

SACO CONTROLS

Mosaic Mimic Panels

Advantages

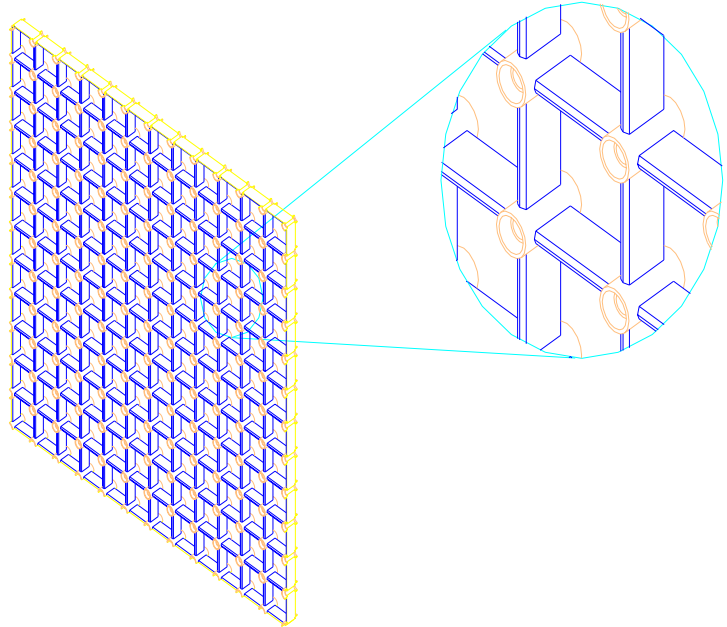
1. Flexible Grid Module

The perimeter of the grid module is smooth with no rough edges. It measures 288 x 288 mm (approximately 1 foot x 1 foot) with a depth of 13 mm.

It is manufactured from precision die-cast zinc alloy, Zamac.

The material is corrosion-proof, lightweight, and durable.

The grid module can be assembled in any 90-degree orientation.



Grid modules can be either straight or curved.

An assembly of curved modules can allow a radius of curvature as small as four (4) meters.

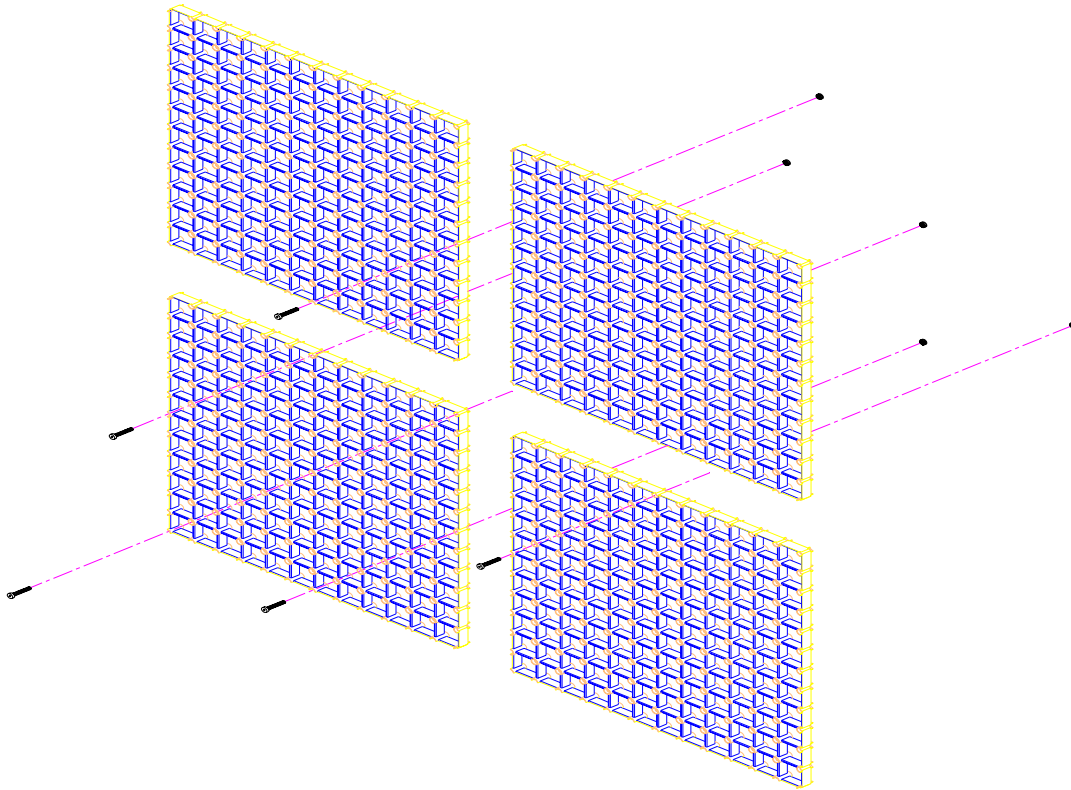
No matter what size of graphic display is needed, the grid modules can be assembled to satisfy any design criterion.

2. Grid Modules Assembly- Simple

Each module will contain a quarter junction that joins with its adjacent counterparts to form a complete circle.

The joined grid modules result in a strong structure with no weakness at the joints.

The overall grid system has no ridges or gaps, thus eliminating any light penetration when mosaic tiles are mounted.



3. Grid Cutout

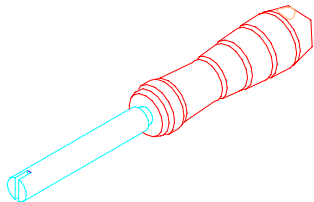
The grid module may be cut to any size.

Simple tooling is use.

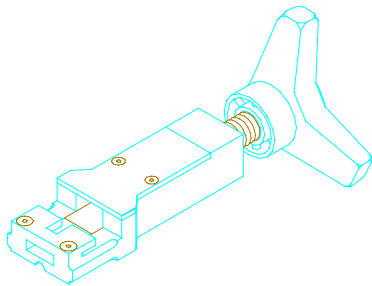
Cutouts for installation of instruments, such as meters, chart recorders; switches and so on... are made using SACO CONTROLS grid tools that are listed below:



Tile/lamp remover tool #SRT-01



Grid cross-line breaker #SGB-01



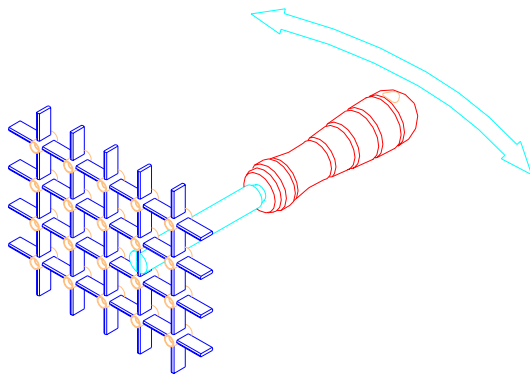
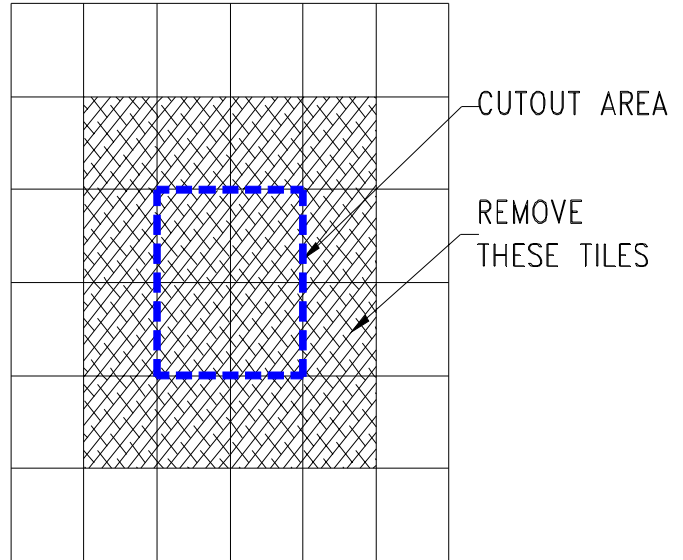
Side/Corner grid junction cutter

4. Cutting Cross-lines -

Simple fast and accurate.

Cutting the cross-lines of the grid is required only for devices that require a complete opening.

Remove the mosaic tiles that occupy this space plus those which surround it.



Select a cross-line which is located within the inside perimeter of the cutout area. Insert the cross-line into the breaker's slot. With a motion perpendicular to the cross-line's direction, move the breaker back and forth until the cross-line breaks.

5. Easy operation to remove half and quarter junctions

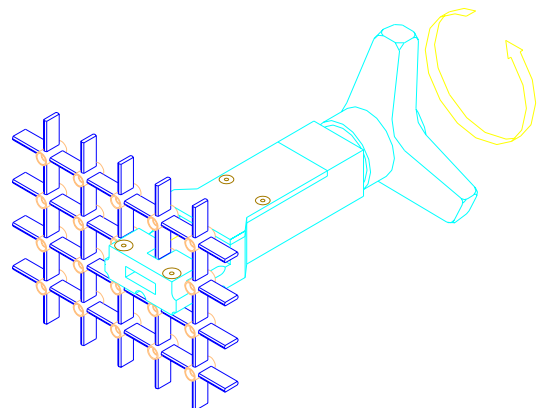
Once the cross-lines are removed, the opening will contain grid junction halves and quarters along the inner sides and corners of the opening's perimeter, respectively

This is done by using the side and corner grid junction cutters.

To remove the unwanted junction half, insert the side junction cutter into the opening so that the grid junction lies inside the tool's cutting guide.

This process is repeated until all junction halves are cut.

To cut the quarter junctions at the corners, the corner junction cutter is used following a similar procedure.

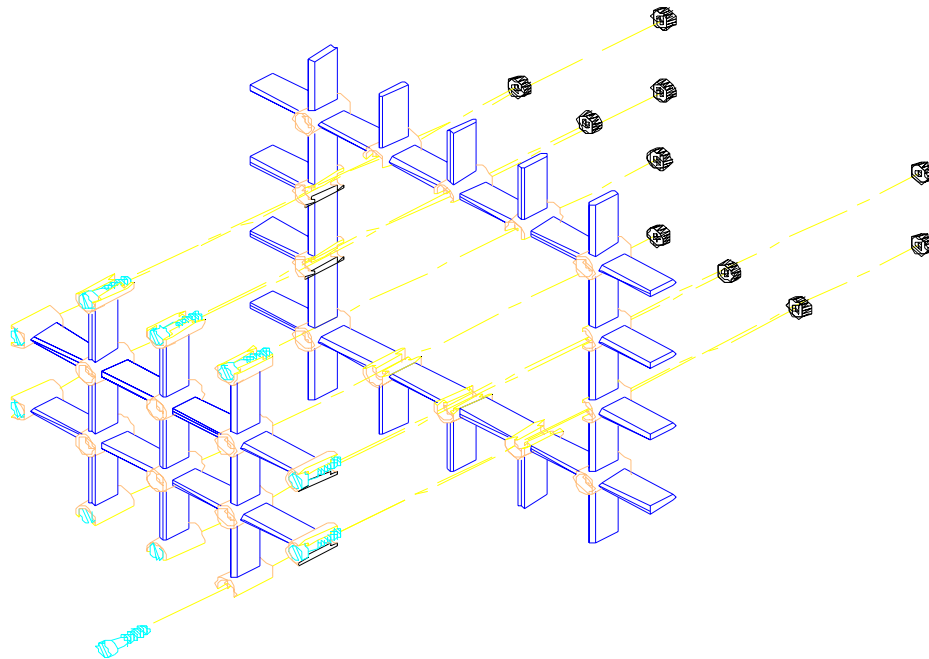


6. EASY Grid Restoration & replacement of sections.

Cutouts can be easily restored simply by using grid junction screws and grid sections cut to the size of the opening.

These grid sections may be cut from residual grid modules or may be ordered directly from SACO.

To close an opening, remove the mosaic tiles that surround the opening. Place a grid section into the opening.



7. Accrued Security in Mounting & Assembly of Components

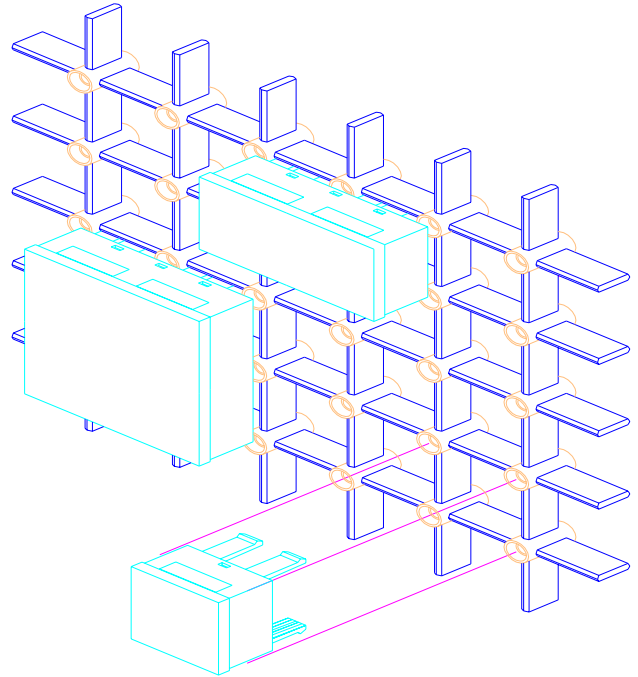
Mounted on SACO CONTROLS grid platform, they are designed to be held firmly in position so that vibration does not cause them to shift or fall.

They are secured to the grid by four integrally molded legs. No screws, cams, or fasteners are required to retain the tiles in place.

When mounted, the tiles have no horizontal or vertical movement. Consequently, the surface of the mosaic has no ridges or gaps.

Cut - outs can be made in the tile for any kind of selector switch, push button, or light.

Because of its modular design, a tile can be removed from the grid and relocated to any other place on the grid matrix without affecting adjacent components.



8. High Quality of Composite Materials

Mosaic tiles are made of high quality polycarbonate (MAKROLON) with flame retardant and self-extinguishing properties.

This material exhibits high thermal resistance with a temperature rating of 100 °C (212 °F) continuous and 125 °C (257 °F) intermittent. Its surface is non-reflective, anti-static, and smooth.

It is highly resistant to ultra-violet rays.

Certified for Nuclear power stations mimic panels fabrication

9. Various Dimensions and Accurate tolerances

Standard tiles come in the following sizes: 24 x 24 mm, 24 x 48 mm, and 48 x 48 mm. The tile has a minimum tile body length of 15 mm (not including the length of its legs).

Its tolerance is +0.0 mm and -0.06 mm.

The gap between adjacent tiles on the grid is 0.1 mm and discontinuity between the corners of adjacent tiles is less than 0.2 mm.

10. Variety and Custom Colors

The following standard tile colors are used as background:

- Gray, ivory, green, charcoal, black, white translucent & red translucent

If the desired background color is not among the standard ones shown above, tiles can be painted to any color available on SACO CONTROLS color chart that is inspired by RAL & BS 4800 colors.

The translucent tiles are used for annunciation. SACO CONTROLS incandescent or LED indicators are placed behind these tiles for backlighting.

Any window size can be accommodated, simply by combining tiles in the X and Y direction.

11. Lettering, Engraving and Symbols Custom Design

Static information of the system to be mimicked is represented by lines and symbols that are engraved on the tiles.

The graphical layout is generated using a Computer Aided Design (CAD) program. An electronic engraving machine uses the CAD generated file to produce a precise representation of the layout.

Each line and symbol is carefully designed at the center of tile (unless required otherwise) so that relocation of this tile to another part of the graphic is easily accomplished.

12. Quality Painting

Suppliers of paints and coats -Certified ISO 9000

After the tiles are engraved, they are covered with a plastic film. This film is removed for areas that require the same paint color.

The tiles are then air-spray painted with a uniform coating.

The masking and painting process is continued until all the colors are applied to the tiles.

The final step involves filling the grooves of the lines and symbols with a special permanent, non-glare ink.

The paint and ink are permanent and will not fade with time.

13. Easy Operations to Insert and Remove Tiles

Snapping in the Tile

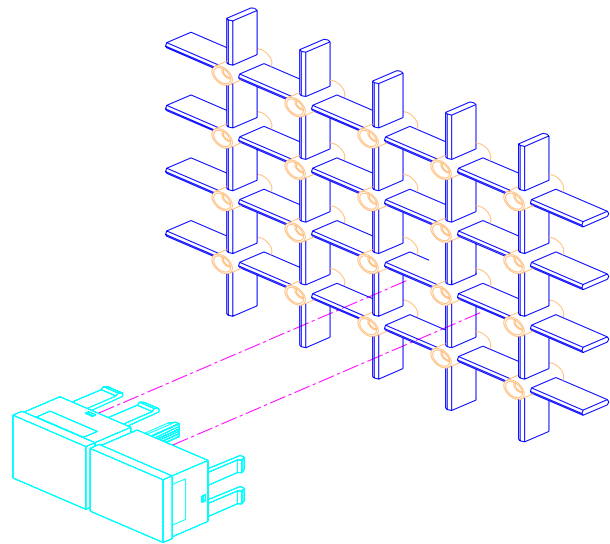
Hold the tile with your thumb and index finger.

Orient the tile so that the sides which contain the legs are the same sides which you are holding with the your thumb and index finger.

Insert one of the legs into the grid square. Gently press this leg against the grids cross-line and snap in the other leg.

When mounting the next tile, orient by 90 degrees compared to the one already mounted and follow the same procedure.

No especial tools required



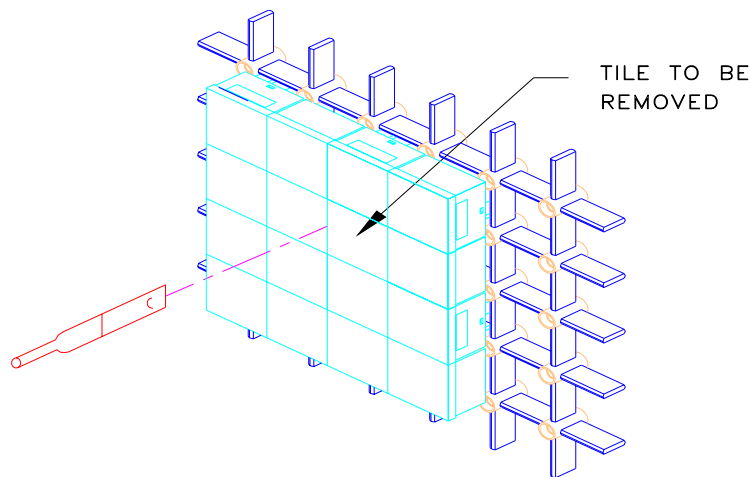
Snapping out Tiles.

The tile can be removed in two ways.

Either from the back by pushing the tile out with your index finger or by using SACO CONTROLS tile/lamp remover tool #SRT-01.

Insert the flat portion of the tile remover between the two tiles. Make sure that the indented slit on the tool's flat portion is facing the tile you want to remove.

Once the tool is inserted, gently pull it straight out. This will snap out the tile.

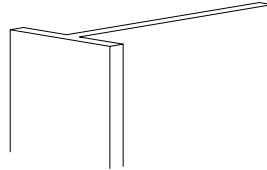


14. Diversity of Front Profiles

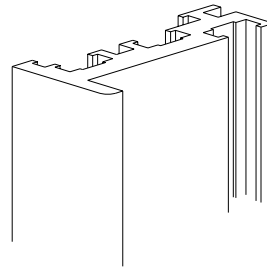
A mosaic system can be constructed for panel mounting or as a freestanding unit.

The framework that supports the mosaic grid system is constructed of extruded aluminum profiles. These profiles include front and rear support profiles.

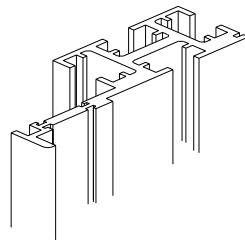
Used for free-standing units



Used for small panel
Mount mosaics



Used for large panel
Mount mosaics



The front support profiles are cut to the appropriate lengths depending on the size of the grid platform. They are secured to the grid system by grid-profile fastener sets and zinc-plated steel connectors.

No drilling, tapping or welding is required.

15. Variety of Support Profiles

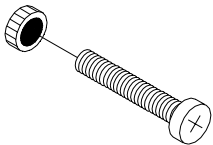
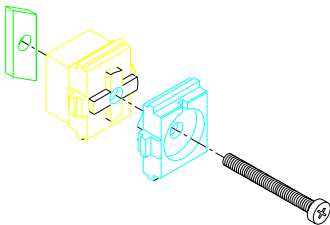
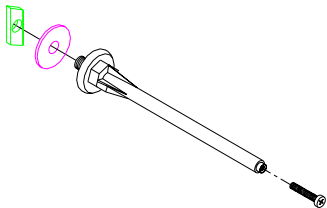
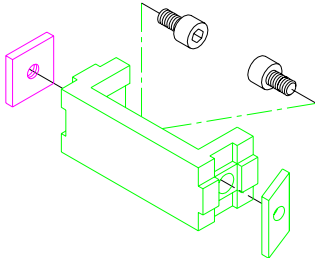
Various types of support profiles can be added at the rear of the front profile to add reinforcement to the front profile or to mount terminal blocks, wire ducts, electronic circuit boards or any rack-mounted equipment.

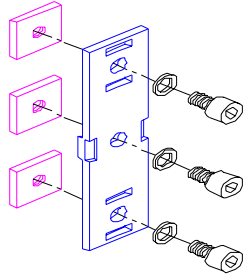
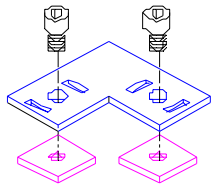
Support profiles contain slots that are used to slide pillars.

The pillars are used to secure the support profile to either the front profile or mosaic grid

16. Simplicity & High Quality of Mounting Accessories -

Common mounting accessories are used throughout the assembly to provide flexibility in future modifications and additions. Some of the mounting accessories are shown below:

	<p>SJS-24</p>	<p>Grid Junction Screw Set Used for securing grid modules together.</p>
	<p>SF-01A</p>	<p>Grid-Profile Fastening Set A Used for securing front profiles to grids.</p>
 <p>Common mounting accessories cont...</p>	<p>SP-120 SP-180</p>	<p>Pillar Type A Used for securing support profiles to the grid system.</p>
	<p>SP-60U</p>	<p>Pillar Type B Used for securing support profiles to front profiles.</p>

	<p>SPC-01</p>	<p>Profile Connector Used for securing profiles together.</p>
	<p>SJA-03</p>	<p>Joint Angle Used for securing profiles together.</p>

**17. The Mechanical components of SACO CONTROLS Structure
are guaranteed for 10 years as well as the supply of Spare parts.**