livewire

Technology Made Simple

THE SPECIFIER'S

MicroLED Video Wall Resource Guide

For Architects, Interior Designers, Custom Home Builders, and Commercial Integrators

Everything you need to confidently specify, recommend, and coordinate a MicroLED video wall installation. Your integration partner from design through INVISION post-install support.

WHAT'S INSIDE

AUTHORIZED — Trade partner program

4.9★ / 421 — Verified Google reviews

20+ YRS — Central Virginia

ONLY — MicroLED showroom in region

SECTION 01

MicroLED Technology Brief

What it is and why it matters for luxury projects

MicroLED is the most significant advancement in display technology in two decades. Understanding what it is and how it differs from competing technologies allows you to specify it accurately and set appropriate client expectations from the start.

How MicroLED Works

Traditional LED displays use a backlight that shines through a liquid crystal matrix and color filters. MicroLED eliminates every intermediate layer. Each pixel is an independent, self-emitting RGB LED. There is no backlight, no liquid crystal, no diffusion layer. The viewer looks directly at the pixels themselves.

This architecture produces contrast ratios, brightness levels, and color accuracy that cannot be achieved by any other consumer display technology at scale. It also eliminates burn-in risk, extends operational lifespan to 100,000+ hours, and enables modular sizing that is not constrained by glass manufacturing limits.

Key Technical Advantages for High-End Residential and Commercial

Modular architecture	Panels tile seamlessly to any dimension. No fixed size. No bezels. The display becomes part of the architecture rather than sitting in front of it.
Ambient light performance	1,200+ nits brightness performs in fully lit rooms, outdoor covered spaces, and any environment where projectors fail. Specify without concern for room lighting conditions.
Pixel pitch scalability	Pitch ranges from 0.9mm (close viewing) to 1.5mm (large format) allow optimization for any viewing distance. Right-sizing the pitch protects client investment.
Multi-source processing	Up to 32 simultaneous inputs on a single display. Security, streaming, sports, and presentation content all at once. No switching required.

SECTION 02

Technical Specifications and Infrastructure

For early project planning and design coordination

Use these specifications for early project planning, rough-in coordination, and design documentation. Livewire provides a full technical specification package as part of the project design phase.

Pixel Pitch Selection Guide

Pixel Pitch	Min. Viewing Distance	Typical Size Range	Application
0.9mm	~7 feet	75" – 110"	Conference rooms, close-viewing media rooms
1.2mm	~10 feet	100" – 162"	Living rooms, great rooms, primary installations
1.5mm	~12 feet	135" – 220"+	Large format, outdoor, commercial lobbies

Infrastructure Requirements for Design Coordination

Structural	Wall must support 8 – 15 lbs per square foot depending on system. Mounting surface should be plumb within 1/8" over 10 feet. Consult Livewire for specific structural requirements per project.
Electrical	Dedicated 20A circuit minimum. Larger installations require multiple circuits. All electrical by licensed contractor. Livewire holds Class A Electrical Contractor license #2705067574.
Signal and Control	HDMI 2.1 or fiber signal distribution depending on run length. For runs over 15 feet, fiber or AV-over-IP is recommended. Compatible with Control4, Savant, Crestron, Elan, RTI, URC, and Josh.ai. Conduit rough-in coordinated before walls close.
Thermal and Network	Processing equipment generates heat; rack location requires ventilation. Dedicated VLAN recommended for video wall processing. 1Gbps minimum for digital art platform streaming.

SECTION 03

Pricing by Brand

Real retail/MSRP figures across major MicroLED brands

Use this table to set early budget expectations with clients. These are retail/MSRP figures we track in the industry, current as of Spring 2026. Pricing covers display equipment only. Plan to add $8K – $20K+ for installation, processing, trim, and cabling on top of the figures below.

Brand	~108"	~135"	~162"	220"+	The Catch
AWALL	$19,250	$33,900	$56,900	$69K – $114K	60Hz, 2-yr warranty, new dealer program
Just Video Walls	~$40K+	$55K – $75K	$80K – $120K	$150K+	Young company, OEM-sourced panels
Samsung The Wall	N/A	N/A	N/A	$120K – $800K+	Price. Just… price.
LG MAGNIT	N/A	$237K (118")	N/A	Custom	Requires certified integrator
Quantum Media	Custom	Custom	Custom	$150K – $500K+	Ultra-niche, turnkey only

How to read this for your projects. AWALL is the value play; panels are good but warranty and refresh rate are limited. Samsung and LG are the prestige brands; clients pay for the name and the engineering pedigree. Just Video Walls is a newer entrant to watch. Quantum Media is custom-only and rare. Livewire works with several of these manufacturers and can match the right brand to your project's use case, viewing distance, and budget tier.

SECTION 04

The Livewire Installation Process

How a Livewire MicroLED project runs from first contact to support

Understanding our process helps you coordinate effectively and set accurate timeline expectations with your clients.

Phase 1 — *1 – 2 weeks*

Design Consultation

Initial consultation to understand space, use cases, and budget. Site visit to assess structural, electrical, and infrastructure requirements. We provide a full proposal with transparent pricing and timeline.

Phase 2 — *1 – 2 weeks*

System Design

Detailed system design including display size, pixel pitch, processing configuration, control integration plan, and infrastructure requirements. Coordination with your team on rough-in specs before walls close.

Phase 3 — *2 – 4 weeks*

Pre-Installation Coordination

Equipment ordering, structural and electrical rough-in coordination, network infrastructure confirmation, and control system driver coordination with your integrator if applicable.

Phase 4 — *2 – 4 days on-site*

Installation

Panel installation, processing equipment rack build, signal distribution, control system integration, pixel-level calibration, and digital art platform configuration.

Phase 5 — *1 day*

Commissioning and Handoff

Full system walkthrough with client, scene configuration, control system testing, digital art setup, and documentation package delivery.

Phase 6 — *Continuous*

INVISION Ongoing Support

24/7/365 remote monitoring via Livewire's exclusive INVISION platform. Proactive issue detection and resolution. No call center. Local team.

SECTION 05

Scope of Work Overview

For project specifications and proposals

Use this as a reference when preparing project specifications or client proposals. Livewire is responsible for everything in the left column. Items in the right column require coordination with your team or the general contractor.

Livewire Scope (Included)

- ✓ Display panel procurement and delivery
- ✓ Processing equipment and rack build
- ✓ Signal distribution design and installation
- ✓ Pixel-level calibration and commissioning
- ✓ Control system integration (driver level)
- ✓ Digital art platform setup
- ✓ INVISION remote monitoring setup
- ✓ Full documentation package
- ✓ Post-install 24/7/365 INVISION support

Requires Coordination

- ☐ Structural wall preparation and backing
- ☐ Dedicated electrical circuits (Livewire can provide)
- ☐ Network VLAN configuration by IT/AV integrator
- ☐ Control system driver installation (coordinated by Livewire)
- ☐ Interior trim and finish work around the display
- ☐ Client content organization and preferences
- ☐ Client training on art platform and control interface
- ☐ General contractor coordination for rough-in timing

SECTION 06

Digital Art Integration

The content layer your clients will love

A digital art streaming platform connected to a MicroLED video wall gives your clients something a black flat panel cannot. For designers and architects, this is a powerful tool for helping clients understand the full potential of a video wall as an architectural element rather than just a display.

What's Possible

Curated digital art streaming platforms provide access to thousands of artworks from artists worldwide, streamed in full resolution to the video wall when it is not displaying other content. The works include both static and moving pieces, curated by genre, palette, mood, and artist. Clients can build personal collections, schedule content by time of day, and control everything from their phone or existing control system.

Why It Matters for Your Projects

- Transforms the wall from a display into an architectural element when idle
- Gives clients a compelling answer to "what does it look like when you're not using it?"
- Pairs naturally with high-end residential interiors where a black rectangle is not acceptable
- Content can be curated to complement a room's palette, furniture, and lighting design
- Livewire handles the full art platform setup, configuration, and ongoing support
- No additional integration work required from your team

> ***"A living piece of art rather than a black rectangle.***
> ***That is the difference your clients will notice every day."***

SECTION 07

Pricing Reference for Project Planning

Total installed budget by project size

Use these ranges for early project budgeting and client expectation setting. All figures represent total installed cost including display, processing, infrastructure, calibration, and INVISION setup. Trim and custom architectural integration are scoped separately.

Project Size	Display Dimension	Installed Budget Range	Notes
Entry	108" – 120"	$35,000 – $60,000	Media rooms, offices, secondary spaces
Mid-Range	135" – 162"	$60,000 – $130,000	Primary living spaces, great rooms
Premium	162" – 220"	$120,000 – $200,000	Large format, signature installations
Custom / Commercial	220"+ or non-standard	$175,000+	Exterior, commercial, bespoke architecture

Note: Structural preparation, dedicated electrical, custom trim work, and architectural integration are scoped separately and vary by project. Contact Livewire for a project-specific estimate. For brand-by-brand pricing on display equipment alone, see Section 03.

SECTION 08

Specification and Project Questions

Use these to gather information for accurate proposals

The more you can confirm early, the more accurate the budget and timeline. Use this checklist when preparing client documentation or briefing Livewire on a new opportunity.

Space and Environment

- ☐ What are the room dimensions? (width, depth, ceiling height)
- ☐ What is the primary viewing distance from main seating to display wall?
- ☐ What is the ambient light level? (dark/controlled, moderate, bright/daylight)
- ☐ Is the installation interior or exterior? If exterior, is it covered?
- ☐ Are there windows or light sources on the same wall as the display?
- ☐ What is the wall construction? (drywall, masonry, metal stud, other)

Use Case and Client Goals

- ☐ What is the primary use? (cinema, sports, art, multi-source, presentations)
- ☐ Will the client use digital art when the display is idle?
- ☐ Does the client have an existing control system? (brand and version)
- ☐ How many simultaneous sources does the client anticipate?
- ☐ Does the client want the display recessed flush with the wall?

Project Coordination

- ☐ What is the project timeline? (rough-in date, client move-in, completion target)
- ☐ Who is the general contractor and point of contact?
- ☐ Who is responsible for structural backing and wall preparation?
- ☐ Is dedicated electrical already planned, or does Livewire need to scope it?
- ☐ Is there a network/IT contractor on the project?
- ☐ What is the preferred method for ongoing client training and support?

SECTION 09

Why Livewire for Your Projects

When your name is on the recommendation, this matters

When you recommend Livewire to a client, you are putting your name behind the recommendation. Here is what you can expect from us.

Your reputation is ours to protect	Livewire has been integrating technology into Central Virginia homes and businesses since 2001. We understand what it means to be the integrator a design professional puts their name behind. We will not let you down.
The only MicroLED showroom in Central Virginia	You can bring your clients to 4900 West Clay Street, Richmond, VA to see the technology in person before any commitment. No other integrator in the region can offer this. Your clients make better decisions when they can see what they are buying.
4.9 stars, 421 Google reviews	Richmond's highest-rated technology integrator. Real reviews from real clients in the same communities your clients live in. Read them before you make a recommendation.
INVISION 24/7/365 post-install support	After we leave, INVISION keeps watching. Remote monitoring, proactive issue detection, and local response. Your clients will not be calling you because their video wall is down.
Digital art platform integration	We handle the full digital art platform configuration as part of every install. Your interior design vision for what the wall looks like at rest is supported from day one.
Transparent, professional communication	We provide project documentation, coordination points, and timeline updates throughout. You will know what is happening and when. We treat your clients the same way we would want to be treated.

Let's start a project together.

Trade inquiries are handled with priority. Schedule a showroom visit, request a project consultation, or bring a specific opportunity to our attention.

(804) 212-3841 · sales@getlivewire.com · getlivewire.com/booking-options

Livewire · 4900 West Clay Street, Richmond VA 23220 · Class A Electrical Contractor #2705067574 · DCJS #11-396