

The LED Wall Specifier Pack.

A working brief for architects, consultants, technical directors and project teams. Choose the right pitch, brightness, structure, service route and acceptance tests before a cabinet is ordered.

DOCUMENT	EDITION	USE
LED wall planning and tender worksheet	August 2026	Complete, mark up and issue with the project brief

THREE NUMBERS START THE WALL

WIDTH AVAILABLE	NEAREST VIEWER	AMBIENT LIGHT
_____ m	_____ m	Dim / controlled / bright / direct sun

This pack is not a substitute for structural, electrical or rigging engineering. It is the document that makes sure those disciplines receive a coherent display brief.

Start with the room.

An LED wall is a room decision before it is a product decision. Record the conditions that cannot be changed, then let the cabinet follow.

[]	Measure clear wall width and height after finishes.	Notes: _____
[]	Record nearest, typical and furthest viewing positions.	Notes: _____
[]	Measure light falling on the display face at worst operating time.	Notes: _____
[]	List real source formats: presentation, camera, signage, render or data.	Notes: _____
[]	Confirm front or rear service access before architecture is frozen.	Notes: _____
[]	Identify structural load path and prohibited fixing zones.	Notes: _____
[]	Confirm operating hours, noise limits and ventilation strategy.	Notes: _____
[]	Name the person responsible for content after handover.	Notes: _____

PROJECT DEFINITION

QUESTION	PROJECT ANSWER
What must the audience see or decide?	_____
What would make the installation a failure?	_____
Who operates and services it?	_____
Required opening / event date	_____

Choose pixel pitch from viewing distance.

Use a band, not one magic number. Fine text and close inspection need more margin than faces, motion or distant signage.

PITCH	MINIMUM INSPECTION	COMFORTABLE DESIGN BAND	TYPICAL ENVIRONMENT
P0.9	0.9 m	1.8-2.7 m	Boardroom, close broadcast, premium retail
P1.25	1.25 m	2.5-3.8 m	Corporate, studio, experience centre
P1.5	1.5 m	3.0-4.5 m	Lobby, control room, church
P1.875	1.9 m	3.8-5.6 m	Auditorium, worship, lecture theatre
P2.5	2.5 m	5.0-7.5 m	Large hall, stage, concourse
P2.6	2.6 m	5.2-7.8 m	Touring and rental
P3.9	3.9 m	7.8-11.7 m	Concert, outdoor event
P4.8	4.8 m	9.6-14.4 m	Transport and outdoor media
P10	10 m	20-30 m	Long-range facade and roadside

The table is a starting heuristic, not an acuity guarantee. Verify representative content on a sample at the actual nearest distance. If no viewer can resolve the finer option, put the budget into physical area, calibration, structure or redundancy.

Specify operating brightness.

Peak luminance is a ceiling. Write the service level and its conditions into the brief so power, heat and lifetime have meaning.

ENVIRONMENT	STARTING SERVICE RANGE	WHAT TO VERIFY
Controlled studio / boardroom	300-700 nits	Camera exposure, black level, low-brightness uniformity
General indoor	500-900 nits	House light on the face, content white area
Glazed atrium	800-1,500 nits	Worst sun angle, heat load, ambient tracking
Covered outdoor	2,500-5,000 nits	Reflections, rear exposure, night dimming
Direct daylight outdoor	5,000-10,000 nits	Service level at temperature, automatic limits

WRITE THIS INTO THE TENDER

The display shall deliver _____ nits under normal service conditions at no more than _____ percent drive, with automatic ambient control and a night limit of _____ nits. Tenderers shall state measured average power and heat rejection at this operating point, separately from peak values.

☐	Service luminance stated	Notes: _____
☐	Drive condition stated	Notes: _____
☐	Average power stated	Notes: _____
☐	Peak power stated	Notes: _____
☐	Heat load stated	Notes: _____
☐	Ambient sensor included	Notes: _____
☐	Night limit commissioned	Notes: _____

Coordinate the invisible system.

The active surface depends on structure, power, processing, data, cooling, access and control. Assign each interface before procurement.

SYSTEM	REQUIRED DECISION	OWNER
Structure	Load path, flatness, tolerance, wind or seismic case	_____
Electrical	Peak current, diversity, isolation, protection, earth	_____
Mechanical	Average heat rejection, airflow, room load, noise	_____
Signal	Native canvas, inputs, scaling, redundancy, genlock	_____
Network	Monitoring, control, access policy, remote support	_____
Architecture	Trim, ventilation, service route, finishes	_____
Content	Native templates, safe areas, ownership, refresh plan	_____

SERVICE ROUTE

Front service / rear service / mixed: _____
Maximum module removal clearance: _____
Safe access equipment required: _____
Room closure required for routine service: yes / no

Tender specification template.

Copy these clauses into the project specification, complete the blanks and require evidence beside every compliance response.

CLAUSE	MINIMUM REQUIREMENT
Active canvas	_____ mm wide x _____ mm high; native aspect _____
Pixel pitch	Not greater than _____ mm; physical sample required
Brightness	_____ nits service at _____ percent drive
Refresh	Visual refresh at least _____ Hz under intended scan mode
Colour	On-site calibration target _____; maximum Delta E _____
Ingress	Front IP _____; rear IP _____; connections IP _____
Service	Front / rear; module, PSU and receiving card field replaceable
Power	Peak _____ W; average _____ W at stated service level
Heat	Average heat rejection _____ BTU/h at service level
Mass	Display _____ kg; complete mounted system _____ kg
Spares	_____ percent modules plus PSU, receiving card and cables
Warranty	_____ years; response time _____; exclusions attached

REQUIRED SUBMITTALS

Cabinet drawing; structural loads; photometric data; power at peak and service; heat load; ingress certificates; processor topology; service method; spare schedule; calibration method; programme; exclusions; reference sample.

Commissioning and acceptance.

A wall is not accepted because every cabinet lights. Test the image, the interfaces and the maintenance promise while the delivery team is still present.

[]	Active dimensions, level, plumb and cabinet flatness measured.	Notes: _____
[]	No visible seams, colour blocks or brightness steps at service level.	Notes: _____
[]	Dead and abnormal pixels recorded against agreed acceptance limit.	Notes: _____
[]	All normal sources tested at native canvas and intended frame rates.	Notes: _____
[]	Camera test completed at fastest required shutter, if applicable.	Notes: _____
[]	Power, average draw and heat assumptions checked at service brightness.	Notes: _____
[]	Ambient control and night limit demonstrated.	Notes: _____
[]	Primary failure and backup signal path demonstrated.	Notes: _____
[]	A module, PSU and receiving card replaced by the trained service team.	Notes: _____
[]	Calibration files, configuration, drawings and spare inventory handed over.	Notes: _____

ACCEPTANCE

Accepted / accepted with defects / rejected

Outstanding items: _____

Client representative: _____ Date: _____

Integrator representative: _____ Date: _____

Calculate lifetime cost.

Compare like with like. Separate the supply-only wall from the installed system, then model energy and service over the planned life.

COST LINE	YEAR 0	YEARS 1-5	NOTES
Cabinets and receiving hardware	R _____	R _____	
Processing and signal	R _____	R _____	
Structure, trim and access	R _____	R _____	
Electrical and cooling	R _____	R _____	
Installation and commissioning	R _____	R _____	
Spares and warranty	R _____	R _____	
Content commissioning	R _____	R _____	
Energy	R _____	R _____	kWh/year x tariff
Planned service	R _____	R _____	Access included?
TOTAL	R _____	R _____	

ENERGY MODEL

Average power _____ kW x _____ hours/day x _____ days/year = _____ kWh/year.

At R _____ / kWh, estimated annual energy cost = R _____.

Average heat rejection supplied to mechanical engineer: _____ BTU/h.

Bring us the sightline, the daylight and the wall.

Use the online configurator for an immediate starting specification, or send this completed pack with plans and a photograph of the room. We will answer with the reasoning attached.

ONLINE CONFIGURATOR	ENGINEERING	USE-CASE FIELD GUIDE
lumiview.co.za/configurator	hello@lumiview.co.za	lumiview.co.za/industries

WHAT TO SEND

One plan or elevation. One photograph facing the proposed wall. The nearest viewing distance. The brightest time of day. The content the audience must read. That is enough to begin.