

INSTALLATION GUIDE

LUMOSTONE

Lumostone panels are lightweight and easy to cut and install, making them the ideal alternative surface to traditional stone surfaces!

TECHNICAL INFORMATION

	ACRYLIC-STONE RANGE	ULTRA-THIN RANGE
PANEL SIZE	2440mm x 1220mm x 8mm	3000mm x 1220mm x 3mm
MATERIAL	Acrylic and natural stone composite	GPPS resin with digital print
WEIGHT	Medium weight 38-42kg/panel	Lightweight 8-10kg/panel
STRUCTURE	Rigid, translucent, can be heat-moulded	Bendable, translucent, cannot be heat-moulded.
WATER IMPACT	Water resistant. Suitable for light wet areas such as backsplashes	Water resistant. Suitable for light wet areas such as backsplashes
SURFACE DURABILITY	Can be easily drilled. Not scratch resistant. Scratches can be sanded and polished if needed.	Can be easily drilled. Not scratch resistant.
HEAT RESISTANCE	Not suited near heat or sun	Not suited near heat or sun
PATTERNS	Each panel is unique. Patterns not continuous; can't be bookmatched	Each panel is unique. Patterns not continuous; can't be bookmatched
USES	Backlit feature panels, wall cladding, low impact vertical surfaces, ceilings, slightly curved surfaces	Backlit feature panels, wall cladding, low impact vertical surfaces, ceilings, slightly curved surfaces



ALIGNING PATTERNS BETWEEN PANELS



LIGHTWEIGHT / EASY TO HANDLE



LIGHTLY BENDING 3MM PANELS

Please contact us for our recommended experienced install teams in Johannesburg and Cape Town who can assist you with custom cutting, trims, backlighting and install of your Lumostone panels

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DRILLING AND CUTTING

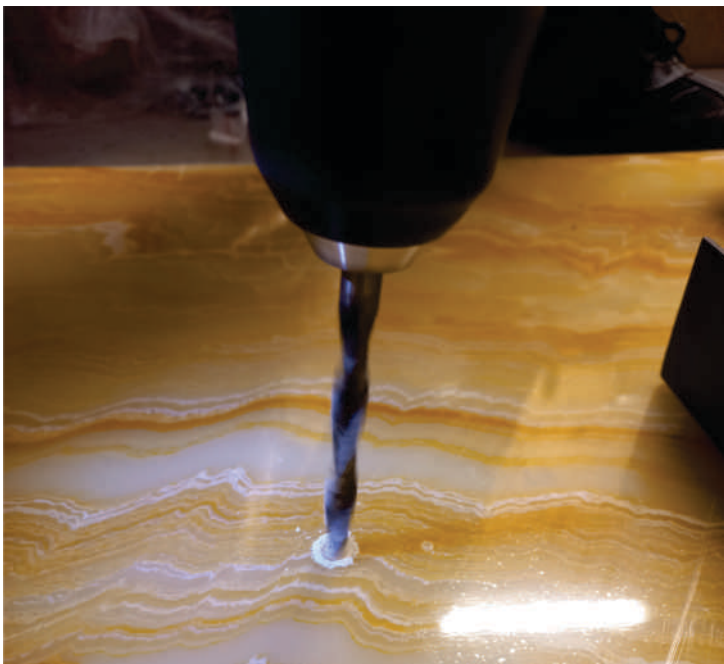
- Panels do not require specialist waterjet cutting – they can be easily cut and assembled in joinery workshops and can be CNC cut
- We recommend HSS Metal bits for drilling into Lumostone, however masonry bits are also suited
- **Drilling manually in workshop:** first mark the hole positions; then make a small indent at each hole with a centre punch to provide a guide prior to drilling.
- **Hole-saws** can be used for larger diameter holes
- **Drilling holes after panels are installed against a wall:** drill the holes through the Lumostone first with a metal drill bit; then swap to a masonry bit to drill into the wall. The holes in the Lumostone could be slightly oversized to avoid the masonry bit from snagging.
- **Blades:** Use 60T or 100T thin-kerf cross-cut wood blades on 8mm panels to avoid jagged edges. Use a coarser blade and/or slower cutting speed for 3mm Lumostone to avoid over-heating of the product.



CUTTING 8MM LUMOSTONE



USING A HOLE-SAW ON 8MM LUMOSTONE



DRILLING INTO 8MM LUMOSTONE



MITRED EDGES ON 8MM LUMOSTONE

LIGHTING SPECIFICATIONS

- The Wine Room recommends high spec, low-heat LEDs to backlighting of Lumostone panels. Indicative light positions show in (01) below.
- Warm white, Cool white or Daylight LEDs can be used as per the client/designer's choice
- All LEDs should be supplied with a high frequency PWM driver, to ensure that the on-off alternate current (AC) used in household mains power is converted to a constant direct current (DC) to avoid visual flickering of LEDs when viewed on camera.
- Example spec: Hafele 12V LED 2043 flexible strips; coupled with a Loox 60W 12V driver; or other similar high quality strip or 'daisy-chains' brands (e.g. LBY)
- Ensure the LEDs are mounted onto a mirror panel or high-gloss-finish back panel for maximum reflection of light behind the Lumostone.
- Always check specifications with a qualified electrician to make sure it is suited to the scale and layout of the project.



EXAMPLE OF 'DAISY-CHAIN' STYLE LEDS



THESE LEDS CAN BE PULLED OUT FROM THE SIDE IN FUTURE

LIGHTING SPECIFICATIONS

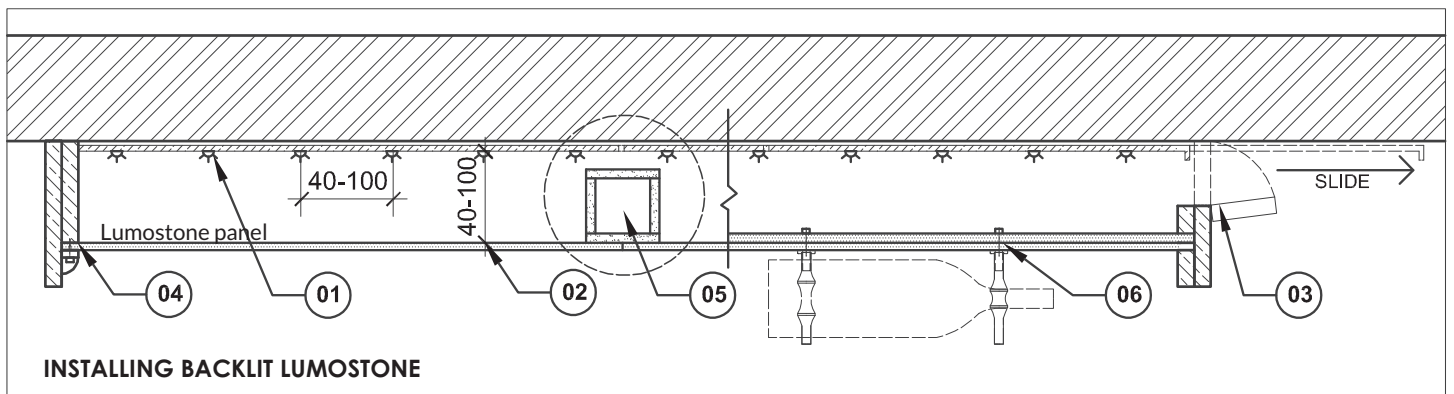
- To avoid uneven light patches, ensure that LED strips are laid at centre-to-centre spacing which is the same as the depth from the LEDs to the Lumostone panel. This should be 40mm min-100mm max (refer to note 02 below).
- For example, if the Lumostone panel is sitting 100mm away from the LEDs, then the LED strips must be placed at 100mm centres from each other.

LED MAINTENANCE

- The Wine Room recommends building in allowance to access the LEDs in future
- **Example 1:** include a hinged panel on the side of the lightbox with a removable mirror board and LED lights that can slide out to the side (refer to 03 below)
- **Example 2:** include magnetic or removable front cover strips (timber or metal) which allows one to remove the Lumostone panel from the front in order to access the LED lights behind. (refer to note 04 below)



EXAMPLE OF VERTICAL LED STRIPS



SUPPORTING BACKLIT PANELS

- Backlit lumostone panels require support when more than 1 panel is used next to each other and/or when additional loads are applied to the front of the Lumostone panels
- As a rule of thumb, 8mm panels can handle weight up to approx. 5kg per 2440x1220mm panel. We recommend providing additional support behind the Lumostone panels if you plan on putting more than 5kg of weight.
- **Scenario 1: Providing support at join lines:** Install 8-10mm thick perspex support columns behind each join line between adjacent Lumostone panels. The column must be fixed to the top and bottom of the surrounding joinery and the lumostone can be fixed onto the column using evenly-applied translucent epoxy. This will avoid bending of the panel at the join line. (refer to note 05 in the diagram on the previous page).
- 3mm thick Ultra-thin panels require additional supports along the length of the panels to prevent bending as they are not as rigid as the 8mm panels
- **Scenario 2: Providing continuous support:** Install a 8-10mm thick perspex panel flush behind the Lumostone panel; and fix your items (e.g. lightweight shelves) directly through the Lumostone and into the Perspex behind i.e. use your fixing screws to 'sandwich' the back-structure directly onto the Lumostone panel, without the need for epoxy glue. (refer to note 06 on the diagram below)

FITTING LUMOSTONE DIRECTLY ONTO WALLS

- The Wine Room recommends high quality High Tack adhesive for installing Lumostone directly to walls;
- Ensure the Lumostone and the wall surfaces are free of grease and dust. Wall surfaces must be smooth, straight, non-porous; dry; in good condition and white in colour. No bulges, cracks, peeling paint or rough plaster permitted.
- A full Lumostone panel will take approximately 3 full tubes of adhesive. Apply the adhesive on the Lumostone panel in vertical strips of maximum 10cm distance between strips, working from the top of the panel down. Do not apply the adhesive in dots!
- For smaller Lumostone panels, the distance between the strips can decrease down to 3cm between strips
- Always apply the adhesive with a caulking gun and unique V-nozzle (available from the supplier), at 90° angle to the work surface with the provided V-nozzle pointing up, so that a perfect bead triangle of 6x6x6mm is laid.
- Do not apply adhesive within 3cm from the Lumostone edge, to allow for spreading of adhesive when pressed against wall without seeping out the edges.
- Bring the Lumostone into position and press firmly onto the wall, so that the adhesive is pressed into a minimum of 2-3 mm thick between Lumostone and wall. Some additional propping may be required depending on Lumostone panel size.
- Because of the high initial strength, support during curing is usually not necessary for up to 25kg weight panels.
- Working time of the adhesive is approximately 10-15 mins before the adhesive starts to dry and form a skin.



EXAMPLE OF PERSPEX COLUMN PROVIDING SUPPORT BEHIND JOIN LINES



LIGHTWEIGHT LOADS CAN BE FIXED DIRECTLY INTO LUMOSTONE PANELS



EVENLY-APPLIED EPOXY USED TO FIX PANELS DIRECT TO SURFACES