INSTALLATION MANUAL

Contents

Section 1 - Introduction 1-1

Introduction 1-3

Safety First 1-3

Section 2 - General Conditions for Installing Mosaics 2-1

General Conditions for Installing Mosaics 2-3

Tools for Installing Mosaics 2-5

Adhesives for Mosaic Installations 2-11

Adhesive and Grout Used for Karma Installations 2-11

Mixing Adhesives 2-13

Section 3 - Surface Preparation 3-1

Surface Preparation 3-3

Marking the Reference Grid 3-5

Preparation, Marking and Spreading Adhesive 3-9

Section 4 - Installing Sheets of Mosaic 4-1

Installing ¾″ X ¾″ Film Faced Sheets of Mosaics * 4-3

Grouting and Final Cleaning 4-9

Installing ¾″ x ¾″ Paper-Faced Mosaics with Borders 4-11

Installing Sheets of Mosaics with Computer Designs 4-15

Installing Wallpaper 4-19

Section 5 - Installing Karma, Liberty, and Glamour 5-1

Installing Karma 5-3

Installing Diamond Shaped Karma 5-7

Installing Liberty 5-9

Installing Glamour 5-15

© 2007, Trend (USA)

Section 6 - Installing Trend Agglomerate Floor Tiles 6-1

Installing Trend Agglomerate Floor Tiles 6-3

Stone, Tile, and Wood Floors 6-3

General Conditions for Laying Floor Tiles 6-5

Slab Storage Before Installing 6-7

Tools for Installing Agglomerate Floor Tiles 6-9

Adhesives for Installing Trend Slabs on Concrete Bases & Dry Walls 6-11

Other Adhesives for Laying Trend Slabs on Special Bases 6-11

Mixing Polyurethane Adhesives 6-13

Cutting Floor Slab Tiles 6-15

Laying Floor Tile Procedures 6-17

Grouting Slabs 6-23

Expansion and Structural Joints 6-24

© 2007, Trend (USA)

Section 1 - Introduction

Introduction

Welcome to the Trend (USA) Installation Manual. This manual will provide step by step instructions for installing mosaics and agglomerate floor tiles. The manual is organized by sections to enable you to select installation procedures and step by step instructions for the products you are going to install. Some of the content in each section is similar to others, such as tools and adhesives and will be covered in basic tools and adhesive sections, and referenced in other sections.

One of the most important areas of concern is the use of proper safety equipment specified for the various grouts and adhesives. Therefore, we want to highlight this first for all users of Trend (USA) products and recommended grouts, adhesives, and tools.

Safety First

Regardless of the installation, proper safety practices must be observed when working with the grouts, adhesives and tools when installing tile products. It is important that each employee read and comply with the safety instructions on all products and tools.

Make sure all employees understand that proper protective equipment must be worn and appropriate safety techniques must be applied. This may include:

- Safety glasses or goggles
- Face mask or respirator
- Protective gloves as recommended
- Weight belts or back braces as needed

Finally, each person should understand and demonstrate proper lifting techniques. From time to time, they may be involved in lifting heavy equipment and/or products.

© 2007, Trend (USA)

Section 2 - General Conditions for Installing Mosaics

General Conditions for Installing Mosaics

Every tile installation begins with verifying the site conditions. For outdoor installations, it is a good practice to assess substrate conditions as well as the weather conditions.

- The substrate must be properly aged. Normal practices recommended by adhesive manufacturers is to:
  - Wait twenty eight days for the underlay and cement based plasters;
  - Wait ninety days for concrete/cement;
  - Allow a maximum of five percent residual humidity in high dried base substrates.
- Temperatures can have an effect on adhesives and materials:
  - If the temperature is lower than fifty-five degrees Fahrenheit, the drying of the adhesive is slower and can create problems for the bonding.
  - If the temperature is over ninety-five degrees Fahrenheit, it is advisable to do the installation when there is less sun, i.e., in the morning or late afternoon.
  - It is also recommended to cover the site from excessive sunlight during the hottest parts of the day or on windy days to prevent possible dehydration of the adhesive.
- Swimming Pools, Showers, and Jacuzzi:
  - For swimming pools, it may be necessary to test the bonding first.
  - Shower floors and jacuzzi tubs must be waterproofed with special products.
- Dirt and Loose Pieces:
  - All traces of dirt, oil, and loose pieces and/or powder from the surface must be carefully removed.

© 2007, Trend (USA)

Tools for Installing Mosaics

The tools used for the installation of glass mosaic must be clean and free from rust. These tools are:

Angle grinder with a continuous crown diamond blade for cutting mosaics. (Figure 2-1)

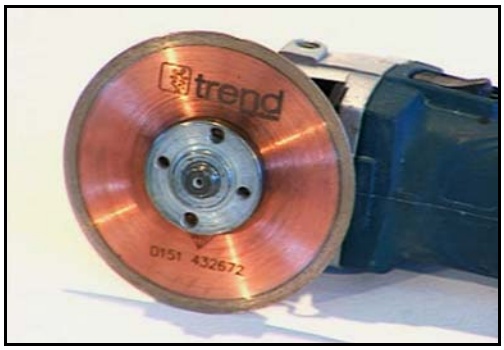


Figure 2-1

A level. (Figure 2-2)

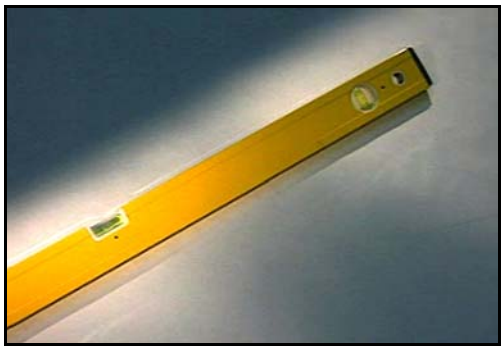


Figure 2-2

A measuring set, tape measure and pencil, for marking the main reference grid. (Figure 2-3)

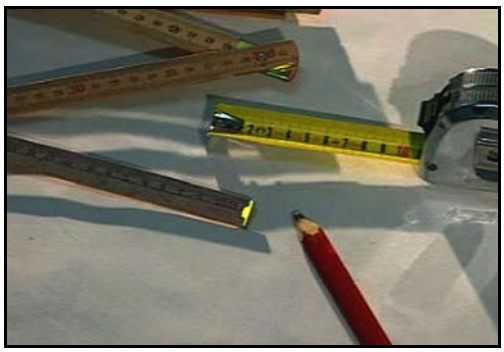


Figure 2-3

© 2007, Trend (USA)

A string for marking the main reference grid. (Figure 2-4)

Figure 2-4

Mosaic pliers (Figure 2-5) and cutters. (Figure 2-6)

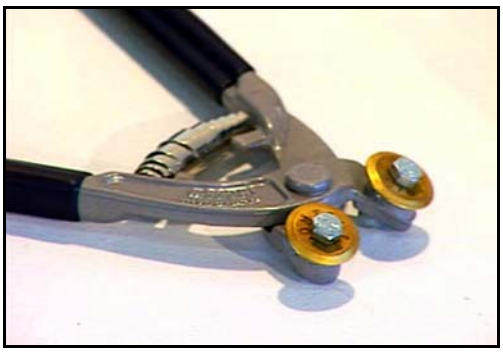


Figure 2-5

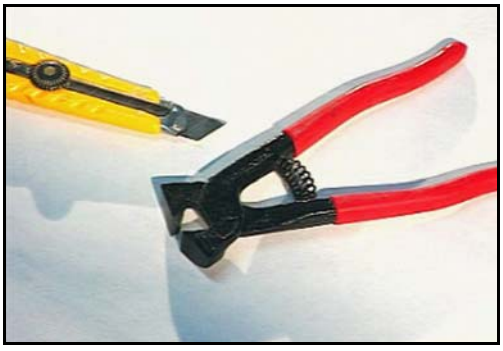


Figure 2-6

© 2007, Trend (USA)

A set of various sizes of trowels. (Figures 2-7a and 2-7b).

Figure 2-7a

Figure 2-7b

Rubber float for patting mosaics to the adhesives and adjusting alignments and a felt backed float. (Figure 2-8).

Figure 2-8

© 2007, Trend (USA)

1/8″x 1/8″ Square-Notched Trowel. (Figure 2-9)

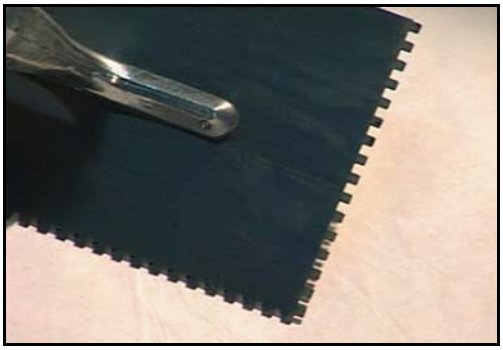


Figure 2-9

A water bucket with a roller and sponge for cleaning. (Figure 2-10)

Note: Always use clean water.

Figure 2-10

A low speed mixing drill (Figure 2-11) with spiral mixer. (Figure 2-12)

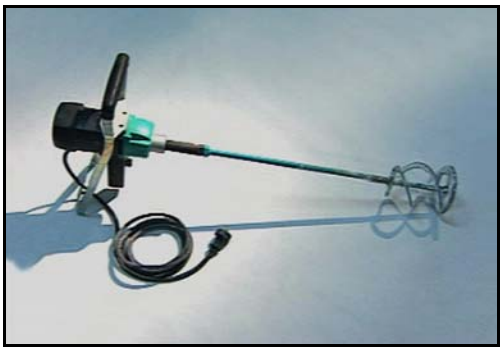


Figure 2-11

Figure 2-12

© 2007, Trend (USA)

Mosaic Adhesive. (Figure 2-13)

Trend (USA) recommends rapid cement base, one part adhesive.

- Mix all adhesives according to the instructions on the package.
- The adhesive must not be too liquid.
- In areas prone to high traffic, mix this adhesive with latex according to the manufacturer's instructions.
- This adhesive can be used for rendering the laying sub-base:
  - Use at a maximum of ¼" thickness
  - Use an auto-leveling material
  - Let it set-up at least 24 hours
- This adhesive cannot be used for doubling up.
- It cannot be used for waterproofing.

Figure 2-13

© 2007, Trend (USA)

Adhesives for Mosaic Installations

Trend (USA) recommends a variety of adhesives and grouts for product installations. Here are some of the products and applications for which they are recommended. In the near future, more Kerakoll products will be added to this list.

Laticrete		
Laticrete	Cement Adhesive	Laticrete 180
Laticrete	Cement Grout	Laticrete 1776
Laticrete	Acid Clear	Laticrete TC 50
Laticrete	Adhesive	Latopoxy 300
Laticrete	Adhesive	254 Platinum White
Kerakoll		
Kerakoll	Adhesive	Superflex
Kerakoll	Grout	Fugabella Epoxy
Kerakoll	Cement Adhesive	Tenax H40 White
Kerakoll	Latex	Top Latex
Kerakoll	Cement Grouting	Fugabella
Kerakoll	Latex	Fugaflex
Mapei		
Mapei	Cement Adhesive with Latex	Kerabond / Keralastie
Mapei	Grout	Keracolor
Mapei	Grout	Kerapoxy

Adhesive and Grout Used for Karma Installations

For Karma, Liberty or for installations in wet areas or spas, saunas, and showers, Trend recommend the use of epoxy adhesive and epoxy grout.

© 2007, Trend (USA)

Mixing Adhesives

Depending on the installation, specific adhesives are recommended. In each case, the surface and product must be taken into consideration to select the correct adhesive. Be sure to follow the specific instructions on the packaging in preparing the adhesive.

Mosaic adhesives must be diluted in water in the proportions indicated by the manufacturer.

Mix with a low speed drill with a spiral mixer to avoid modifying the adhesive characteristics. (Figure 2-14)

- The adhesive should be like a creamy, easy to spread paste. (Figure 2-15)
- Re-mixing after the initial preparation of the mixture with the addition of water or other products to prolong its useful life or workability should be avoided.

Figure 2-14

Figure 2-15

© 2007, Trend (USA)

Section 3 - Surface Preparation

Surface Preparation

The surface should be compact and free of cracks. If the surface flakes or if it is warped from shrinking, it must be rendered correctly. This is always a good practice where capillary absorption may present a significant problem.

Rendering is necessary where the base is not perfectly flat or the surface is flakey. (Figure 3-1)

Rendering must be completed 24 hours before installing mosaics.

Figure 3-1

Rendering a sub-base for glass mosaic must be carried out using the smooth edge of the trowel. (Figure 3-2)

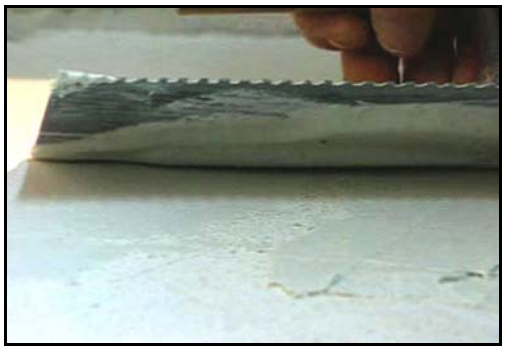


Figure 3-2

© 2007, Trend (USA)

Marking the Reference Grid

Various methods can be used in marking this grid, from a simple level to a sophisticated electronic and laser measuring system. Nevertheless, the reference grid should be marked with great care since the installation of the mosaics will depend on the accuracy of this system.

Select the best starting point and mark out a square grid on the sub-base corresponding to the number of sheets of mosaics being laid.

- This can easily be determined by laying a row of mosaic sheets on the floor, next to the wall to be covered, and measuring the distance the sheets will cover in a row of mosaics. (Figure 3-3)

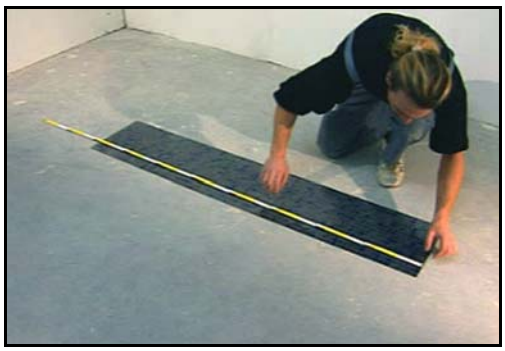


Figure 3-3

- Make sure the distance between sheets accurately reflects the distance of the joints between the individual sheets. (Figure 3-4)

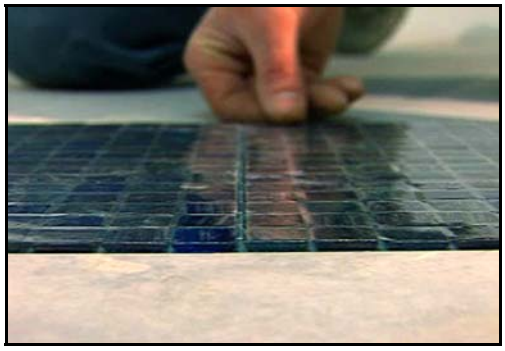


Figure 3-4

Select the best starting point and mark your reference line on the wall. This reference line should be at eye level.

This first reference line can be established with a level or other tool you may select. (Figure 3-5)

Figure 3-5

© 2007, Trend (USA)

The most important concern is that this reference is level and crosses the entire wall of the installation. (Figure 3-6, Figure 3-7 and Figure 3-8)

Figure 3-6

Make sure the distance from this reference line to the floor will accommodate full sheets of mosaics.

Figure 3-7

Figure 3-8

© 2007, Trend (USA)

Marking guidelines at right angles to the grid line should begin to provide reference lines for laying each sheet of mosaic. (Figure 3-9, Figure 3-10 and Figure 3-11)

Figure 3-9

Figure 3-10

Figure 3-11

© 2007, Trend (USA)

Preparation, Marking and Spreading Adhesive

Once the reference grid has been marked, the adhesive is spread over the base.

Spread the adhesive over the base using the smooth edge of the notch trowel to ensure the entire surface is covered. (Figure 3-12)

Figure 3-12

Excessive adhesive is then removed with the notched part of the trowel. (Figure 3-13)

Be careful to keep a steady inclination of the notched trowel and exert sufficient pressure so no more adhesive than necessary remains.

The adhesive must not run over the joints. If it does, it means that the notches on the trowel are too large.

Figure 3-13

© 2007, Trend (USA)

Section 4 - Installing Sheets of Mosaic

Installing ¾" X ¾" Film Faced Sheets of Mosaics *

Once the reference grid has been marked and the adhesive spread over the base, install the first sheet on the reference grid without exerting too much pressure, **with the plastic film towards the installer**. (Figure 4-1)

Always maintain the lines of the previously marked grid as a reference.

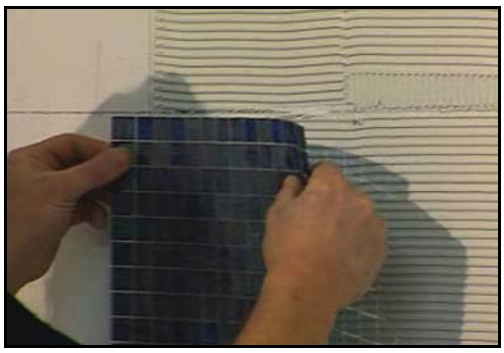


Figure 4-1

A well prepared adhesive will hold the mosaic sheets in position without any problem. (Figure 4-2)

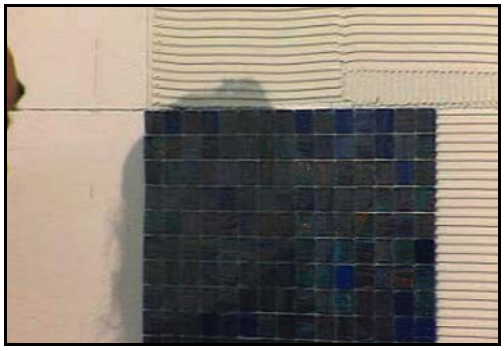


Figure 4-2

Tap the mosaic with a rubber float to ensure perfect adhesion to the surface. (Figure 4-3)

Figure 4-3

* **NOTE:** The same installation steps will be used for installing 5/8" x 5/8" sheets of mosaics.

© 2007, Trend (USA)

During the installation, some individual tiles may need to be repaired. (Figure 4-4)

Figure 4-4

The installer can make adjustments by simply removing a single tile and substituting it with another. (Figure 4-5)

- This is accomplished by cutting the plastic film over the tile and removing the tile with a blade.
- Remove the hardened adhesive on the wall, if necessary.
- Apply new adhesive to the tile and place in the removed tile position.
- Make adjustments to ensure that the tile is uniform and straight with others. (Figure 4-6)

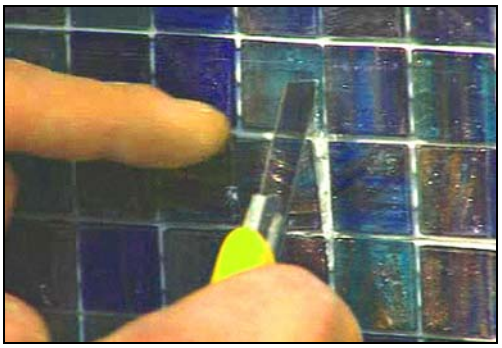


Figure 4-5

Figure 4-6

Continue installing sheets of mosaics across the wall based on the reference grid. (Figure 4-7)

Figure 4-7

© 2007, Trend (USA)

In some cases, walls may not be perfect right angles to each other. To make the tiles fit, you will need to adjust the width of the sheets of tiles by measuring the opening. (Figures 4-8 and Figure 4-9)

Figure 4-8

Figure 4-9

Layout the number of sheets needed to cover this opening and mark your measurements and draw a line for cutting. (Figure 4-10 and Figure 4-11)

Figure 4-10

Cut the tiles with your angle grinder.

Figure 4-11

© 2007, Trend (USA)

Apply the adhesive on the wall and install the individual sheets and tap into place. (Figure 4-12)

Figure 4-12

Cut the plastic film between the rows of tiles and, with a trowel, adjust the space between rows to fill all spaces equally. (Figure 4-13 and Figure 4-14)

Figure 4-13

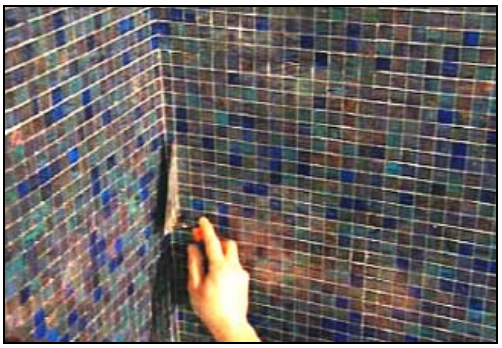


Figure 4-14

Follow the manufacturer's instructions for adhesive hardening time. Depending on the conditions when installing this, this could be from 3 hours to 24 hours. (Figure 4-15)

Figure 4-15

© 2007, Trend (USA)

Once sufficiently dried, the plastic film is removed from the mosaic.

- The plastic film should be removed in a diagonal direction keeping the film parallel to the tiles. (Figure 4-16 and Figure 4-17)

Figure 4-16

Figure 4-17

© 2007, Trend (USA)

Grouting and Final Cleaning

Depending on the time required for the adhesive to set, you will begin filling the joints.

Using a rubber float, spread the grouting cement with vertical and horizontal strokes, with slight pressure to make sure the joints are well filled. (Figure 4-18)

Figure 4-18

The cleaning of the mosaic surface can begin once the grouting cement starts to harden. (The time may vary according to the temperature of the surroundings – **from approximately thirty to sixty minutes**).

- Move your float diagonally across the mosaics to remove most of the excess grout with a special felt and lightly dampened sponge. **Remember to always use clean water.** (Figure 4-19)
- Be careful, at all times, not to remove the grout from between the joints.

Figure 4-19

© 2007, Trend (USA)

From time to time, rinse and roll your sponge to remove excess water and continue cleaning the tiles with **clean water**. (Figure 4-20 and Figure 4-21)

Any final lingering residue can be removed with a solution of clean, warm saltwater mixed with vinegar.

Figure 4-20

Figure 4-21

© 2007, Trend (USA)

Installing ¾" x ¾" Paper-Faced Mosaics with Borders

Follow all preceding steps used for installing ¾" x ¾" mosaics (Pages 2-3 to 3-7) for the following items:

- Tool
- Surface Preparation
- Mixing Adhesives
- Marking Reference Grid
- Laying Mosaics – Preparation, Marking, and Spreading Adhesives
- In this sequence, once the grid lines are marked at eye level, you will need to mark another grid line for the border. This grid line must compensate for the sheets of mosaics that must be installed from the eye level grid line to border grid line.

When installing borders, it is important to install the border modules first. (Figure 4-22)

- To accomplish this, measure the distance from the reference grid to the location of the border. This distance must accommodate full rows of mosaics from the border to the initial grid line.
- Make any adjustments to the reference grid to place the height of the mosaic sheets to fit directly under the border.

Figure 4-22

Note: Use the same procedures for installing ⅜" x ⅜" and ⅜" x ¾" Tessellatum and Gold mosaics.

© 2007, Trend (USA)

Install the sheets of mosaics between the border and eye level grid line. (Figure 4-23)

Figure 4-23

Following the grid line for the top border, install the sheets of mosaics. (Figure 4-24)

Tap the sheets of mosaic tiles with the rubber float to adjust alignment and to ensure a perfect adhesion to the surface.

Figure 4-24

Tap sheets lightly to bring into alignment. (Figure 4-25)

Figure 4-25

© 2007, Trend (USA)

Measure the space between the bottom tile and mark the sheet of mosaic. (Figure 4-26)

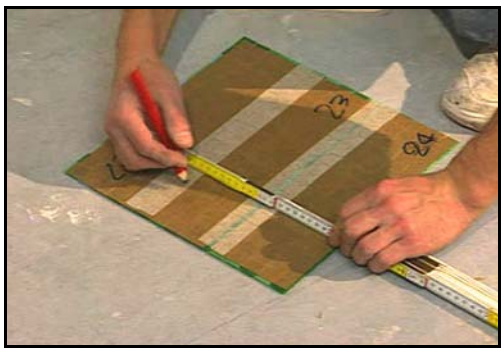


Figure 4-26

Cut accordingly. (Figure 4-27)

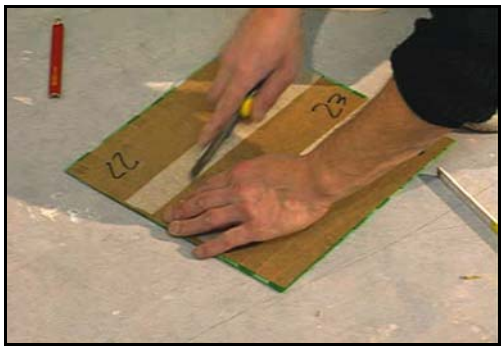


Figure 4-27

Once the adhesive has dried sufficiently, prepare to remove the paper from the tiles. The time may vary according to the temperature of the surroundings. **Always follow manufacturer's instructions.** (Figure 4-28)

Figure 4-28

With a **wet sponge and clean water**, wipe down the tiles to loosen the paper from the tiles. (Figure 4-29)

Figure 4-29

© 2007, Trend (USA)

Peel the paper from the tiles once it is moist and ready to be removed.

Remove the paper by pulling diagonally across the tiles. (Figure 4-30)

Figure 4-30

Wipe down the tiles with a wet sponge to remove the paper adhesive. **Always use clean water.** (Figure 4-31)

Using a rubber float, spread the grouting cement with vertical and horizontal strokes with slight pressure to make sure the joints are well filled.

Figure 4-31

Use **clean, warm saltwater mixed with vinegar to remove any residual grout**. (Figure 4-32)

Figure 4-32

© 2007, Trend (USA)

Installing Sheets of Mosaics with Computer Designs

Follow all the preceding steps used for installing ¾" x ¾" mosaics (pages 2-3 to 3-7) for the following items:

- Tools
- Surface Preparation
- Mixing Adhesives
- Marking Reference Grid
- Laying Mosaics – Preparation, Marking, and Spreading Adhesives
- In this installation, the marking of the grid lines will be dependent on the design layout map that comes in the box of mosaic sheets. Using the map helps determine how many sheets should go above and below the eye level grid line. This grid line must compensate for the sheets of mosaics that must be installed above and below the grid line to get the design to fit the prescribed wall.

When you receive your boxes of mosaics, **open the "only white box" and inside you will find a map of the installation.** (Figure 4-33 and Figure 4-34)

Figure 4-33

Figure 4-34

© 2007, Trend (USA)

Remove the contents from the boxes. (Figure 4-35)

Figure 4-35

The design created was made especially for your installation. Review the picture of the total design and familiarize yourself with the design and wall or space where it is to be installed.

Review the map provided to show exactly how the design should be installed. Keep the following points in mind:

- Layout the design on the floor next to the wall or space where it is installed.
- Measure the height of the wall and count the number of rows of sheets that should be on top of your grid line.
- REMEMBER your grid line should be at eye level.
- Measure the distance below the grid line to determine how many rows of sheets are below your grid line.
- Plot your perpendicular grid lines and measure the number of columns of sheets going to the right and left of the perpendicular grid line.

Begin your installation following the map provided. (Figure 4-36)

© 2007, Trend (USA)

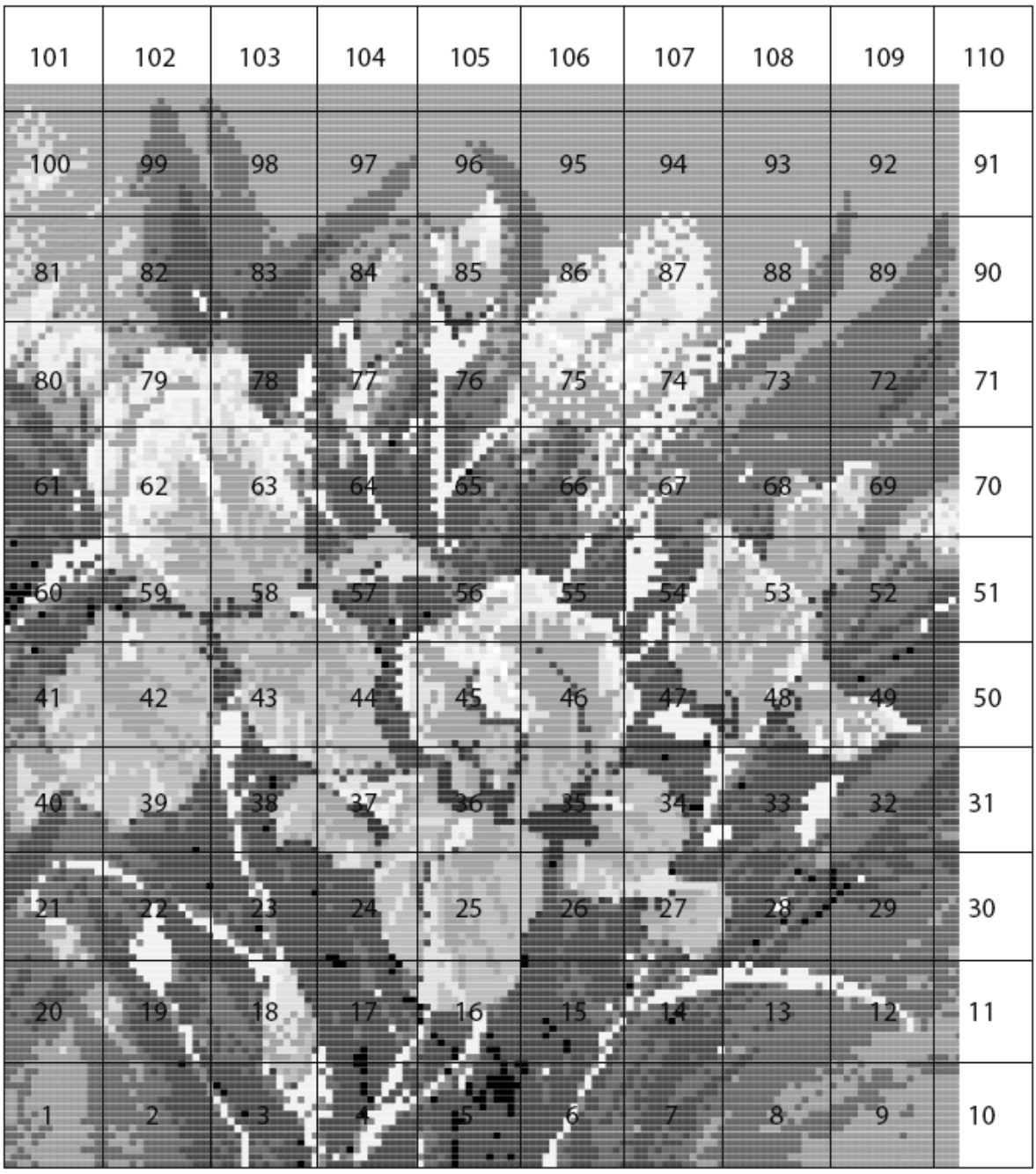


Figure 4-36

© 2007, Trend (USA)

Once the design is installed, allow the tiles to adhere to the wall and remove the plastic film on the mosaics.

Follow all the remaining procedures for cleaning, grouting, and final cleaning procedures as presented in installing ¾" x ¾" mosaics.

1. Wiping down the mosaics with a clean damp sponge. **(Remember to use clean water.)**
2. Grout the mosaic tiles using a vertical and horizontal application.
3. Wipe down the mosaics tiles once the grout has set up.
4. Use clean, warm saltwater with vinegar for cleaning any residual grout.

Enjoy your installation. (Figure 4-37)

Figure 4-37

© 2007, Trend (USA)

Installing Wallpaper

The installation of Wallpaper designs is exactly the same as the procedures used for installing ¾" x ¾" mosaic with a computer design. All the preliminary steps for initiating the installation are the same for:

- Tools
- Surface Preparation
- Mixing Adhesives
- Marking Reference Grid
- Laying Mosaics – Preparation, Marking, and Spreading Adhesives
- In this installation, the marking of the grid lines will be dependent on the design layout map. Using the map helps determine how many sheets should go above and below the eye level grid line. This grid line must compensate for the sheets of mosaics that must be installed above and below the grid line to get the design to fit the prescribed wall or positions.

When you receive your boxes of mosaics, **open the only white box and inside you will find a map of the installation.**
(Figure 4-38 and Figure 4-39)

Figure 4-38

Figure 4-39

© 2007, Trend (USA)

Remove the contents from the boxes. (Figure 4-40)

Figure 4-40

The design created was made especially for your installation. Review the picture of the total design and familiarize yourself with the design and wall or space where it is to be installed.

Once the design is installed, allow the tiles to adhere to the wall and remove the plastic film on the mosaics.

Follow all the remaining procedures for cleaning, grouting, and final cleaning procedures as presented in installing ¾" x ¾" mosaics.

1. Wiping down the mosaics with a clean damp sponge. **(Remember to use clean water.)**
2. Grout the mosaic tiles using a vertical and horizontal application.
3. Wipe down the mosaics tiles once the grout has set up.
4. Use clean, warm saltwater with vinegar for cleaning any residual grout.

Enjoy your installation. Begin your installation following the map provided. (Figure 4-41)

© 2007, Trend (USA)

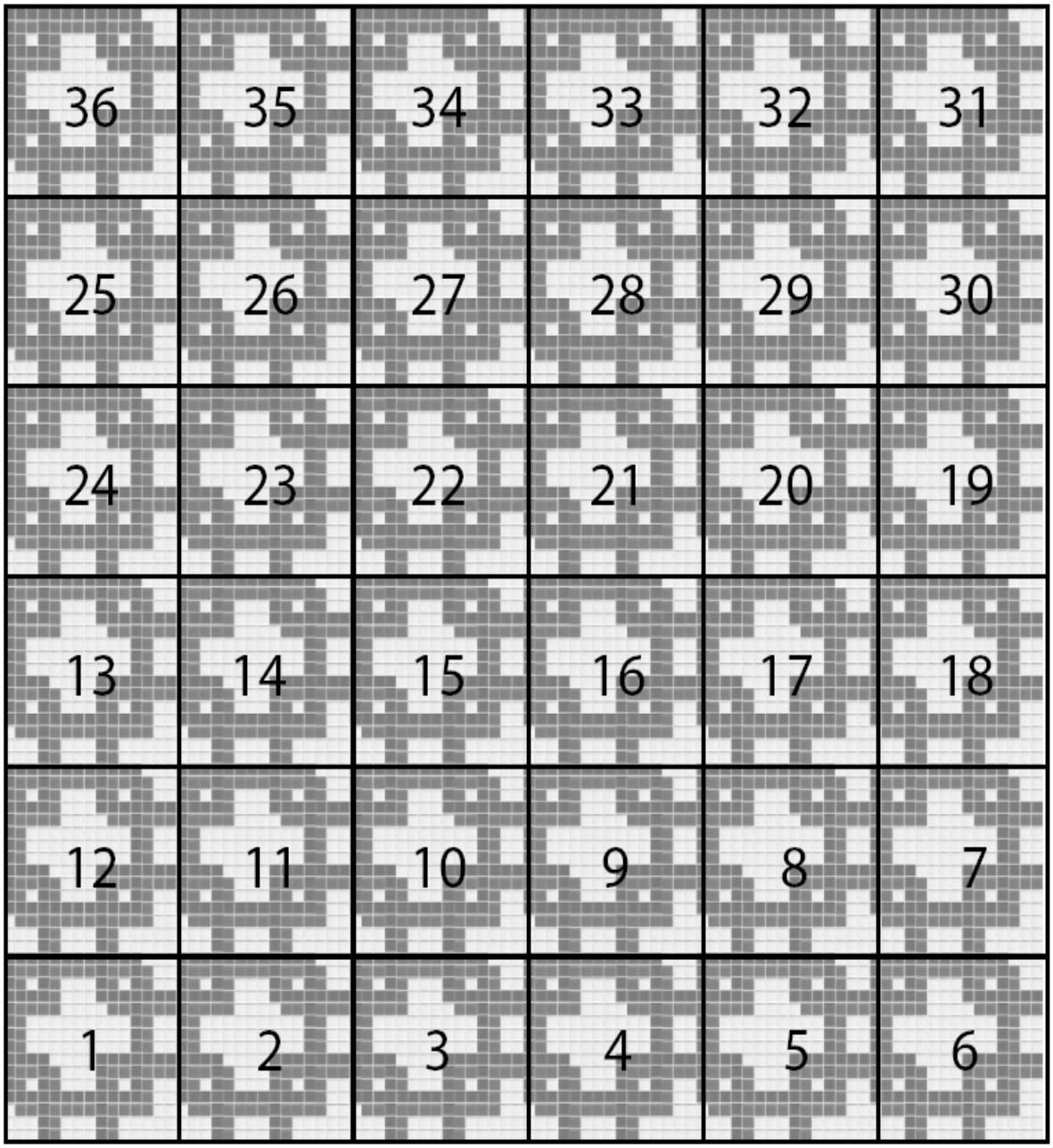


Figure 4-41

© 2007, Trend (USA)

Once the design is installed, allow the tiles to adhere to the wall and remove the plastic film on the mosaics.

Follow all the remaining procedures for cleaning, grouting, and final cleaning procedures as presented in Installing ¾" x ¾" mosaics.

1. Wiping down the mosaics with a clean damp sponge.
2. Grout the mosaic tiles.
3. Wipe down the mosaics tiles.
4. Use clean, warm saltwater mixed with vinegar for cleaning.

Enjoy your installation. (Figure 4-42)

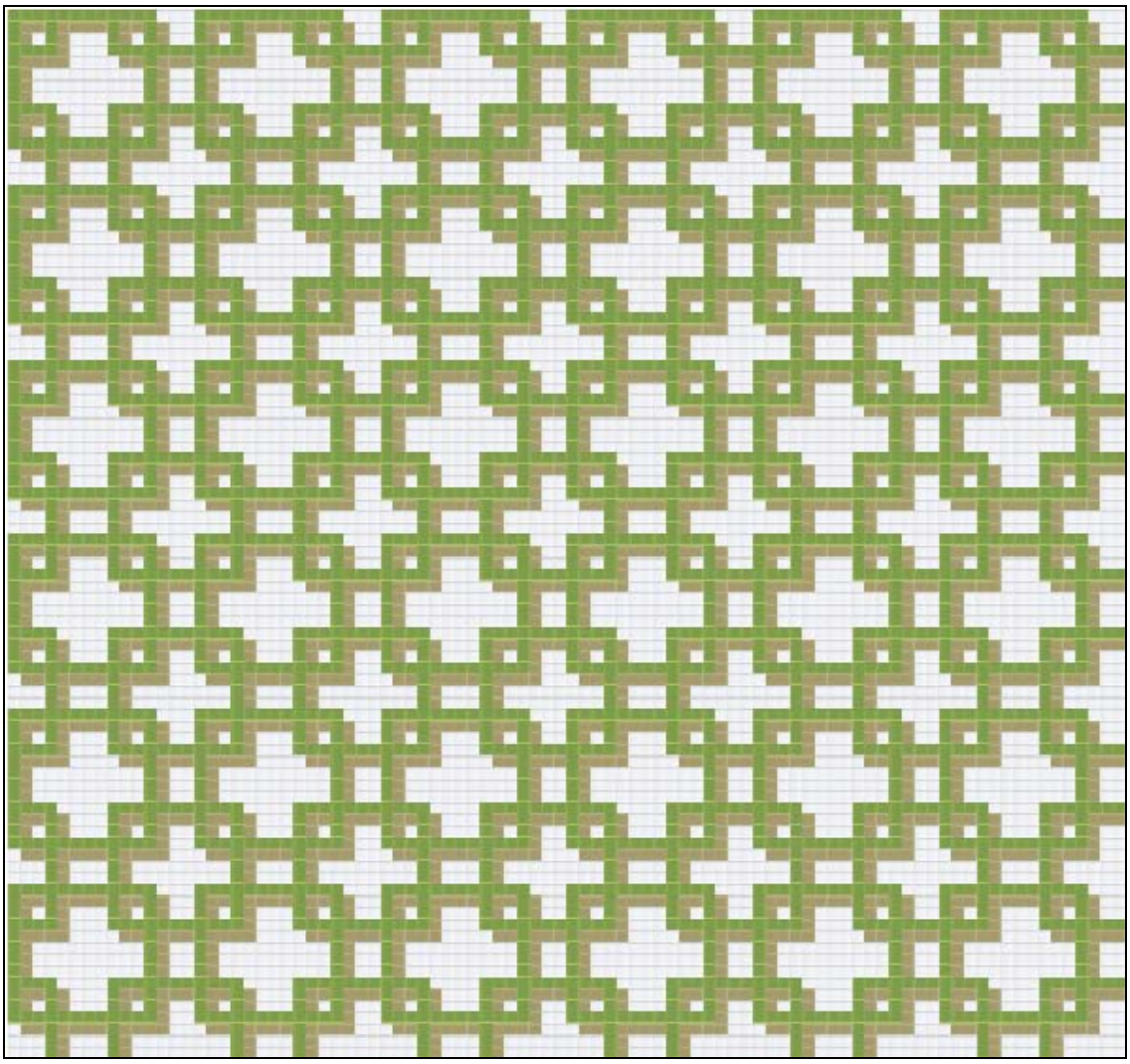


Figure 4-42

© 2007, Trend (USA)

Section 5 - Installing Karma, Liberty, and Glamour

Installing Karma

Follow the same steps used for installing mosaics (pages 2-3 to 3-7) when installing Karma. See previous sections on:

- Tools
- Surface Preparation
- Mixing Adhesives
- Marking the Reference Grid
- Laying Mosaics – Preparation, Marking and Spreading Adhesives

These following instructions are provided for installing Karma. These sheets and individual tiles will be installed starting at the bottom of wall to set the grid line.

Note: In this installation, the wall tiles are installed before the floor tiles. In this demonstration, different sizes of Karma are installed on the walls and floors to provide an understanding in these installation procedures.

Plot the grid line using the sheet of Karma to get the appropriate height for the initial grid line. (Figure 5-1)

Figure 5-1

Use a level or other device to draw a straight line to finish plotting the grid line. (Figure 5-2)

Figure 5-2

© 2007, Trend (USA)

Apply the adhesive over the area with the flat part of the notch trowel and then the notched side.

After spreading the adhesive with the notched trowel, install the mosaics using the grid lines with the plastic film facing the installer. (Figure 5-3)

Figure 5-3

Tap each sheet of tiles lightly with a rubber float to ensure perfect adhesion to the surface. (Figure 5-4)

Figure 5-4

On the adjacent wall, plot your grid line and apply the adhesive first with the flat side of the trowel and then the notched side. Then, using the grid line, install the Karma mosaic and tap lightly with the rubber float to ensure perfect adhesion to the surface. (Figure 5-5)

Figure 5-5

© 2007, Trend (USA)

Plot your grid lines on the floor.

Apply the adhesive over the area with the flat part of the notch trowel and then the notched side.

After spreading the adhesive with the notched trowel, install the mosaics using the grid lines with the plastic film facing the installer.
(Figure 5-6 and Figure 5-7)

Figure 5-6

Tap each sheet of tiles lightly with a rubber float to ensure perfect adhesion to the surface. (Figure 5-7)

Figure 5-7

Continue the installation process by removing the plastic film, grouting, and cleaning the tiles according to previously demonstrated instructions. **Always use clean, warm saltwater with vinegar for final cleaning.**
(Figure 5-8)

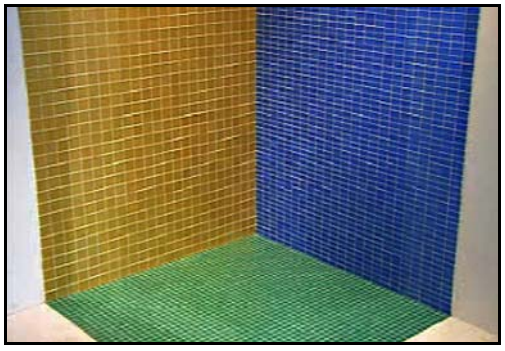


Figure 5-8

© 2007, Trend (USA)

Installing Diamond Shaped Karma

When you install Diamond Shaped Karma, follow all the preceding steps used for installing mosaics (pages 2-3 to 3-7) for the following items:

- Tools
- Surface Preparation
- Mixing Adhesives
- Marking the Reference Grid
- Laying Mosaics – Preparation, Marking and Spreading Adhesives

These instructions are provided for installing Diamond Shaped Karma. These individual tiles will be installed on the grid line using the following procedures:

Plot the reference grid at eye level and calculate the distance between the points of the diamond and mark on the grid. (Figure 5-9)

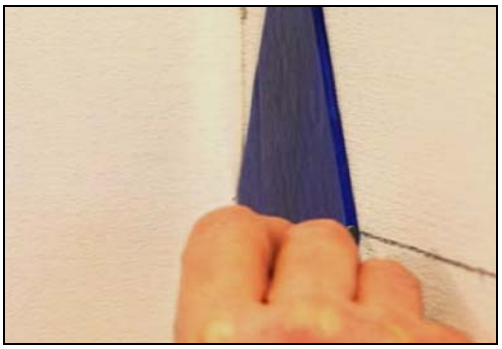


Figure 5-9

Spread the adhesive on the wall with the flat side of the trowel and then the notched side. (Figure 5-10)

Figure 5-10

© 2007, Trend (USA)

Begin laying the individual diamond tiles next to each other so the points are in alignment and on the reference grid line. (Figure 5-11)

When the first row is complete, insert the diamonds keeping the joints equal distance and aligning the points.

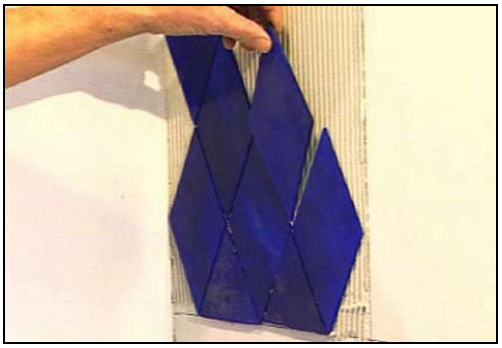


Figure 5-11

To lay the diamond in contact with the adjacent wall, cut it in half and insert it in the position. (Figure 5-12)

Figure 5-12

Wetsaw Grinder for cutting. (Figure 5-13)

Figure 5-13

Once the adhesive is set, grout the tiles according to the grouting procedures. (Figure 5-14)

Clean the surface with recommended cleaning procedures **(use clean, warm saltwater with vinegar)** demonstrated in the preceding sections.

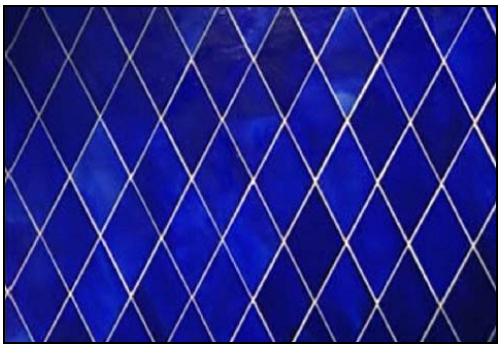


Figure 5-14

© 2007, Trend (USA)

Installing Liberty

The installation of Liberty designs is exactly the same as the procedures used for installing mosaics with a computer design. All the preliminary steps for initiating the installation (pages 2-3 to 3-7) are the same for:

- Tools
- Surface Preparation
- Mixing Adhesives
- Marking Reference Grid
- Laying Mosaics – Preparation, Marking, and Spreading Adhesives
- In this installation, the marking of the grid lines should be at eye level. This grid line must compensate for the sheets of mosaics that must be installed above and below the grid line to get the design to fit the prescribed wall or positions.

Mark your eye level grid line. (Figure 5-15)

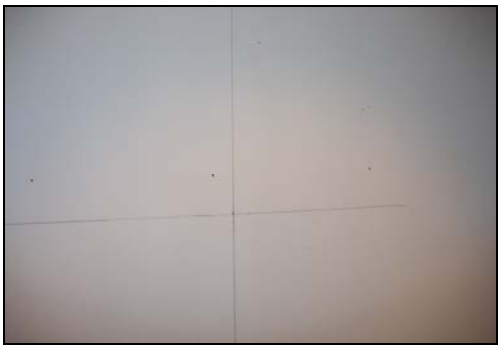


Figure 5-15

Spread the adhesive first with the flat side of the trowel and then the notched side. (Figure 5-16)

Figure 5-16

© 2007, Trend (USA)

Position your first tile and tap the mosaic with a rubber float to ensure perfect adhesion to the surface. (Figure 5-17 and Figure 5-18))

Figure 5-17

Figure 5-18

When you install the remaining tiles with Liberty, some tiles will be cut from the sheet to fill a row. (Figure 5-19)

Figure 5-19

© 2007, Trend (USA)

Small individual glass mosaics may also need to be cut to finish a row.
(Figure 5-20 and Figure 5-21)

Figure 5-20

Figure 5-21

From time to time, you may need to cut the plastic film around individual tiles to adjust them.
(Figure 5-22 and Figure 5-23)

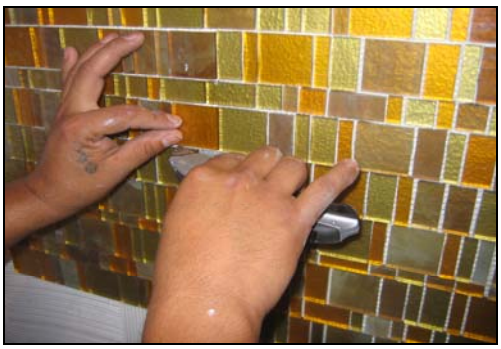


Figure 5-22

Figure 5-23

© 2007, Trend (USA)

Follow the manufacturer's instructions for adhesive hardening time. Depending on the conditions when installing this, this could be from 3 hours to 24 hours. (Figure 5-24)

Figure 5-24

Once sufficiently dried, the plastic film is removed from the mosaic.

- The plastic film should be removed in a diagonal direction keeping the film parallel to the tiles. (Figure 5-25)

Figure 5-25

In this installation, a dark grout will be applied. To protect the wall surface adjacent to the Liberty wall, apply painter's tape to protect the surface. (Figure 5-26)

Figure 5-26

Apply the grout in a vertical and diagonal motion to fill all grout lines. (Figure 5-27)

Figure 5-27

© 2007, Trend (USA)

Once the grout has dried (approximately thirty to sixty minutes), move your sponge across the mosaics to remove most of the excess grout.

Remember to always use clean water. (Figure 5-28)

Figure 5-28

When you use dark grout, the cleaning of the tiles may take several passes with a clean sponge. (Figure 5-29)

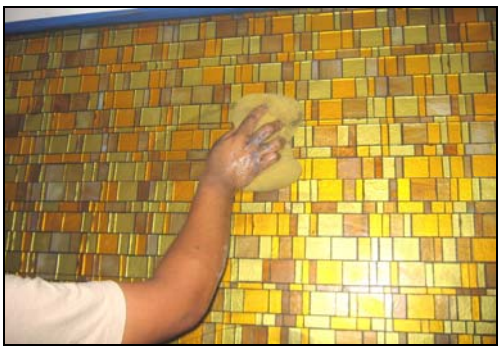


Figure 5-29

Remember to use a warm saltwater solution with vinegar in your final cleaning. (Figure 5-30)

Figure 5-30

© 2007, Trend (USA)

Installing Glamour

When you install Glamour, follow the preceding steps used for installing mosaics (pages 2-3 to 3-7) for the following items:

- Tools
- Surface Preparation
- Mixing Adhesives
- Marking the Reference Grid
- Laying Mosaics – Preparation, Marking and Spreading Adhesives

These instructions are provided for installing Glamour mosaic tiles. Due to the weight of Glamour tiles, the installation begins at the bottom and moves up the wall.

Note: In this installation, the wall tiles are positioned to provide the distance from the wall in which to start plotting the grid lines. In this demonstration, different sizes of Glamour are installed on the walls and floors to provide an understanding of this installation procedure.

Where greater thickness is needed for the wall tiles, place them on the floor to allow for additional space in setting up the floor guidelines for the Glamour floor tiles. (Figure 5-31)

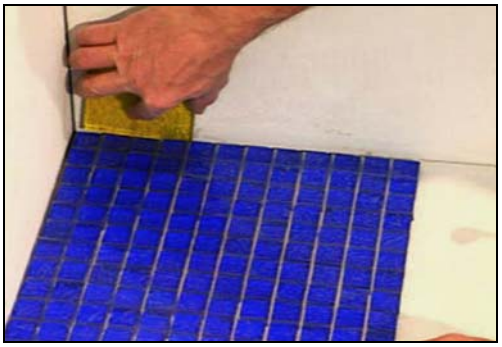


Figure 5-31

Also placing the Glamour tiles in position, you can mark the floor for the floor grid lines for the floor tiles. (Figure 5-32)

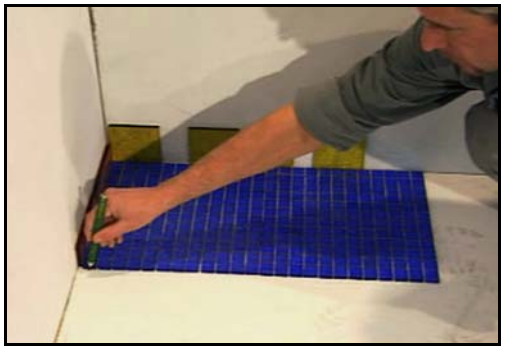


Figure 5-32

© 2007, Trend (USA)

Using your preferred tool to draw the grid line, mark it on the floor. (Figure 5-33)

Figure 5-33

Reposition the wall and floor tiles to complete marking the grid lines and then apply the adhesive to the floor. (Figure 5-34)

Figure 5-34

After applying the adhesive, position the floor tiles using the designated grid lines. A well prepared adhesive will hold the tiles in place without any problems. (Figure 5-35)

Figure -5-35

NOTE: When installing Glamour, a transparent mosaic, you can put a layer of adhesive on the back of the tiles so the floor imperfections do not show through, or apply sufficient pressure to the tiles to flatten the adhesive evenly on the bottom of the mosaic.

© 2007, Trend (USA)

Continue installing the tiles according to grid lines and tap vigorously with a rubber float to adjust positions and adhere to the adhesive (if additional adhesive has not been applied to the back of the mosaics, it is necessary to tap the tiles down with a more firm pressure to seal the tiles tightly into the adhesive). (Figure 5-36)

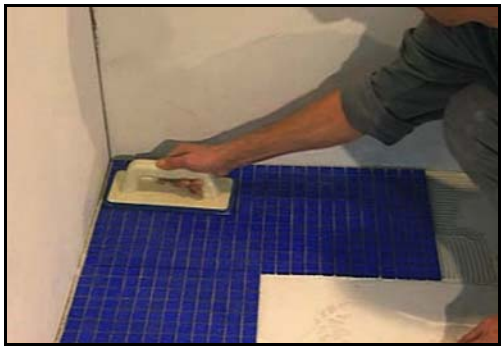


Figure 5-36

Position larger Glamour tiles on the floor with spacers and measure the height of the tiles. (Figure 5-37)

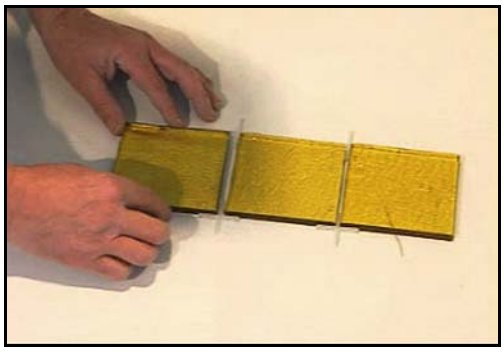


Figure 5-37

Based on the height of the tiles, plot your wall grid line. (Figure 5-38)

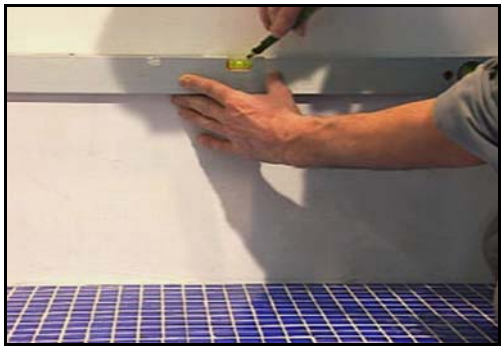


Figure 5-38

Apply adhesive to the wall and go over the surface with the notched trowel. (Figure 5-39)

Figure 5-39

© 2007, Trend (USA)

Glamour is a clear glass mosaic and needs to have a layer of adhesive placed on the back of each tile to keep any blemishes on the wall from showing through the tiles.
(Figure 5-40)

Figure 5-40

Position the bottom row of Glamour tiles with the spacers to maintain the appropriate distance for grouting.
(Figure 5- 41)

Figure 5-41

Continue installing tiles up to the grid line. (Figure 5-42)

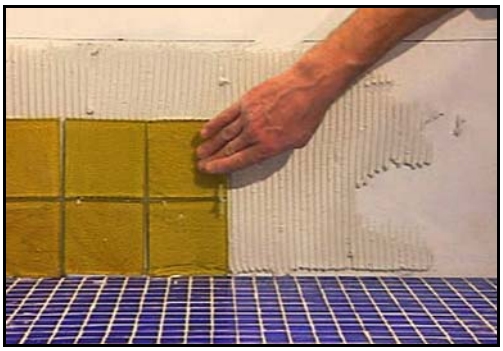


Figure 5-42

The installation of the Glamour tiles begins by inserting the sheet of tiles on the wall to set up the grid line.
(Figure 5- 43)

Figure 5-43)

© 2007, Trend (USA)

Mark a line at the top of this sheet to to draw the grid line. (Figure 5-44)

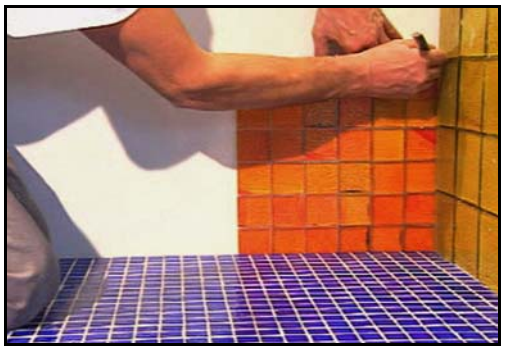


Figure 5-44

Apply the adhesive and position the Glamour tiles with the grid line, and pat gently with the rubber float if you put adhesive on the back of the tiles. If no adhesive is applied on the back, press more vigorously to seal the tiles. (Figure 5-45)

Figure 5-45

The film can be cut to lessen the overall weight of mosaic sheets. Once cut, the individual rows can be pushed up to the grid line. (Figure 5-46)

Once the adhesive has set, remove the film sheets diagonally across the sheet of mosaics.

Figure 5-46

Continue the installation process by grouting and cleaning the tiles, according to previously demonstrated instructions, to complete the installation. (Figure 5-47)
Always use clean, warm saltwater with vinegar in the final tile cleaning.

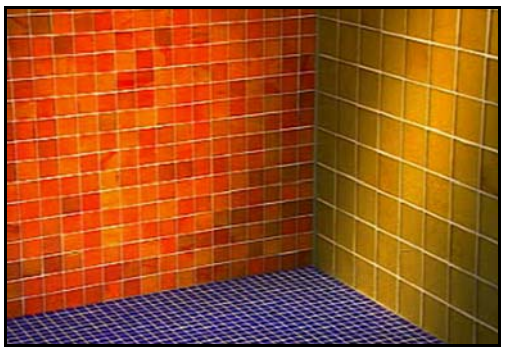


Figure 5-47

© 2007, Trend (USA)

Section 6 -

Installing Trend Agglomerate Floor Tiles

Installing Trend Agglomerate Floor Tiles

Agglomerate floor tiles can be applied over existing surfaces. The application process may vary with local areas. Be sure to check these specifications in your area.

Stone, Tile, and Wood Floors

Trend tiles have been installed over existing stone, tile and wood floors. There may be issues in each situation so thorough tests must be completed to verify proper adhesive for various surfaces.

When applying Trend tiles to existing stone or tiles, you need to use a polyurethane adhesive that is flexible. Before applying the adhesive, make sure the surface is free of any topical application (wax, silicone, or any sealer). Next, thoroughly clean the tiles and remove any grease, grime, or build-up that could interfere with the installation. Follow the normal preparation noted especially including the repair of cracks by removing or patching the crack. (Remove any loose tiles or stones).

When applying Trend tiles to a new concrete surface where you have removed the old floor, you should follow the normal floor preparation. You can use a fast setting thin set on new surfaces (not on existing overlay projects). The thin set should be modified polymers and available from a variety of suppliers.

Do not use regular thin set with Trend tiles. If you are using larger tiles, like 47"x47" or larger, use polyurethane adhesives.

When applying to wood surfaces, it is best to remove the wood surface due to the potential flexing of the wood floor. Wood can move.

If you cannot remove the wood, it is recommended that you sand the wood to rough it up and then thoroughly clean the surface before applying. The polyurethane adhesive should be used on the surface as well. The company does not guarantee floor installations and limits warranty issues to defects in the product so it is extremely important that you use a qualified installer or verify that the adhesive matches the project and adheres to the material you are covering.

© 2007, Trend (USA)

General Conditions for Laying Floor Tiles

The first and most important step of any installation begins with the thorough evaluation of the surface to be covered.

Each existing surface is unique.

If necessary, the surface to be covered needs to be leveled with the appropriate adhesive and other specific products where the surface may have a considerable incidence of absorption through capillary action. (Figure 6-1)

Figure 6-1

Repair any cracks before installing tiles. If the surface crumbles or is undulated through shrinkage, it is not suitable as a laying surface. (Figure 6-2)

Figure 6-2

It is very important that there is not salt efflorescence or rising damp/pots. (Figure 6-3)

Figure 6-3

© 2007, Trend (USA)

The surface must be perfectly planar smooth and dry.

Ambient temperature must be considered.

If the temperature is lower than 50 degrees Fahrenheit, the drying of the adhesive will be slower and could present a problem for bonding.

If the temperature is above 95 degrees Fahrenheit, the adhesive will dry too quickly.

Surfaces to be covered must also be properly seasoned. Adhesive manufacturers recommend:

- Twenty- eight days to dry screened and cement plaster
- Ninety days for concrete
- Anhydrate-based substrate tolerate a maximum residual humidity of 0.5%

© 2007, Trend (USA)

Slab Storage Before Installing

All floor slabs must be stored horizontally on a flat surface. (Figure 6-4)

- If the slabs are stored vertically, they could become slightly warped.
- **If warping occurs, place 5 to 7 slabs on top of one another on a flat surface. After a few hours, they will become flat. Depending on the temperature and humidity of the storage area, they will flatten after a few hours.**

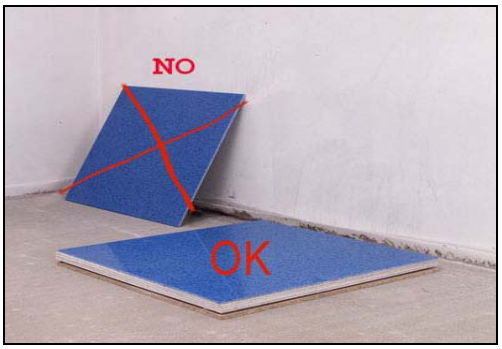


Figure 6-4

© 2007, Trend (USA)

Tools for Installing Agglomerate Floor Tiles

The tools used for the installation of agglomerate tiles must be clean and free from rust. These tools are:

An angle grinder with a continuous crown diamond blade. (Figure 6-5)

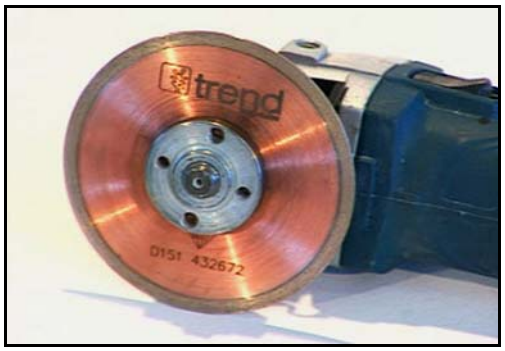


Figure 6-5

A low speed mixing drill with spiral mixer. (Figure 6-6)

Figure 6-6

A level. (Figure 6-7)

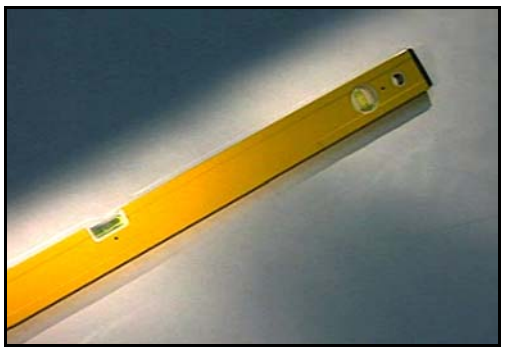


Figure 6-7

© 2007, Trend (USA)

A set of various sizes of trowels. (Figure 6-8)

Figure 6-8

Floats, rubber float for grouting and a felt backed float. (Figure 6-9)

Figure 6-9

¼" x ¼" Square Notched Trowel. (Figure 6-10)

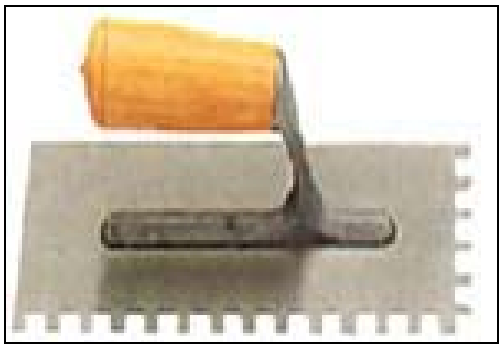


Figure 6-10

A water bucket with a roller and sponge for cleaning. (Figure 6-11)

Remember to always use clean, warm saltwater with vinegar in final cleaning steps.

Figure 6-11

© 2007, Trend (USA)

Adhesives for Installing Trend Slabs on Concrete Bases & Dry Walls

Trend has tested cement-based adhesives for installing Trend agglomerates.

Company	Product Name	Characteristic	Note
Kerakoll	H 40 Marmorex	Quick-hardening adhesive	Adhesive and grouting
Mapei	Granirapid	Quick-hardening adhesive	Adhesive and grouting
Laticrete	4237 Rapid+211 (latex)	Quick-hardening adhesive	Adhesive and grouting

Other Adhesives for Laying Trend Slabs on Special Bases

To bond on metal (except aluminum in which a primer – adhesion promoter must be applied before using any type of adhesive) glass fiber, wood, gypsum, or, plaster, Trend recommends:

Company	Product Name	Characteristic	Note
Kerakoll	SUPERFLEX	2 parts adhesive (polyurethane)	Adhesive
Kerakoll	FUGABELLA EPOXY	2 parts grouting (epoxy)	Grouting
Laticrete	LATAPOXY 300 pav.	2 parts adhesive (polyurethane)	Floor adhesive
Laticrete	LATAPOXY 300 vert.	2 parts adhesive (polyurethane)	Wall adhesive
Laticrete	LATAPOXY SP 100 pav.	3 parts grouting (epoxy)	Floor grouting
Laticrete	LATAPOXY SP 100 vert.	3 parts grouting (epoxy)	Wall grouting
Mapei	UP 71	2 parts adhesive (polyurethane)	Adhesive
Mapei	KERALASTIC	2 parts adhesive (polyurethane)	Adhesive
Mapei	KERAPOXY	2 parts grouting (epoxy)	Grouting

Be sure to get MSDS for each product used.

© 2007, Trend (USA)

Mixing Polyurethane Adhesives

A slow-speed mixing drill with a spiral mixer should be used. (Figure 6-12)

- The adhesive must be mixed according to the manufacturer's specifications on the adhesive package.
- Mixing and blending the adhesive should be accomplished by using the low speed drill to prevent altering the characteristics of the adhesive.
- The recommended texture and appearance should be a creamy paste which is easy to spread. (Figure 6-13)

Figure 6-12

Figure 6-13

It is recommended that a polyurethane adhesive (Figure 6-14) be used when applying Trend tiles to existing stone or tiles.

Figure 6-14

© 2007, Trend (USA)

Follow the instructions on the label of these two products to make the best adhesive for your job. (Figure 6-15)

Figure 6-15

Be sure to mix the correct proportions / weights of the product specified by the manufacturer.
(Figure 6-16 and 6-17)

Figure 6-16

Figure 6-17

Using the slow speed mixer, mix the product until you achieve the desired smooth adhesive.
(Figure 6-18)

Figure 6-18

© 2007, Trend (USA)

Cutting Floor Slab Tiles

Slabs can be cut with the angle grinder with the continuous crown diamond blade.

- Measure and mark the slab. (Figure 6-19 and 6-20)

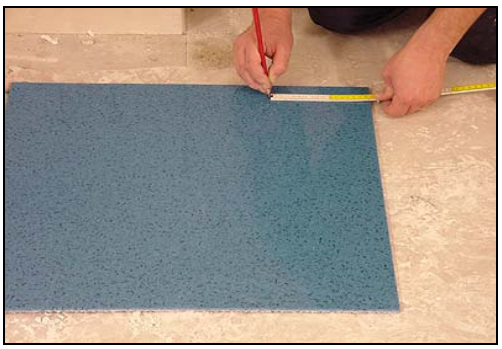


Figure 6-19

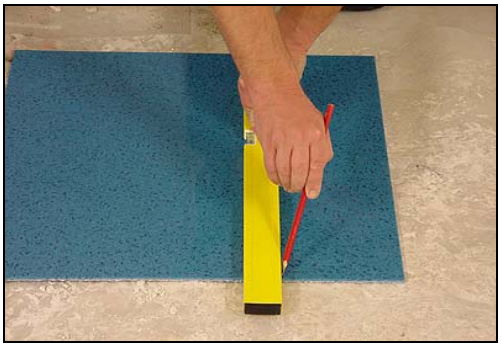


Figure 6-20

- Cut along marked line with the angle grinder. (Figure 6-21)

Figure 6- 21

© 2007, Trend (USA)

Laying Floor Tile Procedures

Dry fit the area to be tiled with the largest full slabs first. (Figure 6-22)

Figure 6-22

Measure additional cut outs to be dry fit. (Figure 6-23)

Figure 6-23

Dry fit additional cut outs. (Figure 6-24)

Figure 6-24

© 2007, Trend (USA)

Dry fit all slabs for a perfect installation. (Figure 6-25)

Figure 6-25

Apply adhesive on the floor and use the ¼" x ¼" square notch trowel for proper application. (Figure 6-26)

Figure 6-26

Apply adhesive to the back of each slab before placing into position. (Figure 6-27)

Figure 6-27

Place slabs on the floor and apply pressure to get an even distribution of adhesive and position of slab. (Figure 6-28)

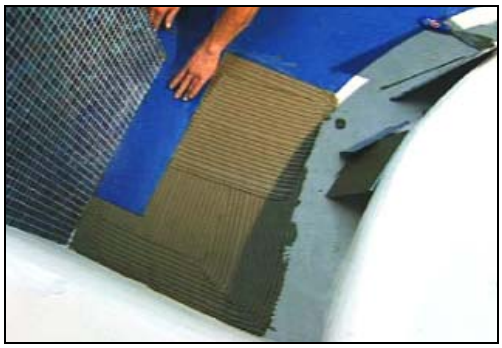


Figure 6-28

© 2007, Trend (USA)

Press down with both hands to ensure there is no difference in the thickness. (Figure 6-29)

Figure 6-29

The surface of the slab must be kept clean by removing any residual adhesive immediately from the surface of the tile before it hardens. (Figure 6-30)

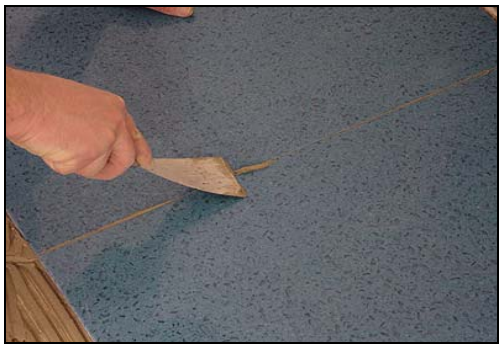


Figure 6-30

Checking adhesive contact

It is a good practice to periodically check the contact between the adhesive and the slab by raising one or more of the slabs after it has been laid and set in place. (Figure 6-31)

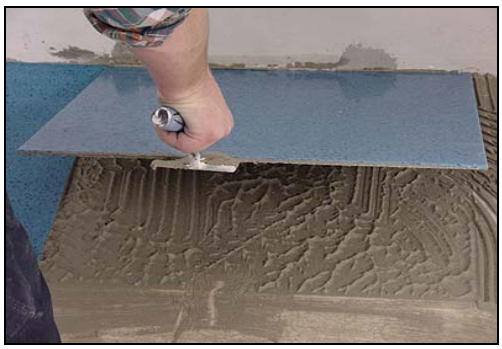


Figure 6- 31

This application is good application of adhesive. (Figure 6-32)

Figure 6-32

© 2007, Trend (USA)

This application is not a good application of adhesive. (Figure 6-33)

Figure 6-33

Once all slabs are installed, wipe down the slabs with **clean warm water as prescribed** in earlier tile cleaning processes. Use the bucket with rollers. (Figure 6-34)

Figure 6-34

With a trowel, clean any excess adhesive out of the seams. (Figure 6-35)

Figure 6-35

Wipe down slabs with clean, warm water to remove all adhesive. (Figure 6-36)

Figure 6-36

© 2007, Trend (USA)

Once slabs are dry, grout the seams between the slabs.
(Figure 6-37)

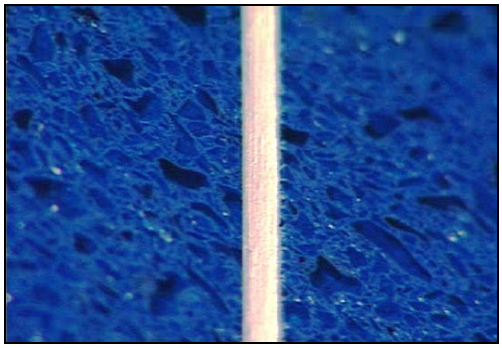


Figure 6-37

© 2007, Trend (USA)

Grouting Slabs

The grouting process is not difficult:

- Grouting should not begin until the adhesive has hardened; usually after 24 hours.
- To obtain the best results, it is essential to have a supply of clean water, and a new sponge for washing.
- Remember- excess grout can only be removed during the surface cleaning process.
- The grout grain size used must be compatible with the dimensions of the joint.
- Both cement and epoxy grout are applied in the same manner.
- The differences between the two grouts are:

Figure 6-36

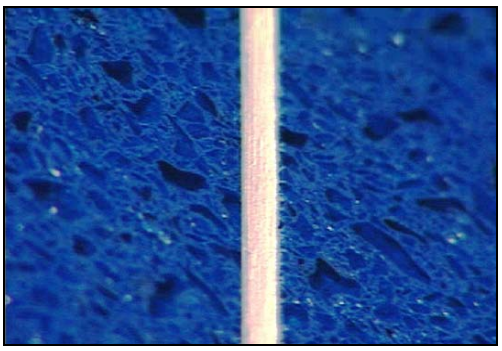


Figure 6-37

<u>Cement grout is:</u>

1. Easy to use
2. Inexpensive
3. Readily available

<u>Epoxy grout is:</u>

1. Easy to use
2. Long lasting
3. Quick hardened
4. Anti-acid

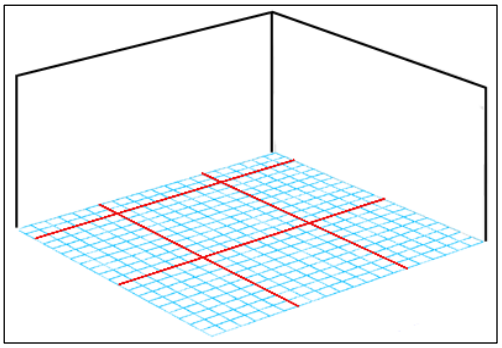
- Be sure to follow the instructions on the grout mix package.
- Epoxy grout is used when it is required by health and hygiene regulations and when high physical and mechanical specifications are required.

© 2007, Trend (USA)

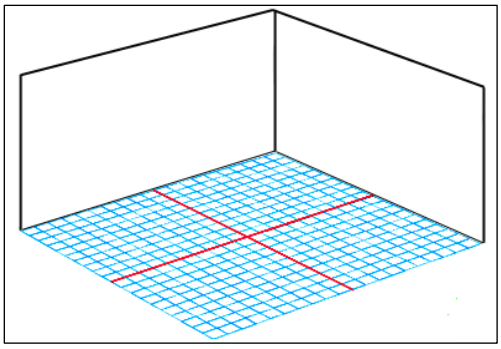
Expansion and Structural Joints

When laying small (24"x 24") or large (118"x 48") tiles, the structural or expansion joints must be used.

For outside installations, the structural joints must be positioned roughly every 16 feet.

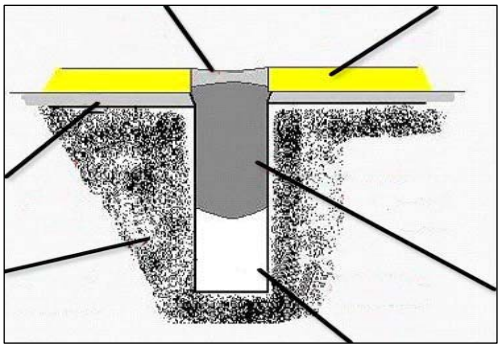


For indoor installations, the structural joints must be positioned roughly every 23 feet.



- It must be noted that structural and expansion joints must only be covered with specific products such as sealants, fillers, etc.
- Under no circumstances should structural and expansion joints be covered with flooring or covering materials.

Expansion or structural joints must be filled with an elastic material capable of absorbing the relative movement of the structure and/or covering.



- Elastomer profiles, normally available, may be used as fillers.
- Or, the joint may be filled with silicone or polyurethane material suitable for the environment.

© 2007, Trend (USA)