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.
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.
- Withstand 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**

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

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

### Tigris Stainless Steel Metal Fabric

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

*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.
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 ft², 615 ft² Mediamesh®  
**Total Pixel:** 33,856 Px  
**Pixel Pitch:** Ver. 40mm / Hor. 42.5mm  
**Facade Direction:** Indoor / East  
**Brightness:** 9,100 NITs  
**Completion:** August 2013

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:** 5,145 ft²  
**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 Mediamesh® 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
Dimension: 16.6 ft. wide x 65 ft. high
Total Area: 1,045 ft.²
Total Pixel: 57,600 Px
Pixel Pitch: Ver. 40 mm / Hor. 42.5 mm
Facade Direction: Outdoor
Brightness: 8,400 NITs
Completion: 2014

CLEVELAND INSTITUTE OF ART (CIA)
CLEVELAND, OHIO

CIA loved the artistic qualities of Mediamesh® and felt it was perfect for the application. The majority of the content will be related directly to CIA events and the artwork of the students and alumni.

Owner: Cleveland Institute of Art
Architect: Stantec
Dimension: 29.5 ft. wide x 52.6 ft. high
Total Area: 1,550 ft.²
Total Pixel: 71,680 Px
Pixel Pitch: Ver. 40 mm / Hor. 50 mm
Facade Direction: Outdoor/Southwest
Brightness: 8,750 NITs
Completion: 2015
ATELIER A TORCÉ
TORCÉ, FRANCE

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

Owner: Communauté Vitré
Architect: H.C. Nestor, Chateaubourg
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

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, Cologne
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: 6,588 NITs
Completion: May 2009

CHECKPOINT CONSOLIDATION
MINNEAPOLIS SAINT PAUL INTERNATIONAL AIRPORT

Mediamesh® display informs customers of checkpoint status and eventually waiting times to pass through security.

Owner: Metropolitan Airport Commission, Minnesota
Architect: Alliance, Minnesota
Dimension: 2 displays / 17ft. wide x 17ft. high
Total Area: 578 ft.²
Total Pixel: 13,000 Px
Pixel Pitch: Ver. 40mm / Hor. 50mm
Facade Direction: Indoor / North & South
Brightness: 8750 NITs
Completion: February 2016
OPEL EXHIBITIONS
EUROPE

At high profile auto exhibitions, Opel cars are 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.$^2$
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: 4,730 NITs
Completion: June 2011
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: 6,500 NITs
Completion: January 2012

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
NCSU Talley Student Center
RALEIGH, NORTH CAROLINA

College spirit gets a boost with Mediamesh at the North Carolina State University in Raleigh North Carolina.

**Owner:** North Carolina State University  
**Architect:** Duda Paine Architects  
**Dimension:** 17.85 ft. high x 31.5 ft. wide  
**Total Area:** 565 ft.²  
**Total Pixel:** 26,112 Px  
**Pixel Pitch:** Ver. 40mm / Hor. 50mm  
**Facade Direction:** Outdoor / Northwest  
**Brightness:** 8750 NITs  
**Completion:** 2015

ETON PLACE
DALIAN, CHINA

Mediamesh® transformed the façade of the shopping mall at the Eton Center in Dalian, China into a dual LED media façade with artistic animations and large-scale advertising.

**Customer:** Eton, Dalian  
**Architect:** NBBJ  
**Dimension:** 4 Screens 34 ft. tall by various widths  
**Total Area:** 4,900 ft.²  
**Total Pixel:** 177,276 Px  
**Pixel Pitch:** Ver. 50mm / Hor. 50mm  
**Facade Direction:** Outdoor / Variable  
**Brightness:** 7,000 NITs  
**Completion:** 2015
BMW BRAND EXPERIENCE CENTER
SHANGHAI, CHINA

The BMW showroom in Shanghai has been equipped with an indoor Mediamesh display.

Customer: BMW
Dimension: 50 ft. wide x 12.4 ft. high
Display Area: 620 ft.²
Total Pixel: 23,040 Px
Pixel Pitch: Ver. 50mm / Hor. 50mm
Orientation: Indoor
Brightness: 3200 NITs
Completion: 2014

Tripoli International Congress Hall
TRIPOLI, LIBIA

Besides individually created content, live events, conferences and movies are shown in Tripoli.

Customer: System Insaat Ltd. Sti
Architect: Tabanlioglu Architects, Istanbul
Dimension: 95.1 ft. wide x 39.4 ft. high
Total Area: 3747 ft.²
Total Pixel: 204,900 Px
Pixel Pitch: Ver. 40mm / Hor. 42.5mm
Facade Direction: Outdoor / East
Brightness: 4956 NITs
Completion: 2010
HAMAD INTERNATIONAL AIRPORT
DOHA, QATAR

The first transparent media façade made of stainless steel mesh in the Middle East.

Customer: SkyOryx JV
Architect: HOK, San Francisco
Dimension: 4 screens; (2) 2850 ft.² and (2) 2350 ft.²
Total Area: 10,400 ft.²
Total Pixel: 390,160 Px
Pixel Pitch: Ver. 50mm / Hor. 50mm
Facade Direction: Indoor
Brightness: 2500 NITs
Completion: 2014/2015

VCU JAMES BRANCH CABELL LIBRARY
RICHMOND, VIRGINIA

School spirit and school business headline this Mediamesh transparent media façade.

Owner: Virginia Commonwealth University
Architect: Moseley Architects
Dimension: 20.9 ft. wide x 18.25 ft. high
Total Area: 382 ft.²
Total Pixel: 18,432 Px
Pixel Pitch: Ver. 40mm / Hor. 50mm
Facade Direction: Indoor facing exterior / North East
Brightness: 8,750 NITs
Completion: 2016
ARIZONA CENTER FOR LAW & SOCIETY
PHOENIX, ARIZONA

Transparent media façade and solar shading in one at ASU.

Owner: Arizona State University (ASU)
Architect: Ennead Architects
Dimension: 26.2 ft. wide x 28.74 ft. high
Display Area: 753 ft\(^2\)
Total Pixel: 35,200 Pxl
Pixel Pitch: Ver. 40mm / Hor. 50mm
Facade Direction: Outdoor / South
Brightness: 8,750 NITs
Completion: 2016

UNIVERSITY OF COPPENHAGEN
DENMARK

The content of this media façade focuses on photorealistic presentations of nature and homeland.

Owner: The Danish Building and Property Agency
Architect: Arkitema Architects
Dimension: 24.25 ft. wide x 40 ft. high
Total Area: 970 ft\(^2\)
Total Pixel: 56,376 Pxl
Pixel Pitch: Ver. 37.5mm / Hor. 42.5mm
Facade Direction: Outdoor
Brightness:
Completion: 2015
**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.