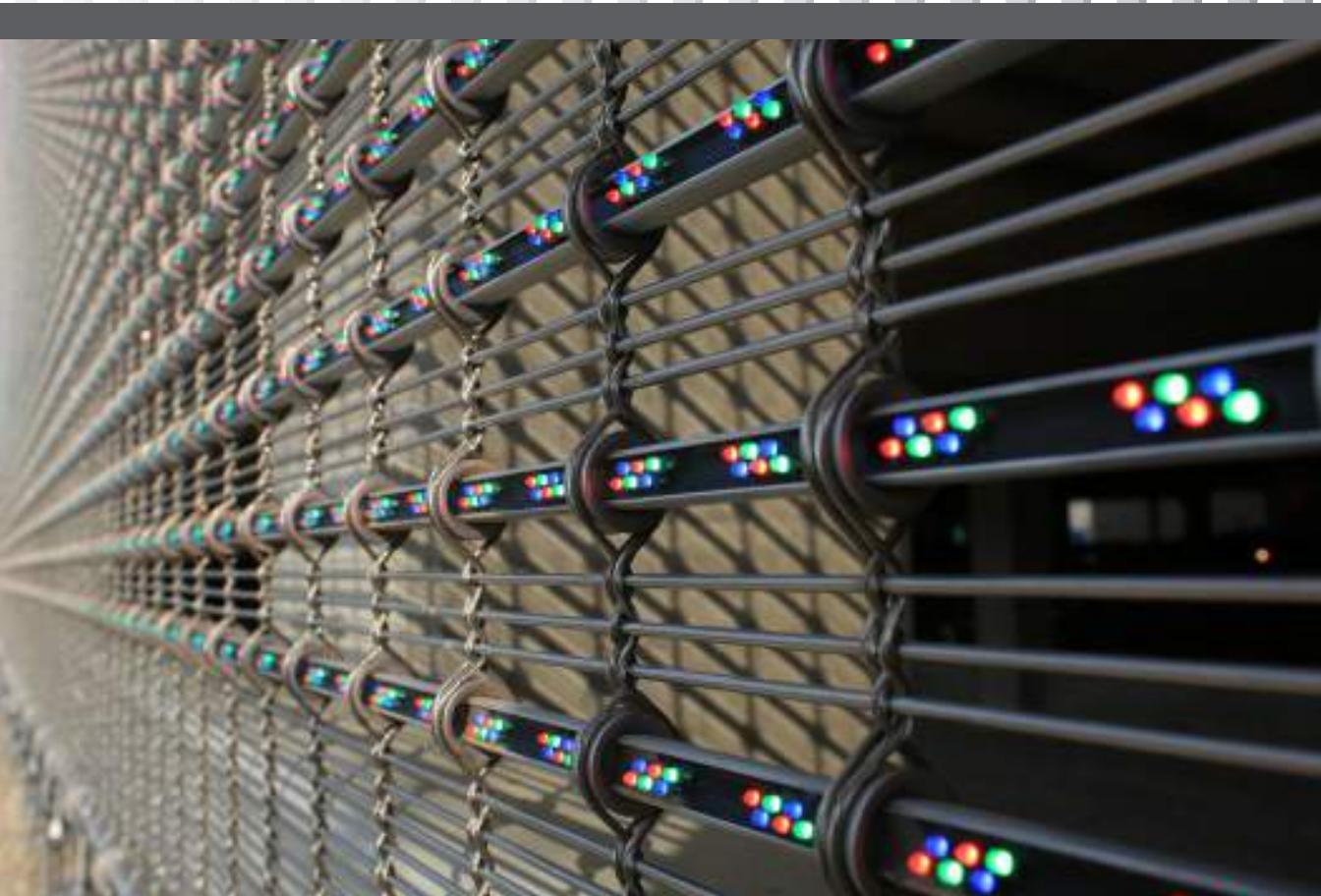# TRANSPARENT MEDIA FACADES

INTERWEAVING EXCELLENCE FROM CONCEPT TO COMPLETION

GKD MEDIAMESH

A Communication Canvas of Infinite Possibilities

GKD, the leading full service provider of woven metal fabric for architectural solutions worldwide, is also the innovator of transparent media façade technology. GKD's media façade offering includes two systems: **Mediamesh®** and **Illumesh®**, both engineered and manufactured to exacting German standards.
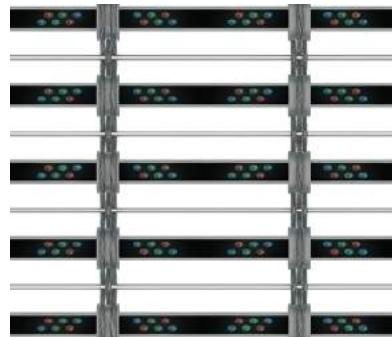
As the pioneer of this complex and state-of-the-art architectural solution, GKD has defined the parameters of the category implementing such critical factors as installation methodology, safety procedures and system variations.

Ideal for large-scale applications, GKD's Illumesh® illuminated metal fabric system allows system-integrated LED lighting to project light onto the reflective metal mesh surface creating a brilliant projection.

Since its introduction, GKD Mediamesh® has been embraced by the architectural community for its versatility and ability to enhance a façade. Through digital technology and the visual power of energy-efficient LEDs, everything from branding graphics to video, live broadcast to conceptual art, can be displayed on what has become the "silver screen" of the 21st century.

Illumesh®

Mediamesh®

Transparent Media Façades

• Transform any building into a dynamic communications medium and are easily installed over any building surface, conforming to a structure's unique shape and design.

• Withstands climatic extremes including hurricane force winds, frigid cold and searing heat.

• Provide a clean viewing experience.

• Are made of GKD stainless steel architectural metal fabric with a profile less than 1" thick.

• Include GKD-designed screen, installation components and brackets for functionality and aesthetics.

• Shade the building and enable natural filtered lighting.

• Offer multiple viewing solutions that consider viewing distance, angles and resolution requirements for all conditions - balancing transparency and display resolution.

• Utilize superior electronic and LED technology.

• Are a turnkey solution with long term cost effectiveness and quick return on investment.
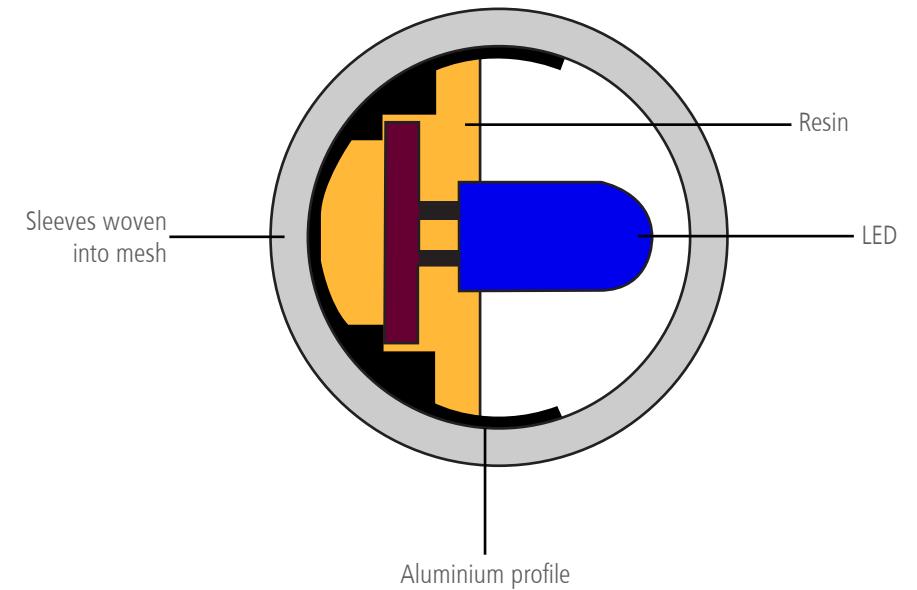
Transparent media façades allow natural views from inside out

Mediamesh® Offers

• A patented system of LED tubing integrated into robust stainless steel metal fabric.

• Exceptionally deep color palette and remarkable brilliance.

• Vertical resolution adjustable in 10 mm increments from 40 mm spacing and upward.

• Horizontal resolution standard at 50 mm pixel spacing.

• Daktronics technology and control system for graphics, animations, video clips and real-time data feeds.

• Automatically adjusted brightness to match lighting conditions using the Daktronics photocell system.

Construction Principle

Resin

Sleeves woven into mesh

LED

Aluminium profile

LED profiles adjust downward up to 20 degrees to better target viewers from street level.

Product Benefits

Transparency
- Digital media platform with up to 60% transparency.
- Views of the building's unique architectural elements.
- Viewing from within the building to the outside.
- Natural daylighting and ventilation to the building surfaces.

Supergraphics Display
- Average installations approximately four times the size of traditional billboards.
- Larger format allows a longer and broader viewing range and greater message rotation.
- Supports a wide range of advertisers on one display without compromising graphic quality of the message.
- Dynamic media presentation will draw attention and transform a building into a media icon.
- Available in multiple versions selected and recommended to meet your needs.
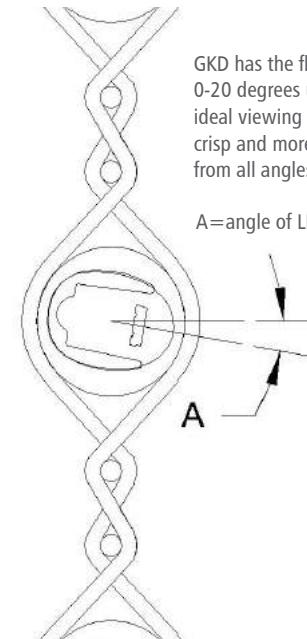
New York Port Authority Bus Terminal

Digital Electronic Format / LED / Angles
- Allows unlimited message delivery options.
- Quickly change out messages – advertiser can convey market conditions, promotions, news, weather.
- Real-time messages for live event delivery such as sporting or music events.
- Versatile advertising packages in an outdoor venue for specific time of day/week/season.
- Civic messaging – National Emergency, Amber Alerts, traffic or weather conditions.
- Bold performance both day and night.
- High quality LED's with more than 90,000+ hours of high performance.
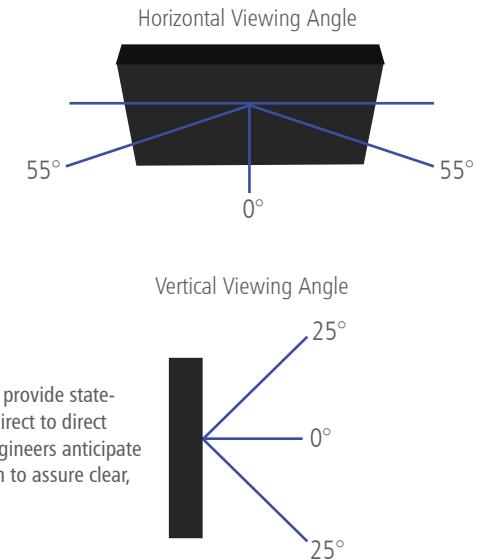
Viewing Angles

GKD has the flexibility to angle LEDs 0-20 degrees up or down, targeting the ideal viewing location. The result is clear, crisp and more color consistent images from all angles.

A=angle of LED tube

A

GKD teams with Dakronics to provide state-of-the-art transitions from indirect to direct viewing angles. Dakronics engineers anticipate "color shift" in all pixel design to assure clear, crisp, and consistent imagery.

Horizontal Viewing Angle

55°   55°

0°

Vertical Viewing Angle

25°

0°

25°

Sustainability

• Uses as much as 80% less electricity than LED boards.

• Automatic LED luminance control adjusts light intensity for ideal viewing and significant energy reductions.

• Mesh provides passive insulation from sun for sunshading, daylighting and improved air circulation.

• Only replace LED lights after useful life, stainless steel mesh is re-used.

Visual Appeal

• Images appear to float on the surface of the building.

• Visual experience is fun, dynamic and engaging.

• Visual presentation creates curiosity and attracts attention.

• Powerful motion graphics and color.

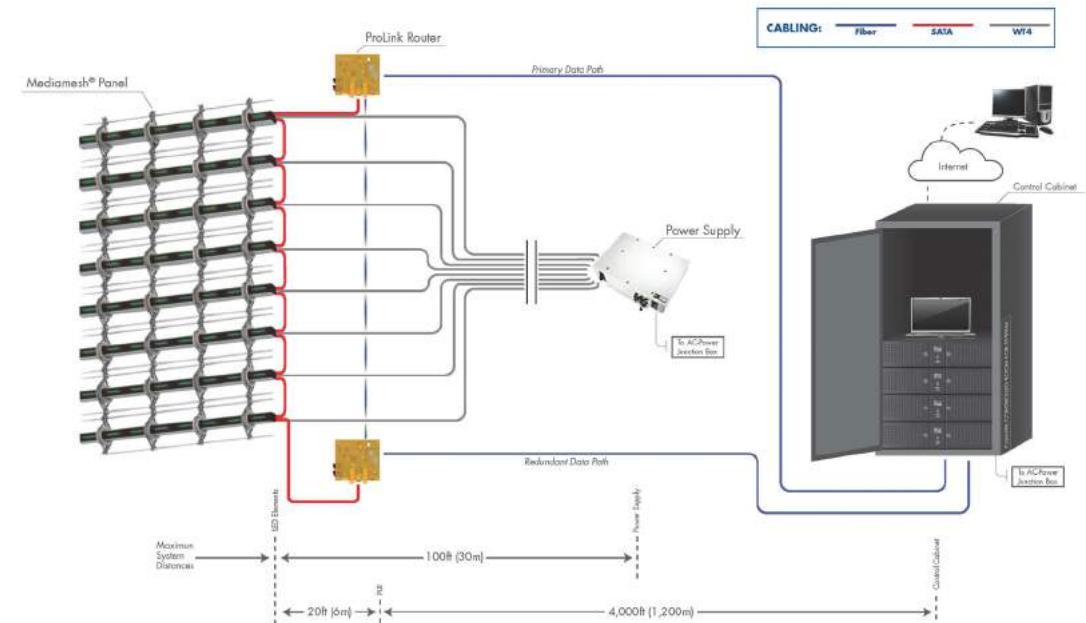• Elegant advertiser branding.

Illumesh® - Indemann

Mediamesh® - American Airlines Arena

System

Installation

GKD provides the complete system and package – including the installation. And, we can put you in touch with advertising and operations management to help you maximize content and revenue flow.
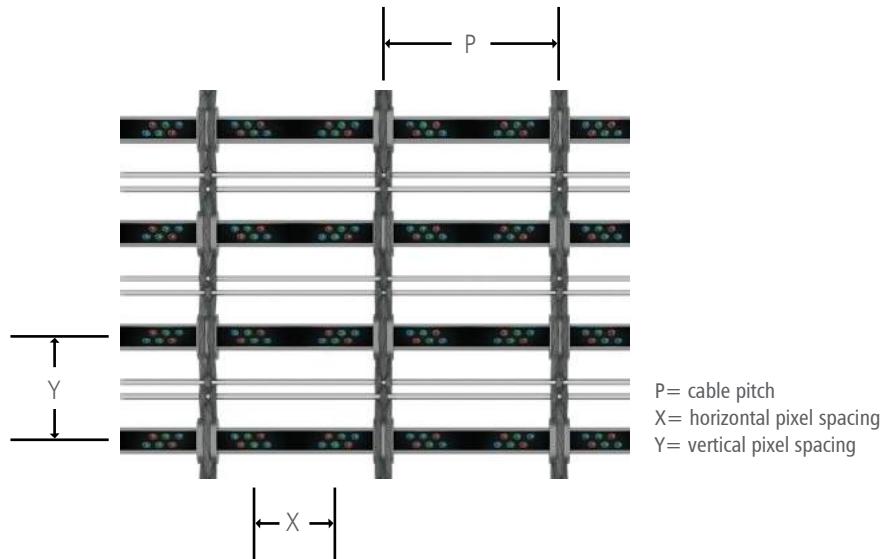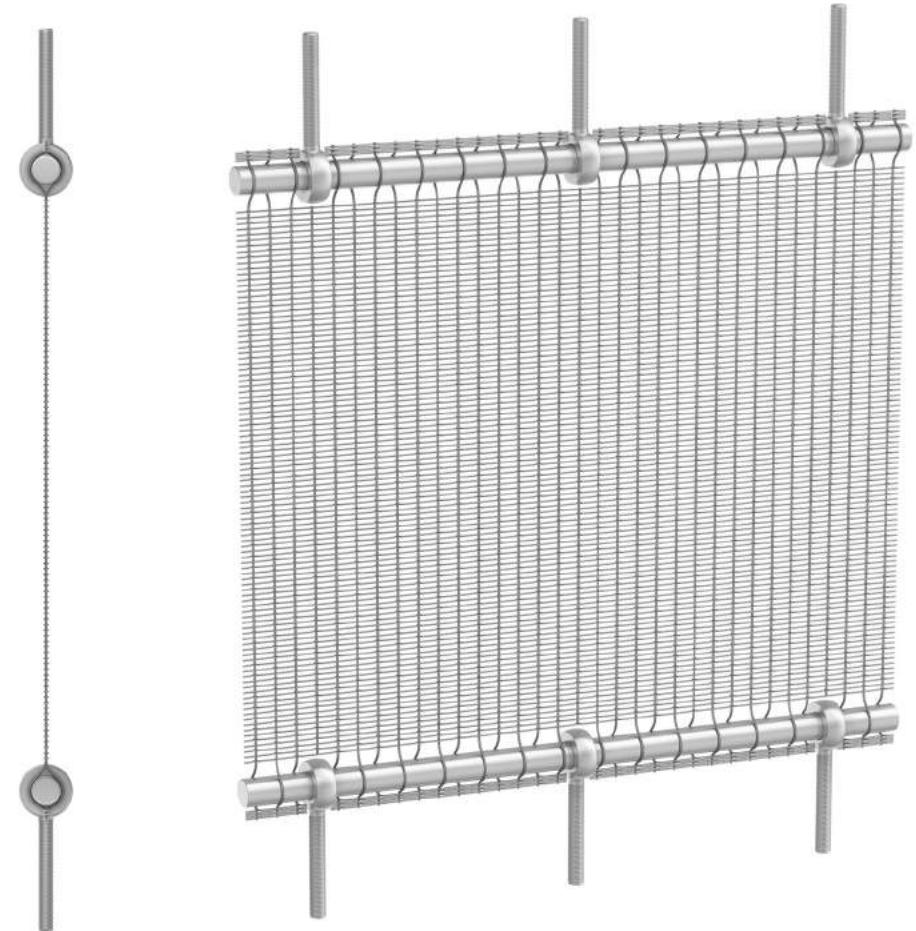
Tigris Stainless Steel Metal Fabric

Specification	V4xH5.0	V5xH5.0	V6xH5.0
Vertical LED Pitch	40mm	50mm	60mm
Horizontal LED Pitch	50mm	50mm	50mm
NITs	8750 NITs	7000 NITs	5833 NITs
Open Area	56.2%	58.1%	59.4%
Viewing Distance	35m/115ft	35m/115ft	42m/138ft
Weight lbs per ft²	1.9	1.77	1.7
Rods between LED Tubes	1	2	3

*table data November 2013

P= cable pitch
X= horizontal pixel spacing
Y= vertical pixel spacing

GKD pioneered a range of attachment systems including woven-in bar with eyebolt, shown here. Attachment method takes into consideration specific application, panel size, structural characteristic, scale and design concept.

ATELIER A TORCÉ
TORCÉ, FRANCE

Illumesh® transformed the facade of this facility from a
dull structure to an ever-changing display of light and color.

Owner: Communauté Vitré
Architect: H.C. Nestor, Chateaubourgs
Dimension: 48.6 ft. wide x 22.6 ft. high
Total Area: 1,098 ft.²
Total Pixel: 1,490 Px
Pixel Pitch: Ver. 660mm / Hor. 100mm
Facade Direction: Outdoor / East
Brightness: 132 NITs
Completion: June 2007

INDEMANN OBSERVATION TOWER
INDEN, GERMANY

The transparent skin of this 118-foot tower features
40,000 interwoven LEDs that create a spectacular light show.

Owner: GIS Dueren GmbH
Architect: Marc Maurer, Maastricht
Total Area: 15,800 ft.² Illumesh®
Total Pixel: 8,131 Px
Pixel Pitch: Ver. 2000mm / Hor. 100mm
Facade Direction: Outdoor / All
Brightness: 48 NITs
Completion: August 2009

AMERICAN AIRLINES ARENA
MIAMI, FLORIDA

A Miami's Mediamesh® marquee, the largest in the southeast,
displays concert and game footage in the plaza, creating
a public gathering space

Owner: AA Arena / Heat Group
Architect: ADC, Florida / ag4, Colgne
Dimension: 80 ft. wide x 42 ft. high
Total Area: 3,360 ft.²
Total Pixel: 147,806 Px
Pixel Pitch: Ver. 50mm / Hor. 42.5mm
Facade Direction: Outdoor / West
Brightness: 6588 NITs
Completion: May 2009

SELFSCAPES MILAN
MILAN, ITALY

In the famed Piazza Del Duomo, this wall of light displays
high resolution messages and advertising in vibrant color.

Owner: Urban Screen S.A., Milan
Architect: ag4, Colgne
Dimension: 96.6 ft. wide x 54.3 ft. high
Total Area: 5,242 ft.²
Total Pixel: 194,040 Px
Pixel Pitch: Ver. 50mm / Hor. 50mm
Facade Direction: Outdoor / North
Brightness: 1993 NITs
Completion: December 2007

OPEL EXHIBITION
GENEVA, SWITZERLAND

At the 77th International Geneva Motor Show, Opel cars were dynamically featured in a continuous flow of colors

Owner: XL Solutions, Duesseldorf
Architect: Bellprat Associates
Dimension: 133 ft. wide x 15.8 ft. high
Total Area: 9,843 ft.^{22}
Total Pixel: 46,102 Px
Pixel Pitch: Ver. 60mm / Hor. 60mm
Facade Direction: Indoor
Brightness: 553 NITs
Completion: April 2007

PORT AUTHORITY BUS TERMINAL
NEW YORK CITY, NEW YORK

A forgettable building becomes a model of modern technology with the world's largest transparent media façade.

Owner: Port Authority
Architect: A2a Media
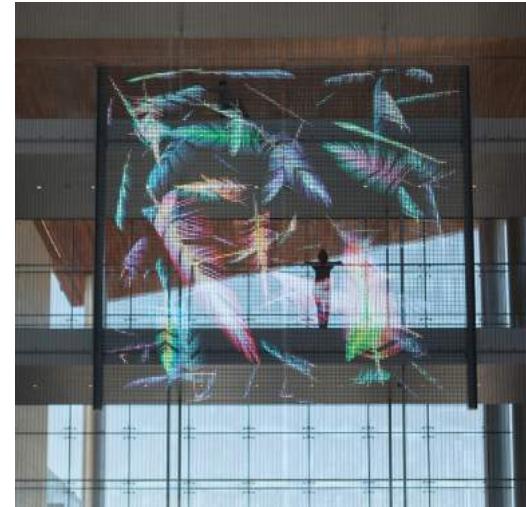**Dimension:** 169 ft. wide x 35.5 ft. high
Total Area: 6,000 ft.^{2}
Total Pixel: 256,800 Px
Pixel Pitch: Ver. 50mm / Hor. 42.5mm
Facade Direction: Outdoor / South
Brightness: 4730 NITs
Completion: June 2011

LONG BEACH COURT BUILDING
LONG BEACH, CALIFORNIA

Artist Jennifer Steinkamp's work, *Murmuration*, is featured using Mediamesh® to accomplish art in motion. This artistic work connects to a multi-story safety barrier of Tigris metal fabric.

Owner: State of California AOC
Architect: AECOM
Dimension: 25.7 ft. wide x 24 ft. high
Total Area: 4,700 ft^2, 615 ft^2 Mediamesh®
Total Pixel: 33,856 Px
Pixel Pitch: Ver. 40mm / Hor. 42.5mm
Facade Direction: Indoor / East
Brightness: 9100 NITs
Completion: August 2013

HENRY MADDEN LIBRARY
FRESNO, CALIFORNIA

Mediamesh® became the canvas of the modern artist with this art installation by Susan Masduli.

Owner: California State University
Architect: Narduli Studio
Dimension: 16.6 ft. wide x 32 ft. high
Total Area: 531 ft.^{2}
Total Pixel: 14,028 Px
Pixel Pitch: Ver. 60mm / Hor. 60mm
Facade Direction: Indoor / West
Brightness: 1940 NITs
Completion: December 2008

WINSTAR WORLD CASINO
THACKERVILLE, OKLAHOMA

The world's third largest casino is the first Mediamesh® installation using state-of-the-art LEDs in a six-pixel cluster.

Owner: Chickasaw Nation
Architect: Michael Huff, Chickasaw Nation
Dimension: 90 ft. wide x 30 ft. high (2)
Total Area: 5,400 ft^2
Total Pixel: 196,000 Px
Pixel Pitch: Ver. 60mm / Hor. 42.5mm
Facade Direction: Outdoor / North and West
Brightness: 6500 NITs
Completion: January 2012

MELLON INDEPENDENCE CENTER
PHILADELPHIA, PENNSYLVANIA

Mediamesh® was selected to help modernize the rooftop signage of the historic Lit Brothers Department Store.

Owner: A2a Media, LLC
Architect: Stantec
Dimension: 359 ft. wide x 14.33 ft. high
Total Area: 5145 ft.^{2}
Total Pixel: 280,566 Px
Facade Direction: Outdoor
Brightness: 11,100 NITs
Completion: Phase 1 January 2015

COOK CHILDREN'S HOSPITAL
FORT WORTH, TEXAS

The parking garage at the Cook's facility utilizes Mediameh® to post art and positive messaging to arriving and departing employees and to the public passersby.

Owner: Cook Children's Health Care System
Architect: HKS, Dallas
Dimension: 16.6 ft wide x 65 ft high
Total Area: 1045 ft^2
Total Pixel: 57,600 Px
Pixel Pitch: Vert. 40 mm / Hor. 42.5 mm
Facade Direction: Outdoor
Brightness: 8400 Nits
Completion: 2014

Architects World-Wide Recognize GKD as the Authority on Metal Fabric Solutions

From concept to completion and every step in between, GKD Metal Fabrics is a service driven company. Following an efficient design-to-build process that leverages collaborative project engineering, GKD consistently anticipates its clients' needs and exceeds their expectations.

To serve clients' unique requirements, GKD Metal Fabrics proudly offers a variety of installation service options.

- **Instruction and Drawings:** GKD Metal Fabrics provides suggestions, sketches or drawings and offers the client the option of having their own contractor complete installation.

- **Supervisory Oversight:** GKD Metal Fabrics provides supervision on a contractual basis to ensure the smooth implementation of the installation plan. On-site troubleshooting is available if necessary.

- **Supervision and Installation:** Once the substructure is prepared for the metal fabric, GKD Metal Fabrics takes the lead on the product's complete installation. GKD Metal Fabrics takes pride in the fact that it is the only company in the U.S. that manufactures and installs GKD metal fabric.

- **Maintenance:** Media façade maintenance is infrequent and typically minimal. The façade requires a simple mechanical washing to eliminate natural contaminants and maintain display brightness. Factors such as heat, operating intensity, corrosives, and operating durations will affect the life of the façade but LED life is typically estimated in the 10 year or 90,000 hour range. GKD is available to inspect and service a façade as required.

- **Warranty:** GKD offers a complete warranty on all parts and components for the first year of installation. Additional coverage terms are available up to 5 years from realization of the project.

GKD MEDIAMESH

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