

CASE STUDY

DAKOTA LED PANELS

VS. FLEXIBLE LED SHEETS

AND LED TILES



When it comes to backlighting solutions for different applications, LUMIRON INC offers two remarkable products that cater to distinct needs – THE DAKOTA CUSTOM LED LIGHT PANEL and the LED Flexible Sheets. While both solutions provide efficient and stunning illumination, each has its own strengths and best-suited scenarios. Let's delve into a comparison between the two, highlighting why the DAKOTA CUSTOM LED LIGHT PANEL is the superior choice for stone applications and flat surfaces:

DAKOTA CUSTOM LED LIGHT PANEL

Perfect for Stone Applications and Flat Surfaces: THE DAKOTA LED LIGHT PANEL is specifically designed to illuminate stone applications and any flat, translucent material. Its uniform and vibrant illumination breathe life into architectural features, illuminated graphics, and signage with remarkable precision.

Full Customization: THE DAKOTA LED LIGHT PANEL offers full customization options for shapes and sizes. Whatever the project's unique requirements, the DAKOTA PANEL can be tailored to fit perfectly, ensuring an aesthetically pleasing and seamless integration.



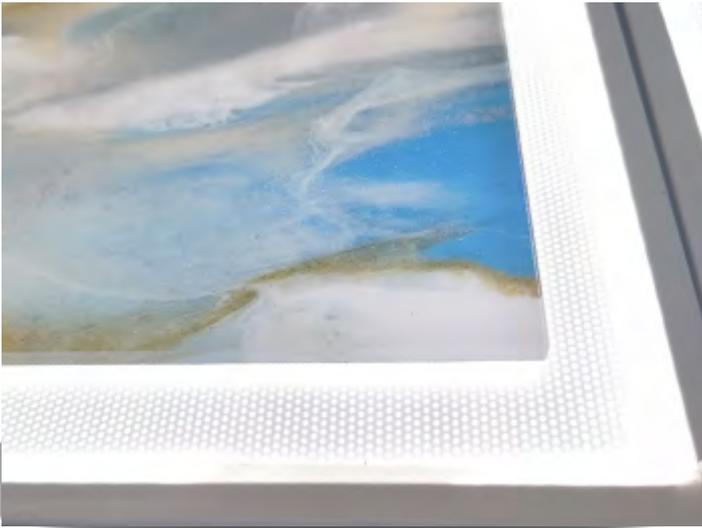
LED FLEXIBLE SHEETS

Ideal for Curved Applications: LED Flexible Sheets shine when it comes to curved backlighting projects. Their bendable nature allows them to fit snugly into soft, curving surfaces and spaces, making them a superb choice for applications where flexibility is paramount.

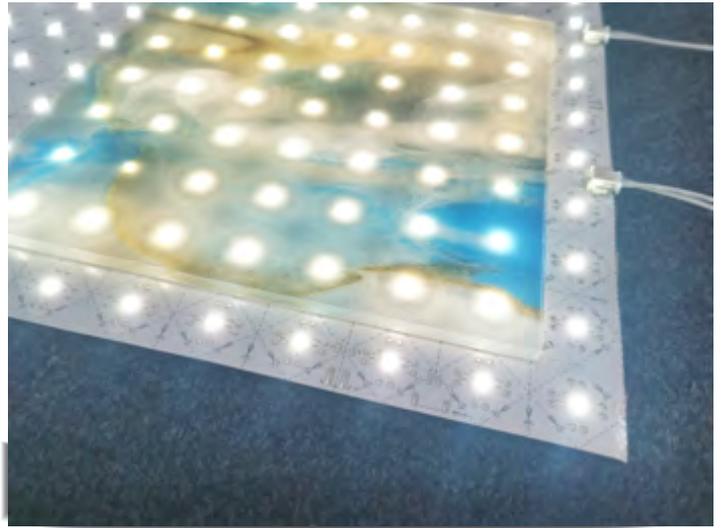
Tiling for Grand Format Illumination: These sheets can be tiled together for grand format illumination, making them suitable for projects of various shapes and sizes.

DAKOTA PANELS

VS. FLEXIBLE SHEETS AND LED TILES



DAKOTA PANEL, ALLOWS SMOOTH EVEN ILLUMINATION



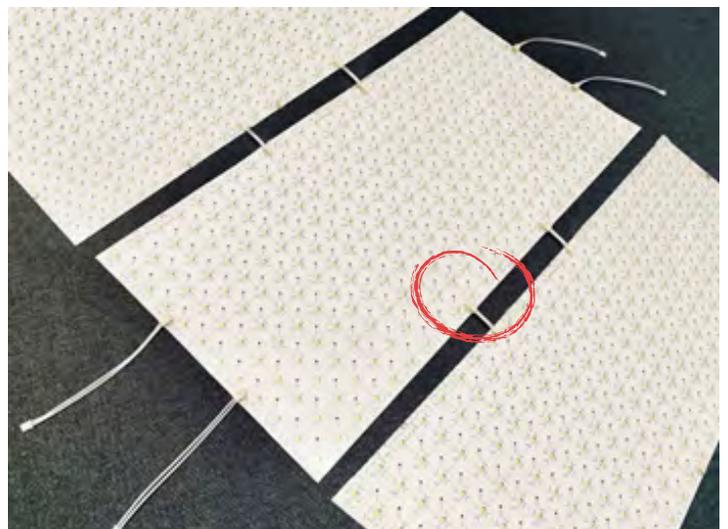
WITH LED SHEETS, ILLUMINATION IS NOT EVEN, CAUSING A "DOT" EFFECT

In a 4' x 8' flat application scenario:

One Panel vs. Multiple Sheets: THE DAKOTA CUSTOM LED LIGHT PANEL requires only 1 panel for complete illumination. On the other hand, the LED Flexible Sheets necessitate 16 pages to cover the same area. This significant difference showcases the efficiency and convenience of the DAKOTA LIGHT PANEL.

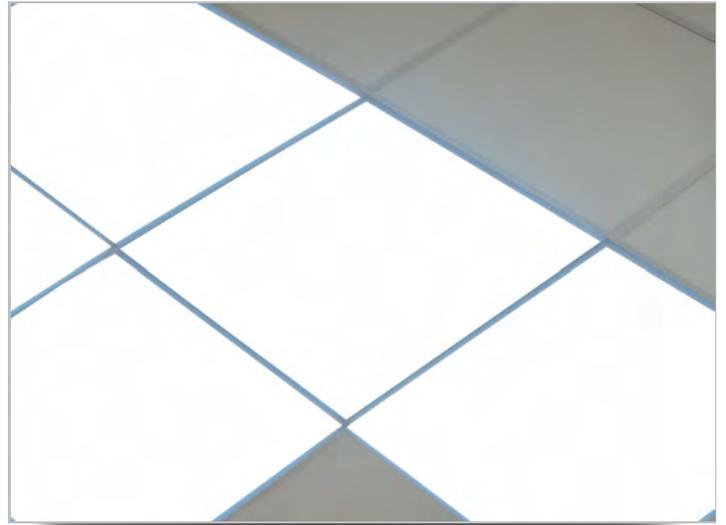
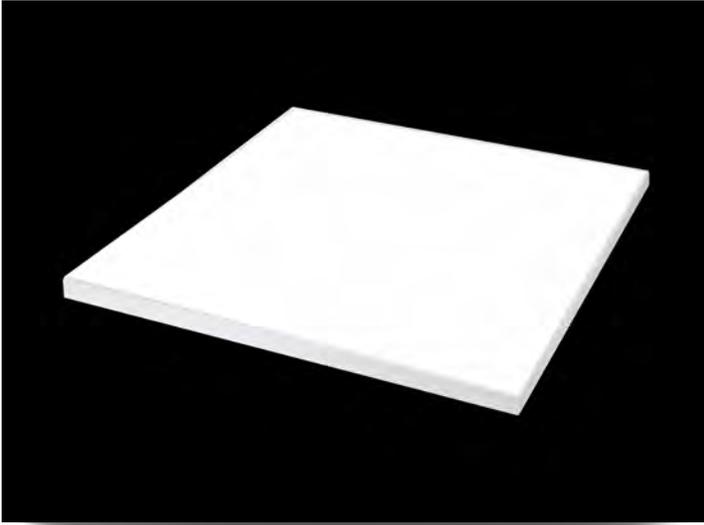
Lower Power Consumption: The DAKOTA CUSTOM LED LIGHT PANEL boasts an impressive power consumption of only 120W in the given scenario. In contrast, the LED Flexible Sheets require a substantial power input of 416W. This translates to reduced electricity costs and increased energy efficiency with the DAKOTA LED LIGHT PANEL.

Minimal Cables and Power Cord: To power the 16 pages of LED Flexible Sheets, a whopping 128 power cords or cables and connectors are required. In contrast, the DAKOTA CUSTOM LED LIGHT PANEL requires only 1 power cord and connector, simplifying installation and reducing cable clutter.



DAKOTA PANELS

VS. FLEXIBLE SHEETS AND LED TILES



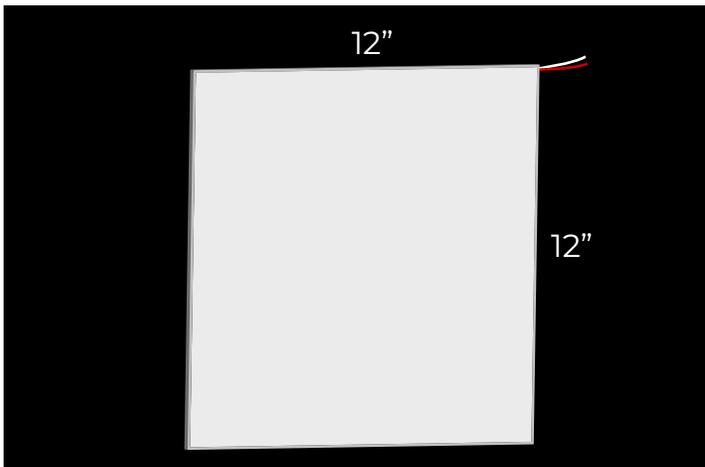
WITH LED TILES, ILLUMINATION IS NOT EVEN, CAUSING A "SHADOW" EFFECT. IT REQUIRES A CABLE FOR EACH TILE.

In a 4' x 8' flat application scenario:

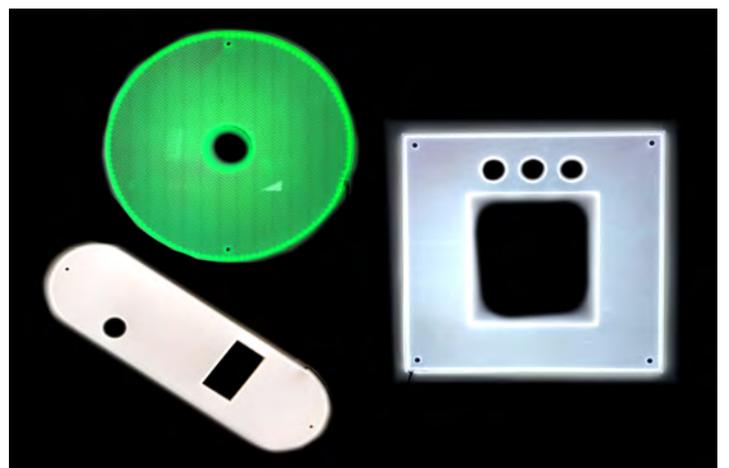
The DAKOTA Custom LED LIGHT PANEL requires only one panel (up to 48x96") for complete illumination, whereas LED Tiles need 32 tiles to cover the same area. This highlights the efficiency and convenience of the Dakota Light Panel.

Additionally, Dakota Panels need just one cable to connect to the power supply. In contrast, each LED tile requires a separate cable, making installation cluttered and uneven. Dakota Panels provide smooth and even illumination.

Furthermore, DAKOTA PANELS can be customized to fit any project, allowing for the installation of various shapes for sinks, faucets, or electrical outlets.



DAKOTA PANELS CAN BE CUSTOMIZED TO MEET THE SPECIFIC NEEDS OF ANY PROJECT, ALLOWING FOR EASY INSTALLATION OF SINKS, FAUCETS, ELECTRICAL OUTLETS, AND OTHER FIXTURES.



DAKOTA PANELS

VS. FLEXIBLE SHEETS AND LED TILES



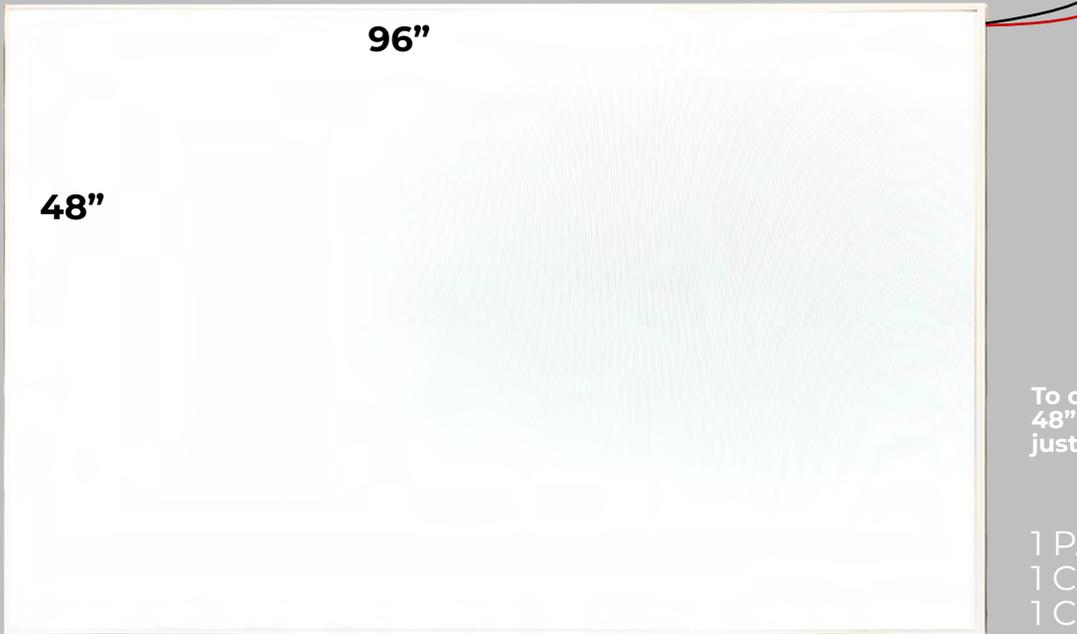
COMPARISSON IN A 48" X 96"

FEATURE	DAKOTA LED PANEL	LED FLEXIBLE SHEETS	LED TILES
Section Size	Custom, up to 96"x48"	12" X 24"	12" X 12"
Section Needed	1	16	32
Cables Needed	1	128	32
Connectors Needed	1	128	32
Spacing Needed	None	2" X 3"	2"X3"
Wattage	120W	416W	320W
Stone Applications	Yes	No	No
Installation Labor	No labor	Cost/Assembly	Cost/Assembly
Reliability	Great	Fair	Fair

Acrylic Artistic surface wall, back-lit by DAKOTA PANELS. The illumination is even, bright and smooth.



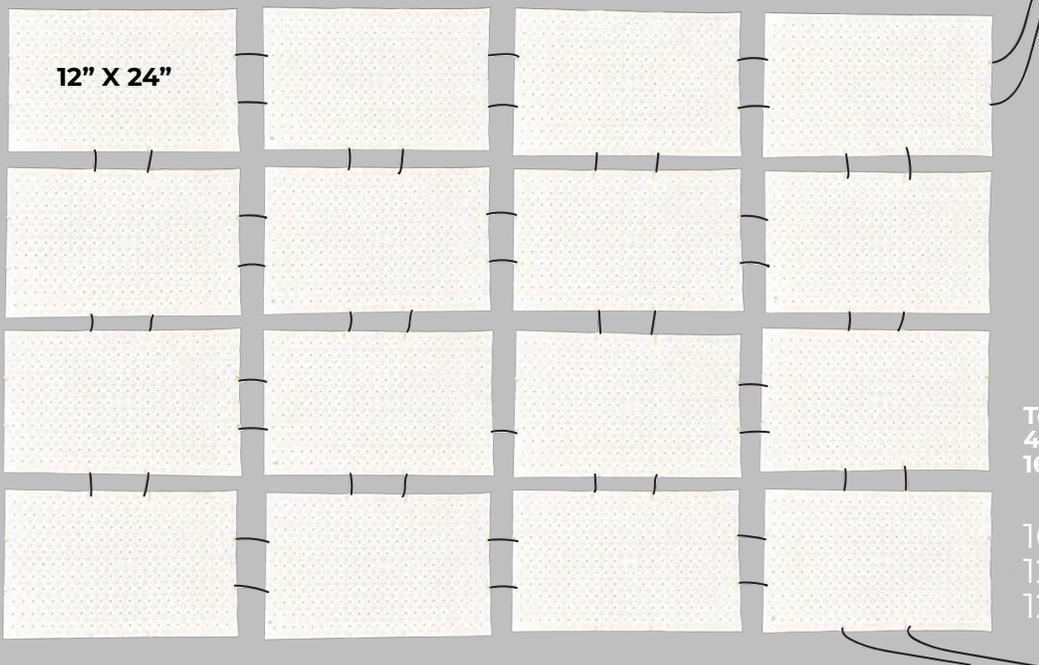
DAKOTA LED PANEL



To cover a
48" x 96" surface,
just 1 PANEL is needed

1 PANEL
1 CABLE
1 CONNECTOR

LED SHEETS



To cover a
48" x 96" surface,
16 sheets are needed

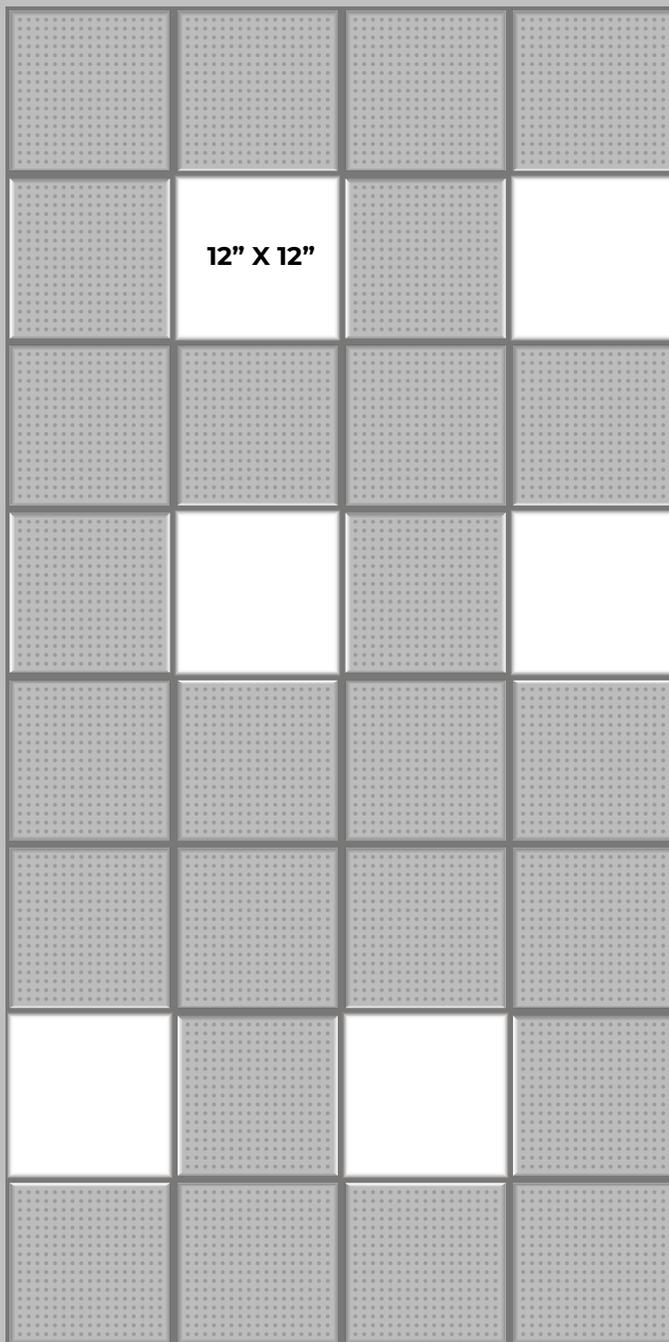
16 SHEETS
128 CABLES
128 CONNECTORS

DAKOTA PANELS

VS. FLEXIBLE SHEETS AND LED TILES



LED TILES



To cover a
48" x 96" surface,
just 1 PANEL is needed

32 TILES
32 CABLES
32 CONNECTORS

DAKOTA PANELS VS. FLEXIBLE SHEETS



IN CONCLUSION

While both the DAKOTA CUSTOM LED LIGHT PANELS and LED Flexible Sheets are exceptional backlighting solutions, the choice ultimately depends on the project's specific requirements. For stone applications and flat surfaces, the DAKOTA LED LIGHT PANEL stands out for its efficiency, minimal power consumption, and easy installation with just one panel.

LED TILES can be a more cost-effective solution if top-tier quality and clean installations are not priorities. However, this comes at the cost of compromising smooth illumination, durability, and efficiency.

Conversely, for curved applications and versatile backlighting needs, LED Flexible Sheets offer the flexibility and adaptability required for soft, curving surfaces and spaces.

For the thinnest lighting solutions and seamless customization to any shape, size, or application, the DAKOTA CUSTOM LED LIGHT PANEL is the superior choice. It delivers brilliant illumination and exceptional performance across a wide range of projects.





DAKOTA

LED LIGHT PANELS



**THERE ARE SEVERAL OPTIONS FOR BACKLIGHTING ILLUMINATION,
IDEAL FOR WALLS AND COUNTERTOPS, BUT IN PROVEN REALITY,
NOTHING IS BETTER, MORE EFFICIENT, AND VERSATILE
THAN DAKOTA PANELS.**

TALK TO US, AND LET'S MAKE YOUR PROJECT STUNNING!



THANK YOU



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