



BACKLIGHTING CAMBRIA - OMNIFY

TECHNICAL GUIDELINE

This document outlines how to properly use Omnify Matrix LED sheets to backlight Cambria quartz surfaces.

1. **Figure 1** below shows designs that can be properly backlit with Omnify Matrix Sheets. This includes columns for designs that can be successfully lit in an office setting (200+ LUX) and a dim setting (50+ LUX).

DESIGN	APPROVED THICKNESS(ES)	OFFICE LIGHTING ENVIRONMENT (200+ LUX)	LOW LIGHT ENVIRONMENT (50+ LUX)
Baybridge™	1cm, 2cm	Yes	Yes
Brittanicca Gold Warm™	1cm	Yes	Yes
Brittanicca Warm™	1cm	Yes	Yes
New Brighton™	1cm	Yes	Yes
Skara Brae™	1cm	Yes	Yes

Figure 1

2. Color temperature of a light source impacts the surface tone of backlit Cambria. Omnify Matrix Sheets can be purchased in 6,500K, 5,300K, 4,100K, and 3,000K temperatures. Backlit Cambria tends to warm transmitted light. Because of this, Cambria recommends 6,500K sheets.
 - a. NOTE: Ensure proper electrical requirements are understood and followed. To contact Omnify Technical Support, please call 1-866-766-0509, email hello@omnifynow.com, or visit omnifynow.com.
3. When using the Omnify Matrix, a proper substrate support structure is required to secure LED sheets in place. Cambria recommends using a sheet on Masonite or plywood at least ½” thick on top of the cabinet. **See Figure 2.**

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Figure 2

4. Omnify Matrix sheets are backed with 3M tape. This allows sheets to be adhered directly to the surface of the substrate. Screws are not required, but can be used to more permanently secure sheets to the substrate. Insert screws into Matrix squares with a cross. **See Figure 3.** Use only pan head, coned, or round head screws. Tapered screws such as wood or drywall screws will ruin the product.

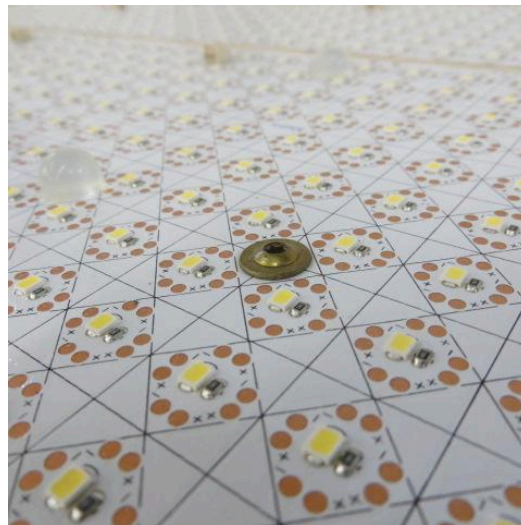


Figure 3

5. Matrix sheets can be cut and folded to match contours of the substrate. When cutting matrix sheets, only cut along straight, black lines with a scissors symbol. Cutting outside these lines

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could cause sheet failure. Similarly, when folding Matrix sheets, fold along the straight, black cut lines.

- 6. Ensure that matrix sheets are placed flush to straight edges. The Matrix is designed in such a way that LEDs are offset from cut edges at the proper distance for lighting mitered drops.
 - a. NOTE: Each Matrix sheet has an outer strip of material that must be removed if placed flush to a straight edge. If this material is not removed, LEDs will be too far offset from the edge and will cause a shadow to appear. **See Figure 4.**

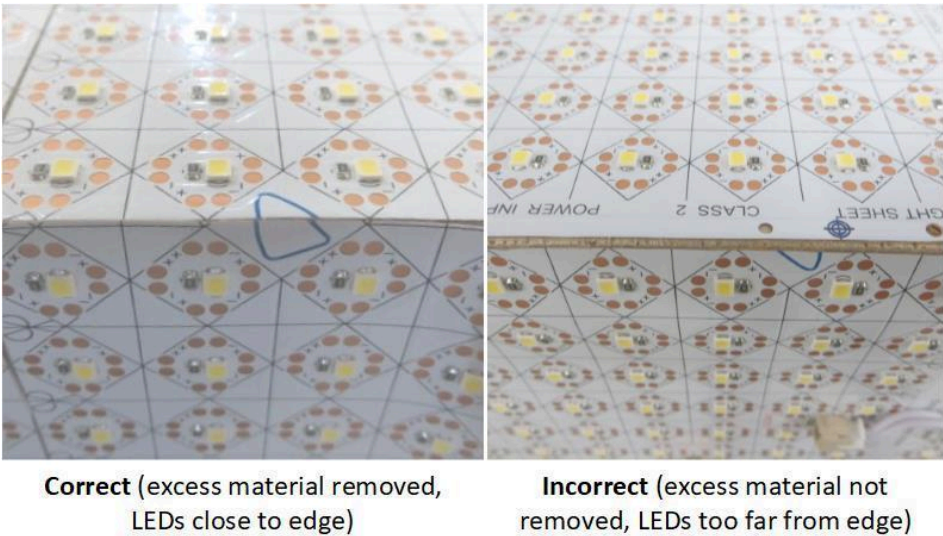


Figure 4

- 7. Place Matrix sheets such that they overlap to form one continuous sheet. **See Figure 5.** Gaps or discontinuities will produce a shadow line. This is most effectively completed by utilizing cut lines to properly align sheets.
 - a. NOTE: When placing Matrix sheets, be mindful of 2-pin connector location. This ensures that sheets can easily be connected with Omnify provided jumper cables.

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CAMBRIA®

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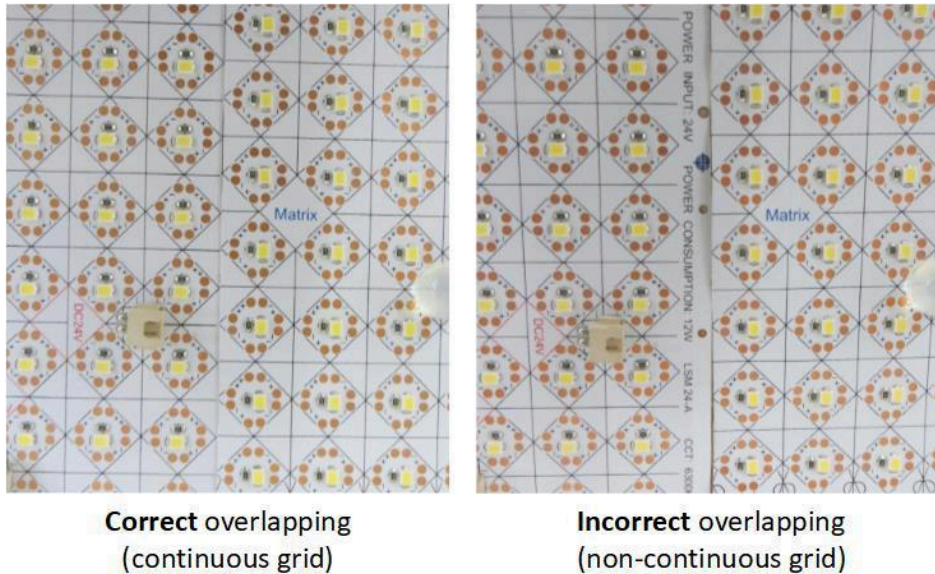


Figure 5

8. If the substrate has a curved edge, cut Matrix sheet so that no diode overhangs the edge. **See Figure 6.** The red line represents the curved edge of the substrate. Diodes that are outside this line have been removed. The remaining, overhanging material can be folded (not cut) along the edge to remove the possibility of shadow lines.

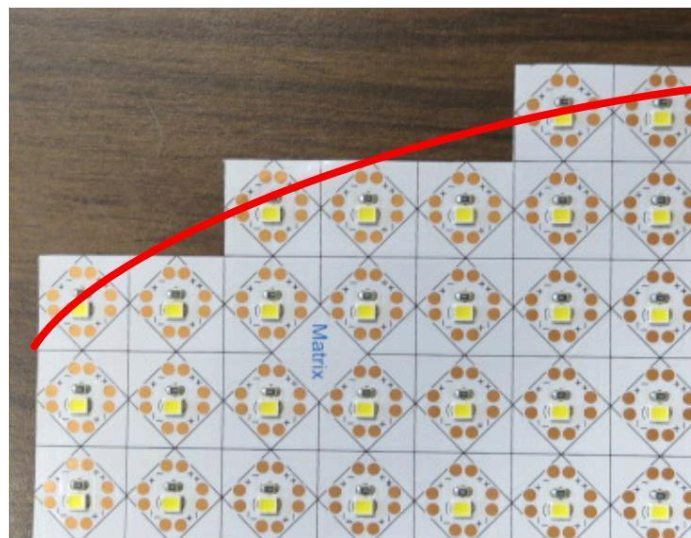


Figure 6

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- 9. Cambria is properly raised above the Omnify Matrix sheet using rubber bumpers and a 1.5 mm thick diffusive acrylic layer. Bumpers must be spaced no more than 3" apart to achieve full support per Cambria installation standards. For Omnify Matrix sheets, this means that a bumper must be placed every fourth square. The diffusive acrylic layer is placed between the bumpers and Cambria. **See Figure 7.**

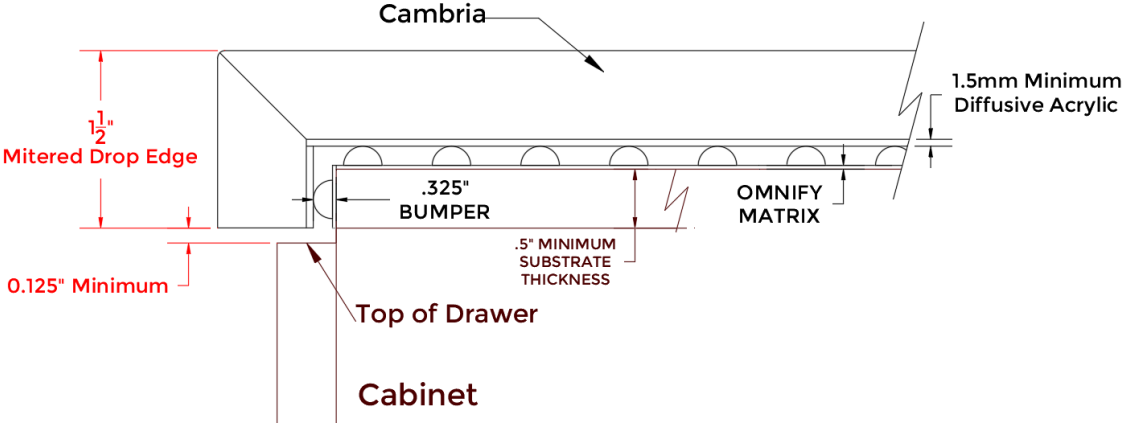


Figure 7

- a. NOTE: The diffusive layer is what is commonly called frosted acrylic. This layer must be at least 1.5mm thick. Frosted acrylic can be purchased directly from Omnify, from hardware stores such as Home Depot or Lowes, or it can be purchased from 3rd party acrylic sheet providers such as Delvie's Plastics and PLASKOLITE.
- 10. Silicone must not be placed between the diffusive layer and back of the Cambria. Doing this can cause hot spots of light to appear on the surface. However, it is possible to apply silicone to the back of the diffusive layer. Apply silicone to the back of the diffusive layer only in small, strategic areas. Large area of silicone will reduce the overall brightness of backlit Cambria.

If you have any questions, please contact Cambria at 1-866-CAMBRIA.

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