

MAZAN[®]

STUNNING ACRYLIC GLASS

INSTALLATION GUIDE

INSTALLATION INSTRUCTIONS

Mazan engineered polymer acrylic can be installed on site by anyone with adequate woodworking skills and tools.

The following installation guidelines and the pre-installation quality check must be followed in order to protect your 10 year limited warranty. For after installation care and maintenance and warranty information, please see the separate 'Mazan Care & Maintenance Guide'.

Pre-Installation Check

Before installation, check that the Mazan panels are the correct colour and that they have no imperfections.

COLOUR MATCHING

Colour matching is within a tolerance set by Mazan of +/-1 Delta-E for high gloss solid colours and +/- 2 Delta-E for metallic solid colours. Metallic solid colours have metallic elements suspended within the colour to give the metallic effect. The metallic elements will reflect light differently as you look at the panel from different angles. This may give a perceived colour variation as the angle of view varies. Metallic solid colours must be installed in the same plane or direction. If a metallic solid colour panel is installed next to another panel which is at 90, 180 or 270 degrees to the first panel, the directional nature of the metallic panels may reflect the light differently and so the two panels may look different.



CUTTING

Method 1: Circular saw

You can cut Mazan using a circular saw following the general guidelines with a suitable guard and a guide to ensure the accuracy of the cut.

The circular saw requires a fine tooth blade with no offset (We recommend a Festool blade suited to hard plastics: part no. 496308).

Ensure the Mazan panel is well braced before cutting and also ensure that the panel is protected from surface scratches and other damage.

Method 2: CNC router

This is a specialist method of fabrication. It is used for intricate shapes and exact cutting specifications. You will need a straight cutting bit for plastics including acrylic polymers. If you do not have a CNC router machine, you will need to seek out an industry professional to supply this method.

Method 3: Laser Cutting

Laser cutting is a highly specialised method of cutting acrylic panels. It does however leave a very smooth, well finished edge. Please contact a specialist plastic fabricator to see if this method would be suitable for your needs.

Other methods

Jig saws and band saws are acceptable for cutting Mazan panels. Use only blades designed for acrylic polymers.

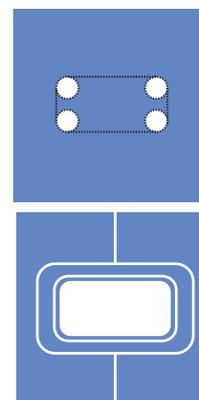
Hole saws

Hole saws should be sharp, but the pilot hole blunt. Make sure it is a metal type of hole saw with no offset. It is recommended to drill half way through the thickness of the panel. Then turn the Mazan over and finish the hole. This prevents the edge from 'blowing out'. De-bur the edge with 100 grit paper.

Switch box and other cut-outs

When measuring and marking for cut-outs around power outlets and switch boxes, ensure enough clearance is given for the switch body and that the cover plates or bulkhead fittings will cover the finished cut-outs.

- Pre-drill four 8mm holes using 9° pitch drill bit on a flat surface.
- Cut hole-to-hole using a jig saw with a fine tooth acrylic blade.
- Use an approved sealant to seal both the edge and a 50mm perimeter around the Mazan panel cut out.



FINISHING THE EDGE AFTER CUTTING

If the Mazan edge is to be left exposed, it can be easily finished to a polished, glass like quality. A good finish left from the machining process will take considerably less time to complete to a good finish

- Always peel back the protective film 25mm from the edge.
- Use a 240 grit paper to remove any cutter marks from the machined edge and then process to 400 grit paper and then to 600 grit.
- Chamfer any burrs or marks from the corners.
- Using a soft, clean cloth and a suitable polishing compound (for example Mirka M35), hand rub the edge to a polished finish.
- Remove any sanding dust between grades and polishing compound immediately.
- Clean with a soft dry cloth.

A comprehensive kit containing all of the materials required to polish the exposed edges of Mazan is available. Alternatively, colour matched plastic end profiles are available.

Flame polishing

A well matched edge can be flame polished using a hydrogen/ oxygen mix. Contact an acrylic fabricator for this service. This method should only be attempted by an experienced operator who can leave an excellent finish.

EDGE POLISHING KIT

The Mazan edge polishing kit is available to buy from Blackheath Products Ltd. For use in the preparing and finishing installation of Mazan panels. Each kit contains 1 Mirka M35 polishing compound, 3 sanding discs, 1 microfibre cloth.

Other useful kits are also available - contact your local Mazan supplier for more details.

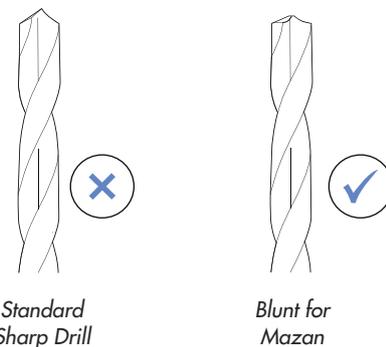


DRILLING

A drill press or electric drill may be used. A standard metal or wood drill will cut into the Mazan panel too quickly and may cause damage through cracking or splitting. Use a drill bit suitable for drilling acrylic polymers. You can also use a plunging type router to produce a hole in a Mazan panel. Employ the same principles as electric drilling methods. In most site applications, drill bit options are minimal. In this case the best option is to use a blunt drill as shown.

Please remember that as Mazan will need a small amount of room to expand and contract. It is advisable to ensure that drill holes are slightly oversized to allow for this expansion and contraction.

- Firmly secure the Mazan panel before drilling.
- Use a 9° pitch drill bit.
- When drilling Mazan using a drill press, the revolving speed is increased if the hole diameter is small (up to 4mm).
- If the hole is large in diameter, decrease the speed. A hole saw may be used to further enlarge the opening. Make sure it is a metal type of hole saw with no offset.
- To avoid work bench damage, use a scrap sheet of timber or plastic of 5 – 10mm thickness underneath the cutting area and allow the bit to drill into this support.



SILICONE SEALANT AND ADHESIVE

When installing Mazan panels, use a high quality transparent, low modulus, neutral cure adhesive. For example Dow Corning C60, which is available from Blackheath Products Ltd.

When installing any panels to wet areas, a perimeter silicone seal is required to stop any water or moisture affecting the specialist Mazan coating. Apply beads of silicone from the top to the bottom of the Mazan panel at 100mm intervals.

Use a straight edge to press and bond the Mazan panel onto the substrate or wall, taking care not to scratch the panel.



REMOVING THE PROTECTIVE FILM

Mazan is supplied with protective film designed to protect against scratches on both sides of each panel. Never attempt to cut the protective films with a knife as this may scratch the surface.

Painted side

Remove this protective film when all machining operations are complete and the panel is ready to be adhered to the wall/surfaces.

Exposed side

Remove this protective film completely at the very last stage of installation by gently peeling down film – never peel at right angles to the sheet as this may pull the sheet away from the installed wall/surfaces.



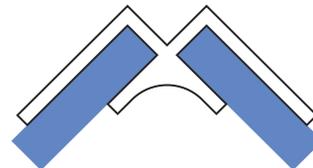
EXTRUDED PROFILES

A range of colour matched extruded profiles are available for Mazan, these consist of;

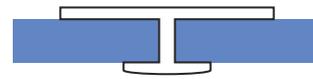
- A 'J-profile' or 'End Cap' which can be used at the end of a run of panels, or at the bottom of a sheet.
- An 'Internal Corner' profile, suited to shower enclosures.
- An 'External Corner' profile
- A straight panel connector or 'H-joint'.



External Corner



Internal Corner



H-joint



End Cap

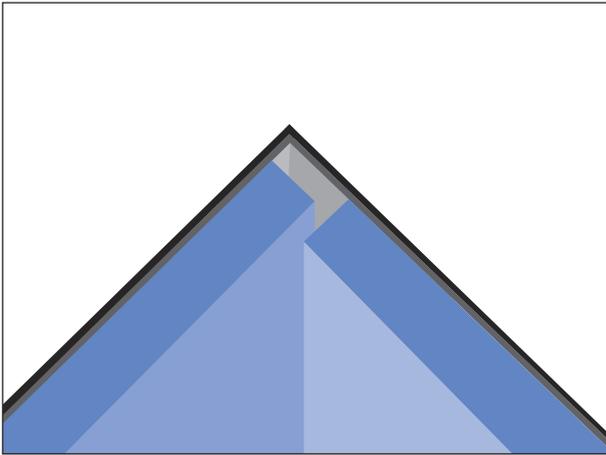
WALL PANEL INSTALLATION

Apply relevant installation guidance as noted on pages 2 and 3. It is particularly important that there is a 7mm band of silicone around the perimeter of any cut-outs. In addition there needs to be a 7mm band of silicone around the perimeter of the Mazan panel(s).

INSTALLING INTERNAL CORNERS: WITHOUT EXTRUSIONS

Due to the effect of heat, each Mazan sheet may expand and/or contract 3mm. The internal corner is therefore crucial to the installation as it must allow for thermal expansion and contraction.

The first sheet will fit into the wall allowing for a 3mm expansion gap between the edge of sheet and the wall. The second sheet will fit in a similar manner, however this time allowing for a 3mm expansion gap between the face of the first sheet and the edge of the second.



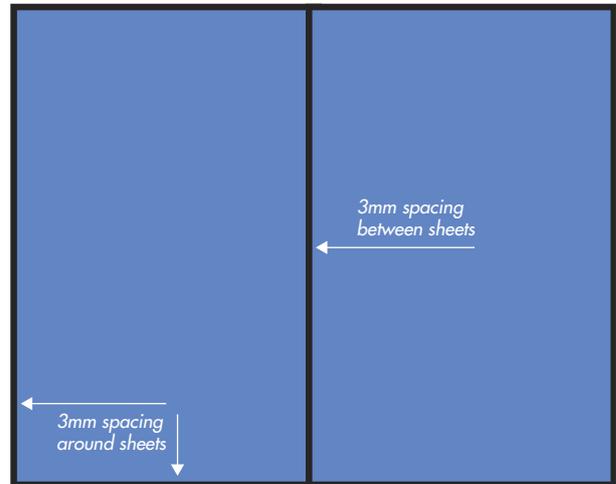
INSTALLING INTERNAL CORNERS: WITH EXTRUSIONS

When fitting an internal corner using the internal corner profile please ensure they are firmly fastened to the substrate using a grab adhesive or screws, provided they can be countersunk sufficiently so they do not interfere with the installation of the panel. A bead of neutral cure silicone should be placed inside the area where the panel fits (see the diagrams opposite).

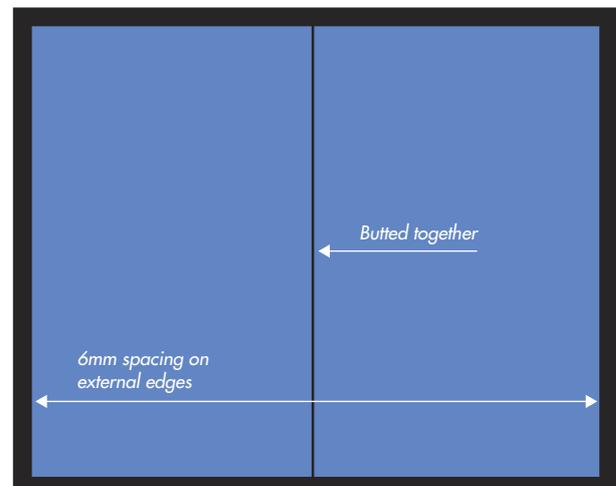
The panel can then be fitted with the edge being placed inside the profile. You must still allow for a 3mm expansion gap between each panel to allow the panel to naturally expand and contract.

SPACING FOR TWO SHEETS

When installing two sheets edge to edge, you must allow for a 3mm expansion gap between each panel to allow the panel to naturally expand and contract. This can be filled with transparent, neutral cure silicone adhesive.



Alternatively, the sheets can be butted against each other with no gap between them, however when using this method you should ensure that the opposite edge to the butt joint has a 6mm expansion gap.



A third method of jointing sheets edge to edge using the colour matched straight connector or H-joint is possible. The H-joint should be firmly fastened to the substrate prior to the sheets being fitted. Remember that the sheets must still have a 3mm expansion gap left within the extrusions.

SHOWER WALL INSTALLATION

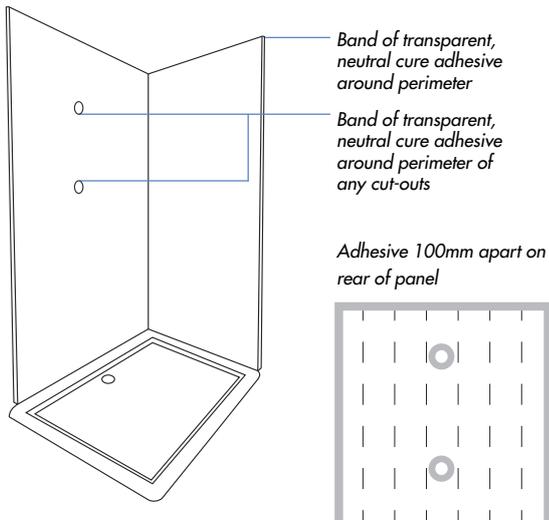
Apply relevant installation guidance as noted on pages 2 and 3. It is particularly important that there is a 7mm band of transparent, neutral cure adhesive around the perimeter of any cut-outs. In addition there needs to be a 7mm band of transparent, neutral cure adhesive around the perimeter of the Mazan panel(s).

Installing Mazan into a shower enclosure

When installing Mazan into a shower enclosure there are 2 key points which must be observed. Firstly the walls or substrate that the Mazan is being mounted to should be as flat as is reasonably practical, this can be measured using a suitable straight-edge.

If this requires adjustment, please seek a suitable building contractor. Secondly, the shower tray should be on a solid level base or constructed from a material that does not allow the tray to flex or move. Any movement in the tray can lead to the neutral cure silicone used to seal the shower tray/Mazan panel to break and allow water seepage, which could in turn lead to water damage to the wall, substrate or flooring.

Where there is a corner within a shower enclosure, all points from 'Installing Internal Corners: Without Extrusions' or 'Installing Internal Corners: With Extrusions' (Page 5) must be adhered to. These instructions also apply if fitting into a bath.

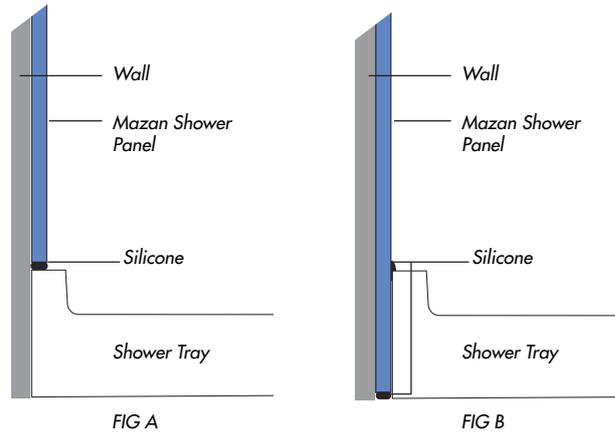


Installing Mazan with a shower tray

When fitting the Mazan panels down to a shower tray, there are 2 options of meeting the shower tray;

The first is positioning the shower tray so that it is touching the wall. The Mazan panels must then finish 3–4mm above the shower tray. The gap between the bottom of the Mazan panel and the top of the shower tray should be filled with neutral cure adhesive and smoothed off (see 'FIG A').

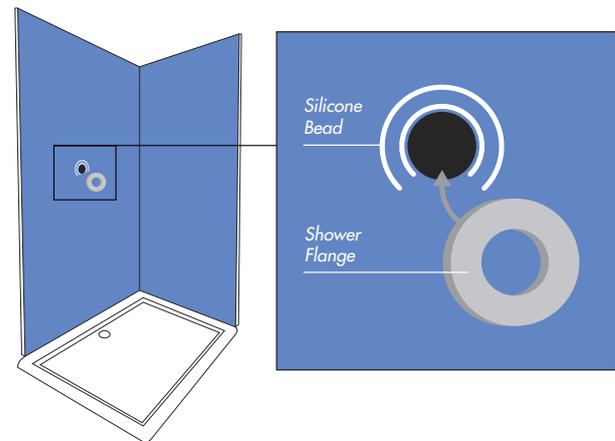
The second option is to mount the Mazan panel so that it finishes within 5mm of the floor. The shower tray can then be positioned against the Mazan panel. The gap between the bottom edge of the Mazan panel and the floor should be filled with a transparent neutral cure adhesive. A band of transparent neutral cure adhesive can then be placed and smoothed off (see fig 'FIG B').



Fitting of shower components

When fitting door returns or plumbing flanges, please refer to the manufacturer's instructions. Please ensure that an expansion gap of 3mm is left around any cut out to allow the natural expansion and contraction of the Mazan panel.

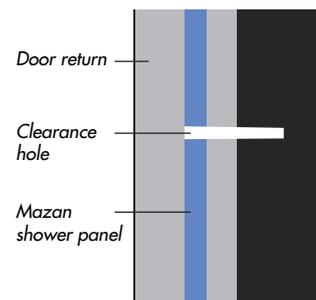
All cut outs should be sealed round their perimeter to prevent water ingress. In areas such as showers, where there is a higher chance of water ingress, fittings and fixtures can be sealed onto the face of the Mazan panel (please see below illustration).



Fitting of door returns

Refer to manufacturers instructions for the fitting of shower screens (that are not wall panels) and doors.

- Do not screw directly into the Mazan panel, this may cause the sheet to split.
- Drill clearance holes through Mazan and wall linings using a drill bit as described on page 3.



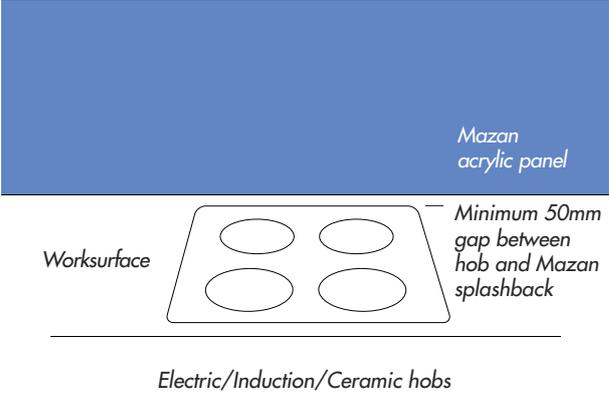
UPSTAND AND SPLASHBACK INSTALLATION

Apply relevant installation guidance as noted on pages 2 and 3. The warranty will be void if Mazan comes into direct contact with cooking apparatus.

Electric/Induction/Ceramic hobs

Mazan can be used with induction, electric and ceramic hobs where radiant heat is less than 100°C. A minimum of a 50mm gap between the rear edge of the hob and the Mazan panel is required. Do not allow a wok/frying pan or any other hot cooking utensil to come into direct contact with the Mazan panel.

Heat tolerance
Do not leave a hob hot plate switched on, unattended and uncovered with cookware. Prolonged radiant heat could damage your Mazan splashback.



Gas hobs

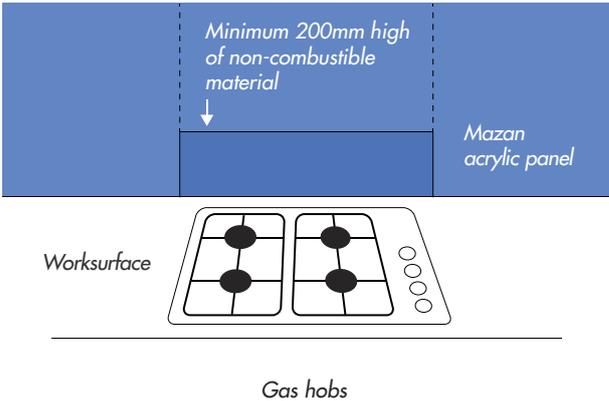
Mazan can be used behind gas hobs when it is used in conjunction with non-combustible materials such as glass, tiles or stainless steel. These materials should provide an upstand of at least 200mm height. When using materials such as tiles or stainless steel, these should not be adhered directly to the Mazan panel, instead these should be fitted to the main wall surface in accordance with the manufacturer's recommendations.

These non-combustible materials can run all the way up to the overhead extraction unit.

A range of purpose made, colour matching glass panels are available from Mazan in both 200mm & 750mm height and 600mm or 900mm wide. A minimum 50mm gap between the rear edge of the hob and the Mazan panel is required.

When installing the colour matching glass panels, the surface of the Mazan Panel should be sanded to create a key for the adhesive. The colour matching glass panel can then be adhered to the keyed face of the Mazan panel in the same manner as fitting a Mazan panel to a wall.

Do not allow a wok/frying pan or any other pan to come into direct contact with the glass panel for any length of time.





Blackheath Products Limited
Units 1-4 Fairfield Park, Halesowen West Midlands B62 9JL

Telephone: 0121 561 4245
Fax for free: 0800 634 0113

www.mazan-glass.co.uk