting underlay made up of either plywood or MDF (medium density fiber board) with a waterproofing mat (i.e. Ditra by Schluter®) or waterproofing membrane (i.e. AquaDefense by MAPEI) with a minimum thickness of 3/4" of recommended adhesives. More so recommended is the use of Kerdi Board by Schluter® in desired thickness (1/2" to 2" offered), with thinset application using proper trowel and large porcelain panels on top. Kerdi Board offers a sturdy material that will not expand due to moisture and offer top support.

Colored or tinted epoxy glue such as Akemi or equivalent are often used to fill edges and bring the pieces together to form a smooth transition.



INSTALLATION WITH CUT OUTS AND JOINTS

1. CUT OUTS (i.e. PLUMBING FIXTURES)

For plumbing fixtures (circular cut outs), a circular diamond drill bit must be used with a variable speed grinder.



Example of initial drawing for plumbing fixtures cut out

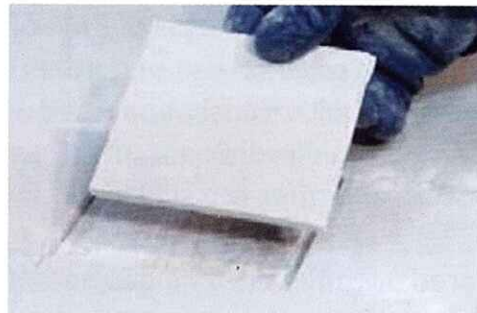


Image shows contact of variable speed grinder with diamond circular bit

For straight lined cut outs, a variable speed grinder with continuous rim diamond blades must be used. Release holes or cuts before planning a square or rectangular shape are necessary.



Example of variable speed grinder using diamond blade to make straight line cut out



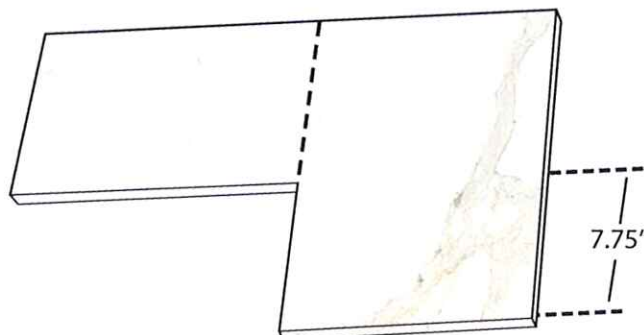
Clean cut out complete

Where possible, it is best to fabricate plumbing and electrical niches and holes after the panel is already installed with thin set on wall or floor to avoid possible cracking during transportation. Holes and cuts weaken the body of the panels and movement stress may cause damages. If it is not possible to cut with multiple holes or square/rectangular cuts (fireplace, sink, etc.) after panel is installed, create full support with plywood or MDF panel template with same shapes and cuts to attach and transport the porcelain panel. Support panels should only be detached when porcelain panels are fully bonded to the wall or floor. It is also possible to move panels with proper moving tools made of multiple suction cups to avoid tension of the panel after it is cut.

2. COUNTERTOP SEAMS

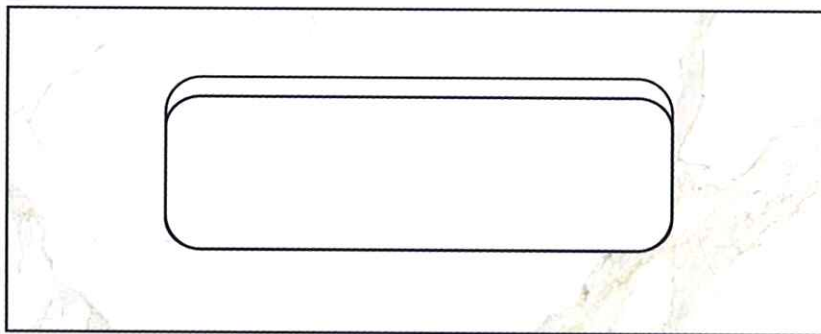
Do not place seam within 6 inches of a planned cut out, such as for a sink, cook top, etc.

Fiandre USA does not recommend installing "L" shaped counter tops without a seam at the corner of the "L" shape, due to various mechanical stresses to be experienced by such tops after installation unless proper support already is established prior to moving. Fabricator should use their discretion when fabricating.



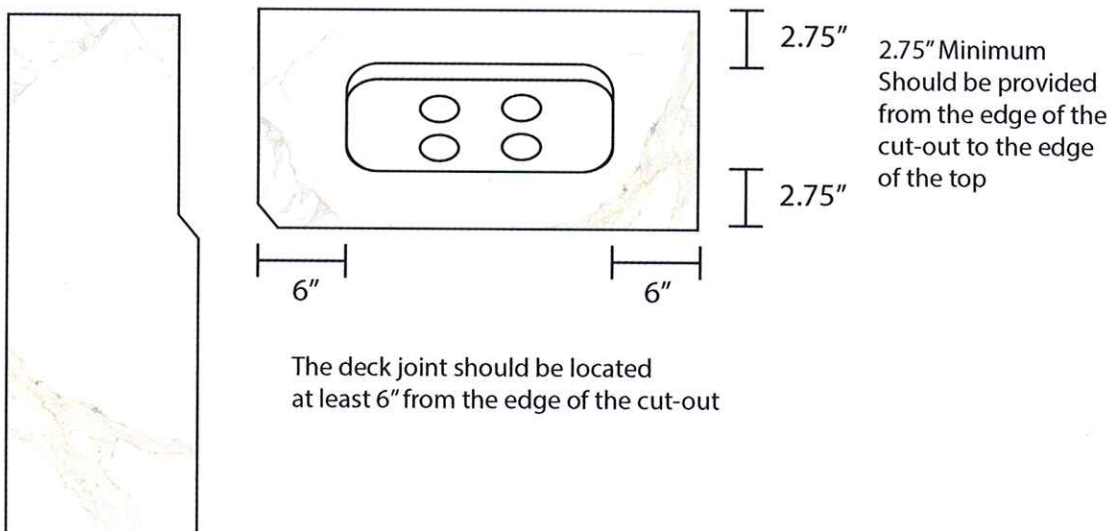
- All the seams in the tops should be well supported from underneath.
- All the seams should be properly cleaned with acetone or denatured solution to get rid of dust and grime.
- All the sides of the seams should be grooved or slotted in the middle so that the glue joining the two panels will be well distributed for good adhesion.
- Check that the top is leveled properly and is plumb and true.
- Ensure that the seams are perfect and then place clamps until the adhesive sets properly.

Do not use any mechanical fasteners like screws and nails to Fiandre, Maximum large porcelain panels.



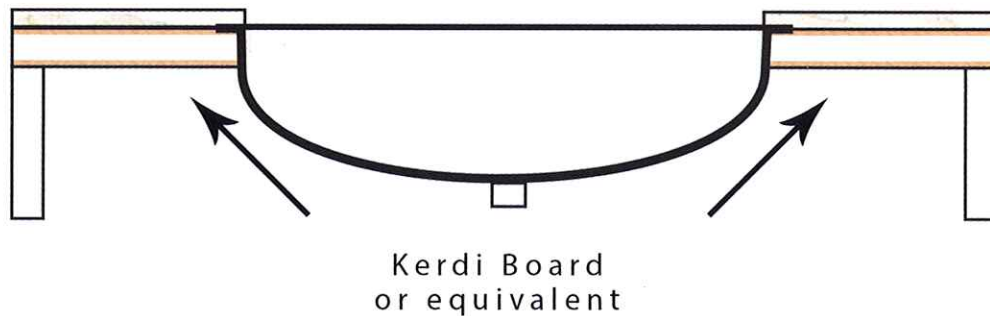
3. APPLIANCES AND PORCELAIN PANELS FOR COUNTERTOP

- All care should be taken when installing appliances, Refer to the manufacturer's instruction manual prior to the installation of appliances, cooktops, sinks, etc.
- Center all the appliances in the cut out and make sure that you allow a minimum of 1/8" space between the inside edges of the appliance and cut out walls.



- Position all the appliances in place and make sure that the seals provided with the appliances are properly placed prior to tightening the fasteners. All fasteners should be only finger tight, never use force in tightening the fasteners.
- Any appliances weighing more than 11lbs should be adequately supported by the cabinet frames.
- Sinks may be under mounted, see example below.

UNDER MOUNT SINK



4. OVER HANG

If the overhang is less than 20" then general practice is to provide a support base made up of cement board, MDF, Kerdi board, etc.

5. BULLNOSE FABRICATION

The porcelain panels can be polished with a combination of standard polishing tools.

6. MITERED EDGES

Material can be mitered using proper tools. Colored or tinted epoxy glue such as Akemi or equivalent are often used to fill edges and bring the pieces together to form a smooth transition. Please see image below of 45 degree miter cut.



7. INSTALLATION OF BACKSPLASH

Fiandre, Maximum large porcelain panels are ideal for a backsplash application behind wash basins, sinks, and behind cook tops and can be installed over existing stone, tile, or solid surface or as a new installation.

WALL AND FLOOR INSTALLATION

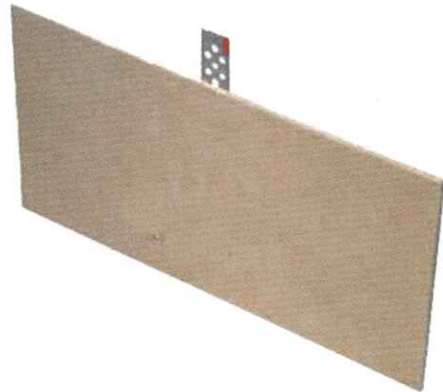
1. INTERIOR CLADDING WALLS

Fiandre, Maximum large porcelain panels can be used for all internal cladding of walls and vertical applications. The installation of vertical panels varies from location to location.

It is generally suggested thin set application over cement board or solid surface.

2. EXTERIOR CLADDING WALLS

Fiandre, Maximum large porcelain panels can be used for all exterior wall applications using mechanical fastening systems, safety hooks, etc.



3. FLOOR INSTALLATION

Fiandre, Maximum large porcelain panels for a floor application are an excellent choice that offers the flexibility and visual impact not previously available in the market place. Fiandre, Maximum porcelain panels can be installed over concrete slabs, solving the presence of eventual concrete cracks and respecting expansion joints. Concrete slab flatness should be within ANSI standards (1/8" in 10').

Contractor should strive for full mortar coverage on the back of the tile (full skim coat to back panel before installing the floor is essential). It is imperative to have sufficient mortar under the body of the tile and at the tile edges for full support. It is commonly suggested to consider a 50 lb. bag of premium thin set for each full 5'x10' size porcelain panel. 3/8" thickness of the mortar thin-set is recommended. Self-leveling systems are recommended to achieve proper final floor installation. Fill any voids with the mortar for complete support.



Example of full skim coat being applied

Proper tools and techniques need to be used to fully ensure full bond and air to move out of the panel after first installation.



Example of proper full mortar coverage

Self-leveling system being used for floor installation

The adhesive manufacturers have vast experience in the installation of a tiling system using porcelain tiles and large porcelain panels. Accordingly, we strongly recommend that the installer should consult the relevant manufacturers and seek their advice prior to installation of Fiandre, Maximum products including our large porcelain panels. (please see referenced manufacturers page with contact details)

MAPEI: <http://www.mapei.com>

Laticrete: <http://www.laticrete.com>

Custom Building Products: <http://www.custombuildingproducts.com>

Use a trowel with a configuration that helps to obtain maximum mortar coverage between substrate and the large porcelain panel, evenly spreading the bottom of the tile and minimizing air pockets. It is recommended to use a 1/4" notch trowel or zipper trowel (Euro-Notch trowel by Raimondi or similar) for maximum thin set coverage of up to 98%.

Place tile into the fresh mortar and firmly press to cause the ridges to flatten out and come together into a continuous void-free bed. Install desired spacers of preferred grout joint design width.

NOTE: A minimum 1/16" and maximum 1/8" grout joint width should be maintained throughout entire installation.

GROUT AND FILLERS

Unsanded grout with added polymer or epoxy grout is suggested to grout the joints. If using epoxy grout, make sure to follow proper cleaning instruction within the manufacturers' specific time frame.

Fiandre USA does not accept any responsibility nor does it recommend a particular method of installation, it is the responsibility of the installer/buyer to design the tiling system based on the advice obtained from the engineered tile adhesive manufacturers.

CARE & MAINTENANCE

1. COUNTER TOPS & FLOORS

Fiandre, Maximum large porcelain panels are high quality solid non porous product that are resistant to scratches, heat, and stains. Fiandre, Maximum large porcelain panels require minimum maintenance and the following care and maintenance guidelines will help to keep the surface in immaculate condition for years.

2. GENERAL ROUTINE CARE & MAINTENANCE

Fiandre, Maximum large porcelain panels are highly resistant to stains caused by fruit juices, liquid food coloring, coffee, tea, wine, grapes, soft drinks, paints, nail polish and remover, automotive fluids, and permanent markers.

Should a spill occur, wipe off the stained area with any commonly available multi-purpose cleaner or household detergent and then rinse area with ordinary water immediately. For more stubborn spills and stains, repeat the procedure several times and use a soft, non-metallic scouring pad to remove the stain. It is possible that some of the stubborn stains may leave a light mark or very slight discoloration on polished material. Please refer to the recommended cleaners page for specific residue solutions.

3. USE OF COMMON KITCHEN IMPLEMENTS

Common kitchen implements including sharp knives won't harm Fiandre, Maximum large porcelain panels. Normal care should be exercised when moving heavy objects and avoid dropping heavy kitchen tools.

4. FOREIGN MATERIAL

If food, chewing gum, nail polish, paint or any other foreign material is found sticking to the top/floor, simply scrape away the material with a sharp blade or sharp plastic scraper. The use of a metal scraper may leave grey metal marks on the surface, and nylon scouring pad can easily remove them. Wash and rinse the surface in the normal way with water. Please refer to the recommended cleaners chart page.

5. MAINTENANCE OF FLOORS

Dust, grit, and barrier materials from the floors should be removed on a daily basis by sweeping with a soft brush and when necessary by use of a machine.

Sand can scratch the floor and those surfaces should always be kept free from dust, sand and soil. Fiandre, Maximum large porcelain panel surfaces can be easily cleaned with warm water and mild household detergent, using a standard mop. Make sure the floor is completely dry before allowing it to be walked on.

6. ADVICE TO THE INSTALLER

Please always follow proper initial cleaning regiment using the suggested solution on the following cleaners chart.

RECOMMENDED CLEANERS & CONTACT INFORMATION:

- **FILA CLEANING SOLUTIONS**

10800 N.W. 21st Street #170

Miami, FL 33172

Phone 305.724.8939

Website www.filasolutions.com

For organic residue removal

FILA PS87

For cement-based residue removal

FILA DETERDEK

For epoxy removal

FILA CR10

- **HILLYARD, INC.**

302 North 4th Street

St. Joseph, MO 64501

Phone 800.365.1555

Fax 800.861.0256

Website www.hillyard.com

For lead or metal residue removal

HILLYARD CREME CLEAN

REFERENCED MANUFACTURERS CONTACT INFORMATION:

TOOLS

- **RAIMONDI TOOLS**

Donnelly Distribution LLC
N63 W 22611 Main Street Unit C
Sussex, WI 53089
Toll Free 800.625.6686
Phone 262.820.1212
Fax 262.820.1226
Website www.raimondiusa.com

- **SIGMA TOOLS**

European Tile Masters, Inc.
1830 Vista Way
Margate, FL 33063
Phone 954.917.3599
Fax 954.917.3539
Website www.europeantilemasters.com

- **ABACO MACHINES USA (BOOM, PINCH CLAMP)**

20224 S. Normandi Ave.
Torrance, CA 90502
Phone 310.532.0366
Fax 310.532.0499
Website www.abacomachines.com

BUILDING PRODUCTS (KERDI BOARD, CEMENT BOARD, ETC.)

- **SCHLUTER SYSTEMS (KERDI BOARD)**

Schluter-Systems L.P.
194, Pleasant Ridge Road
Plattsburgh, NY 12901-5841
Phone 800.472.4588
Fax 800.477.9783
Website www.schluter.com

REFERENCED MANUFACTURERS CONTACT INFORMATION CONTINUED:

- **USG (CEMENT BOARD)**

USG US Corporate Office
550 West Adams Street
Chicago, IL 60661
Phone 312.436.4000
Website www.usg.com

- **For MDF (MEDIUM DENSITY FIBER) BOARD**

Available at most local hardware stores

ADHESIVES (COLORED EPOXY GLUE, ETC.)

- **AKEMI**

INNOCHEM
Innovative Chemicals
4030 Pleasantdale Road Suite F
Doraville, GA 30340
Phone 770.409.8789
Fax 770.409.9096
Website www.akemina.com

- **TENAX**

Tenax USA
1408 Center Park Drive
Charlotte, NC 28217
Phone 800.341.0432
Fax 704.583.3166
Website www.tenaxusa.com

REFERENCED MANUFACTURERS CONTACT INFORMATION CONTINUED:

SETTING MATERIALS (FAST SET, THIN SET, GROUT, ETC.)

- **MAPEI**

MAPEI Americas Headquarters
1144 E. Newport Center Drive
Deerfield Beach, FL 33442
Phone 800.992.6273
Fax 954.246.8805
Website www.mapei.us

- **LATICRETE**

LATICRETE International, Inc.
1710 111th Street
Grand Prairie, TX 75050-1913, USA
Phone 972.641.3266
Fax 972.660.5365
Website www.laticrete.com

- **CUSTOM BUILDING PRODUCTS**

13001 Seal Beach Blvd
Seal Beach, CA 90740
Toll Free 800.272.8786
Phone 562.598.8808
Fax 800.200.7765
Website www.custombuildingproducts.com

LIMITATIONS AND RESPONSIBILITIES

We have taken every care to provide complete information in this document; this information should be used as a guide in the design, installation and care of Fiandre, Maximum large porcelain panels. No warranty, however implied or expressed, is given in relation to the procedures outlined in this technical information except that is required by industry standards.

Fiandre USA assumes that the designers, fabricators and installers using our large porcelain panels, are familiar with all aspects outlined in the information provided and strictly adhere to the recommendations and specifications described herein and by ANSI industry standards. Any deviation from the recommended guidelines may result in the products not performing as expected and may result in the warranty becoming null and void.

Though every care and precaution has been taken in the preparation of this document, Fiandre USA assumes no responsibility for errors and or omissions, or for the damages resulting from the use of information contained in the information hereby provided.

Fiandre USA shall not be liable for any loss of profit or any other loss or damage caused or alleged to have been caused either directly or indirectly as a result of any person solely relying upon any information contained in this manual.

Fiandre USA reserves to change or modify this manual or its electronic version from time to time without notice, it is the responsibility of the consumer to consult or contact Fiandre USA for the latest version or updates.

*For more information on large porcelain panels, please visit our website
www.granitifiandre.com.*



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ARCHITECTURAL SURFACES

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