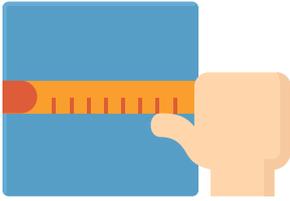


# Installation & Maintenance Guidelines



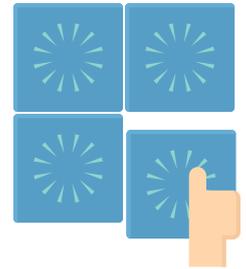
Measure



Cut  
Use utility knife



Apply adhesive  
RTV Silicone  
or double-sided adhesive



Set tiles

## GENERAL

- KirMa Panels can be installed directly over existing walls in wood, metal, ceramic, plaster, drywall or any other compact type of surface.

## RECOMMENDED USE

- Interior/ exterior decorative panels.
- Architectural panel for decorative wall surfaces, back-splashes, Ceilings and other applications.
- Custom architectural and décor applications.
- Panels are **not recommended** for horizontal use or flooring without an additional clear coat layer (e.g. epoxy resin)

## IMPORTANT SAFETY INSTRUCTIONS

- Read instructions thoroughly before using this product.
- Keep these instructions for future reference.
- Heed all warnings on the product and in this guide.
- Follow all instructions.
- Install in accordance with the manufacturer's instructions.

## PRODUCT ATTRIBUTES AND CHARACTERISTICS

- Flat, lightweight aluminum sheet with Engineered polymeric coating.
- Panels are manufactured using a patent pending process that includes a top coat finish for durability.
- Panels Approx. 0.65mm thick (1/32").
- Easily cut with a utility knife in multiple passes.
- Panel can be attached with adhesive, eliminating need for exposed fasteners or alternately, retaining fasteners can be used.
- Prior to installation store panels flat, in a clean, dry area with consistent temperatures to avoid condensation and moisture collection.
- During handling, do not slide panels against each other or over rough surfaces.

## LIMITATIONS

- Metal panels must be attached to a substrate such as primed drywall, plaster or clean, smooth tile.
- Care must be taken to avoid damaging the exposed top coating finish during cutting.
- Material can be cut with a simple utility knife using multiple passes.
- Avoid contact with dissimilar materials to prevent corrosion or electrolysis.
- For mechanical fastening materials, aluminum or plastic.

## PANEL SIZES

- 30cm x 30cm (~12in. x 12in.)
- Custom Sizes available.

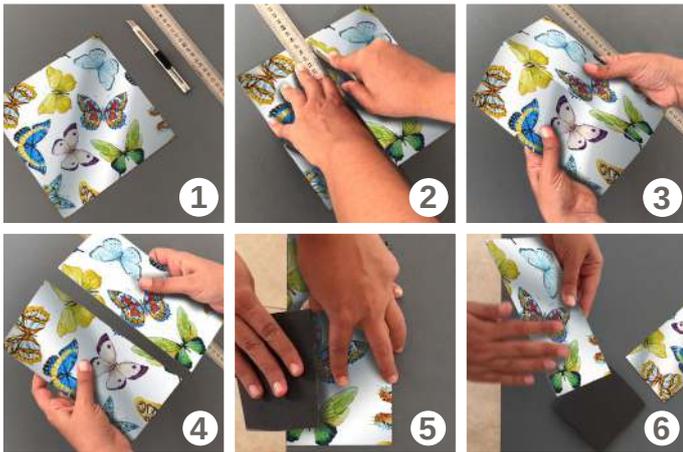
The Metals used are :

- Silver Finish Aluminum.
- Gold Finish Aluminum.

## CUTTING

Use only a simple utility knife **(1)** for straight cuts as follows:

- Before cutting, cover the area to be cut with a painter's tape/ Removable tape, to protect coating.
- Measure and mark cut lines with a marker on protective tape you placed.
- Using a straight edge, score along the panel using a utility knife **(2)**.
- Repeat scoring with the utility knife to deepen score, hold the panel on both sides and bend to separate tile parts **(3,4)**. In case of small pieces, repeat cutting until the pieces separate.
- Use a fine-grit sandpaper or small metal file to deburr edges of newly cut panels in a downward motion respective to the panel's surface **(5,6)**.



- No cutting lubricants, oils or coolants are required.
- Before cutting, cover the cutting line/s with a painter's tape/ removable tape, to protect coating.
- KirMa Panels are manufactured with polymeric clear coating. Care should be taken to protect the finish during any cutting operation.
- Do not cut more than one panel at a time by stacking panels.

**SUBSTRATE PREPARATION**

- Before installation begins, clean the surfaces to be covered with KirMa Panels. Make sure all surfaces are clean, dry, smooth, and free from dust, grease, wax, etc.
- Isopropyl alcohol & cloth cleaning method are recommended as a minimal surface preparation.
- Clean existing ceramic or hard surface tile substrate well; generally primer is not be required.

**MEASUREMENT AND LAY-OUT**

- Measure first area to be covered; lay-out first panel. Using a temporary marker, transfer measurements of the first panel (7).
- Plan for, corners or edge treatments before cutting.
- To fit around pipes and other irregularities or interruptions, transfer cutting lines to the panel using a cardboard pattern as a guide.
- IT IS RECOMMENDED TO KEEP A GAP OF 1MM (~1/32") BETWEEN TILES. DO NOT USE TILE GROUT.
- If you wish to reduce the visibility of Gap lines("grout lines") paint the wall / panel gaps in a light grey color, we recommend using RAL9006 color for silver aluminum tiles and RAL1006 color for gold aluminum.



**ADHESIVE**

- Before applying any adhesive remove any stickers from the back of the panels.
- **We recommend simple Clear RTV silicone(any brand) or 3M double-sided adhesives**
- Many other types of construction adhesives/ silicones and tapes have been found to work well with KirMa Panels. Please consult your local hardware store for the best adhesive to fit with the aluminum backing.
- It is important to follow the guidelines listed above and to experiment with any new adhesive or technique prior to generating the final product (9,10).
- KirMa panels can also be installed onto solid substrates using double sided adhesive tape (11).
- It is necessary to check that the existing wall coating is well anchored before laying; possible detached wall tiles and/or cracks must be fixed or removed.
- The support must be cleaned with water and soap and possibly sandpapered in the case of an underlying surface that has a very glossy surface.
- Isopropyl alcohol & cloth cleaning method is a minimal surface preparation for all adhesive bonding.
- Apply the adhesive in thin layer as possible, the panels are very light and require minimal amount of adhesive, avoid lumps of adhesive as they can cause deformation or lifting of the panel (9,10).
- Apply the adhesive upto the edges of the panel to prevent lifting (9,10).
- Always follow the adhesive manufacturer's directions. Adhesive will vary in their "set up" times.
- Some products may require longer direct pressure times to hold panels in place. Please refer to the manufacturer's product specifications for set and dry times.



- Many will recommend that you apply the adhesive, press the panel in place **(12)**, and then pull it away for a few seconds; then re-apply the panel with direct pressure. This process aids in the “set up” of the adhesive. Once in place, press your hands firmly across the panel **(13)** repeatedly to ensure proper contact with the substrate, adhesive, and wall surface. If an area “pulls” away, reapply pressure to that area. Continue to press the panel into its place against the substrate until the adhesive has made contact with the intended substrate. Use a soft cloth to apply pressure evenly across the panel and squeeze out the excess air.
- **Wipe immediately off excess adhesive** with a damp sponge or cloth, clean off any adhesive residue that is visible while it is still wet. Do not allow this residue to dry as it will be impossible to clean up when dry without damaging the panel.
- Placing temporary bracing or taping the edges with removable tape will help hold the panels in place when using slow-drying adhesives.
- Mechanical fasteners such as screws or nails can also be used to apply panels. For mechanical fasteners, drill a pilot hole first (do it while placing the panel on a wooden surface) and then install small screws or designer nails along the perimeter of the Panels.
- We recommend you only use non-corrosive mechanical fasteners composed of aluminum, plastic or stainless steel.
- Finish installing your panels, add additional panels in the same fashion.
- To achieve reliable bonding, it is imperative to follow the adhesive manufacturer’s application instructions.
- Care must be taken in the selection of an adhesive regarding the thermal expansion of the materials to be joined. Where significant thermal expansion can occur (i.e. exterior applications) adhesives should be of medium or low modulus materials to allow for movement without shear or loss of bond. For interior applications where thermal expansion is not a consid-

eration, high modulus adhesives can be used to join materials.

- Cure time is generally a consideration in the choice of adhesives. Silicones take a good deal of time to cure before a load can be applied whereas the faster curing adhesives do not have the movement capabilities to meet the project needs. In these instances, a combination of double sided tape and adhesive is often used.

#### CLEANING

- The best method of cleaning is simple: regular washing of KirMa Panels using a solution of warm water and non-abrasive, pH neutral detergent. Make sure you thoroughly rinse the surfaces after cleaning to remove all residues.
- You can use a soft cloth, sponge or a soft natural bristle brush.

#### NOTES:

- We offer our clients for sale our recommended double-sided adhesives, silicon/ construction adhesives and all the equipment necessary to handle the panels.
- Panels can also be installed with mechanical fasteners . Corner holes can be pre-made on order (recommended only for exterior wall cladding of large format panels).

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