The basic construction of the tile support matrix comprises the assembly of precision die-cast alloy grids within an aluminium extruded bezel section which provides great strength and enables easy mounting within panel apertures.

Mosaic assemblies of any size may be constructed either within the constraints of practicable handling limitations, or as sub-sections which, when mounted within an aperture, may be joined to provide an overall tiled surface which is flat, even and with invisible joints between the tiles on either side of such a joint line.

The grid is manufactured as a 24 x 12 tile matrix, i.e. 576mm x 288mm, and the design is such that it may be cut and joined to an adjacent casting at any 24mm grid intersection. Flat surface alignment of tiles is ensured within a tolerance of less than 0.1mm in height, and **without** imposing **any limitation** on the positioning of control and indication devices or instrumentation.

The grid may be cut at any point to provide an aperture for the mounting of **DIN** or **non-DIN** instruments without any significant reduction to the overall structural integrity. Openings within the grid may be 'closed' by inserting and fixing an 'infill' grid section without compromising the area concerned for the creation of a new aperture or the positioning of control or indication devices. **No special tools or jigs are necessary**.

Where necessary, the replacement of a complete grid casting is possible from the front of the diagram, although front and rear access is advisable.

Usually the matrix assembly would be framed within an aluminium bezel extrusion, normally silver anodised, although it may be finished on request to any specified colour. Alternatively steel, stainless steel or hardwood trims may be used.

The bezel section accepts a range of mounting clamps designed for the fixing of mosaic assemblies of various sizes within enclosure apertures. To the rear of the matrix **special aluminium extruded rails** are provided, running vertically or horizontally at **regular intervals** and secured to the bezel and grid to ensure a **strong and rigid** overall assembly.

These extruded sections are designed to accept a range of **captive nuts** at any position within their length and in each of 4 planes, to facilitate the mounting of terminal rails, instrument support rails, cable trunking, etc.

Where necessary, a mosaic structure can be assembled without a bezel or with a special bezel to suit a specific application - i.e., when mounted directly into a wall aperture, a special wide bezel section is available which would cloak any sub-frame and perhaps untrue brickwork and plastering at the edge of the opening.

The final assembly is **structurally self-supporting** without reliance on its enclosure for strength or support. In addition it can be capable of **supporting large case instruments** and even **Rear Projection Units for combining dynamic information with the mimic.** 

**Data Sheet** 

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