

# CASE STUDY

## DAKOTA LED PANELS

### VS. FLEXIBLE LED SHEETS



# DAKOTA PANELS VS. FLEXIBLE SHEETS

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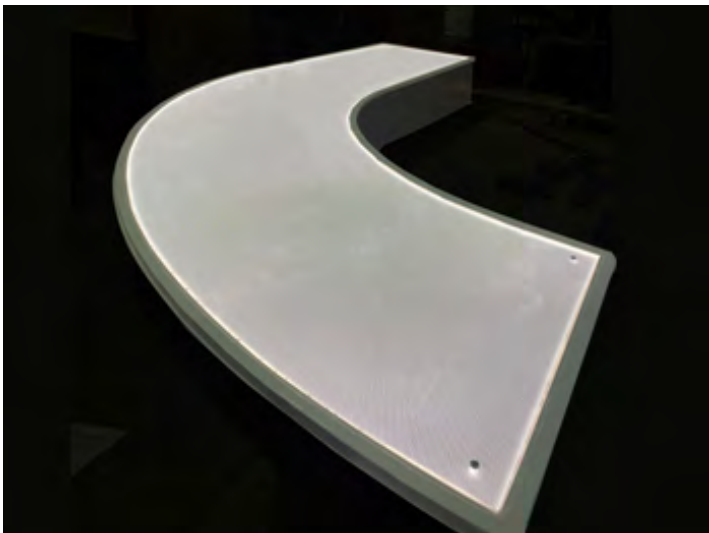


When it comes to backlighting solutions for different applications, LUMIRON INC offers two remarkable products that cater to distinct needs – the Dakota Custom LED Light Panel and the LED Flexible Sheets. While both solutions provide efficient and stunning illumination, each has its own strengths and 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.



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## LED FLEXIBLE SHEETS

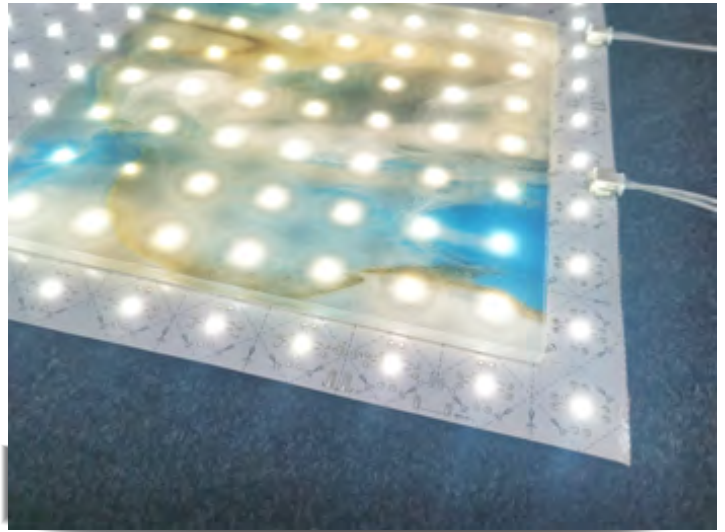
**Ideal for Curved Applications:** LED Flexible Sheets shine when it comes to curved backlighting projects. Their bendable nature allows them to fit snugly into soft, curving surfaces and spaces, making them a superb choice for applications where flexibility is paramount.

**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



DAKOTA PANEL, ALLOWS SMOOTH EVEN ILLUMINATION



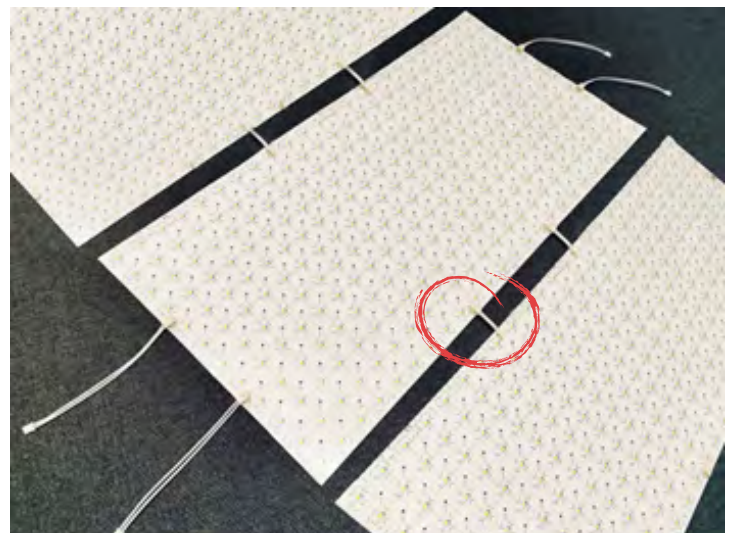
WITH LED SHEETS, ILLUMINATION IS NOT EVEN, CAUSING A "DOT" EFFECT

## 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



## COMPARISSON IN A 4' X 8'

FEATURE	DAKOTA CUSTOM LED PANEL	LED FLEXIBLE SHEETS
Section Size	Custom	1'X2'
Section Needed	1	16
Cables Needed	1	128
Connectors Needed	1	128
Spacing Needed	None	2"X3"
Wattage	120W	416W
Stone Applications	Yes	No
Installation Labor	Free	Cost/Assembly
Reliability	Great	Poor

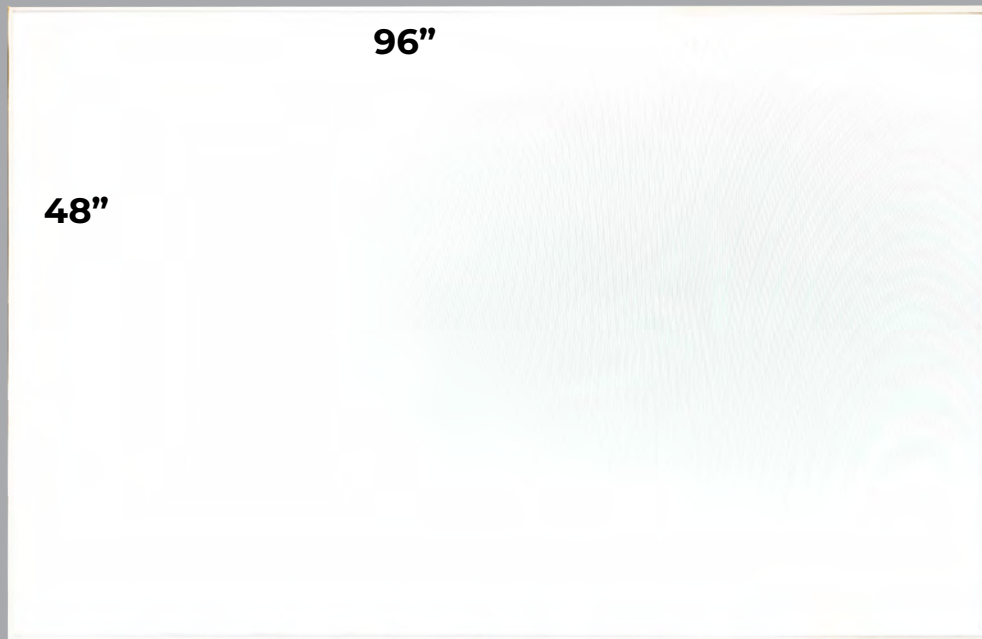
Acrilyc Artistic surface wall, back-lited by DAKOTA PANELS. The illumination is even, bright and smooth.



# DAKOTA PANELS VS. FLEXIBLE SHEETS

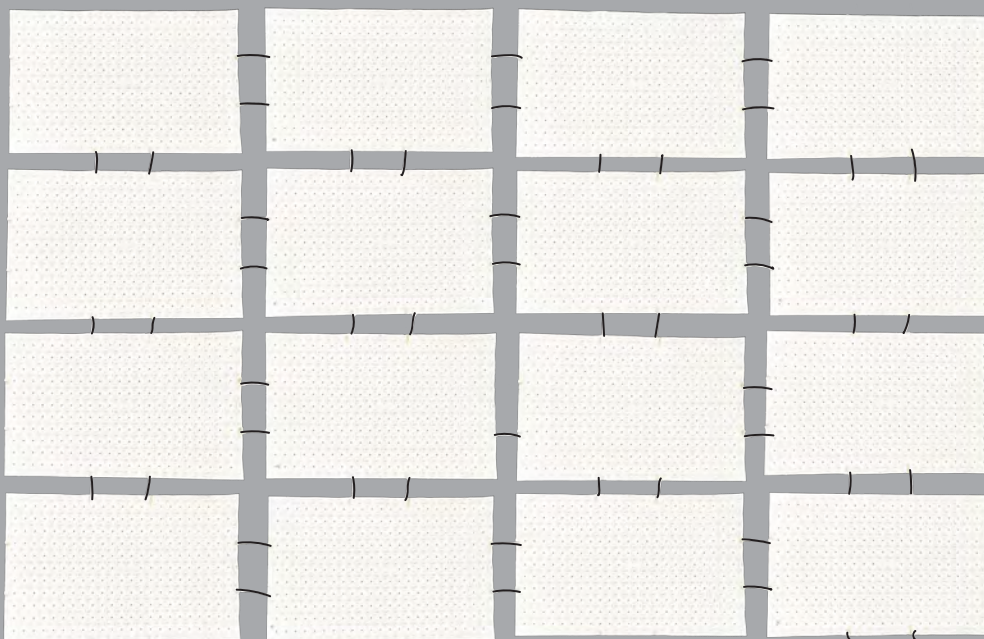


## DAKOTA LED PANEL



1 PANEL  
1 CABLE  
1 CONNECTOR

## LED SHEETS



16 SHEETS  
128 CABLES  
128 CONNECTORS



# DAKOTA PANELS VS. FLEXIBLE SHEETS



## LED SHEETS BACK-LIT ENDING RESULT

Regardless of the surface used, Stone, Acrilyc or Glass, the resul of back-lit with **LED Sheets**, the illumination effect is dotted and uneven with shadows.

**DAKOTA PANELS**, provide even and smooth illumination, wothout shadows, avey time, with every kind of translucent surface.



# DAKOTA PANELS VS. FLEXIBLE SHEETS



## IN CONCLUSION

While both the Dakota Custom LED Light Panel and LED Flexible Sheets are exceptional backlighting solutions, the choice ultimately depends on the specific project requirements. For stone applications and flat surfaces, the Dakota LED Light Panel reigns supreme with its efficiency, minimal power consumption, and easy installation using just one panel. On the other hand, for curved applications and versatile backlighting needs, LED Flexible Sheets offer the flexibility and adaptability necessary for soft, curving surfaces and spaces.

When you need the thinnest of lighting solutions and a lighting solution that can be seamlessly customized to your desired shape, size, and application, the Dakota Custom LED Light Panel proves to be the superior choice, delivering brilliant illumination and exceptional performance for a wide range of projects.





# THANK YOU



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