

LED BACKLIT SCENIC FLAT -
10'H X 28'W

FURNITURE OF CHOICE

LED BACKLIT SCENIC FLAT -
10'H X 20'W

DRAPE SURROUND OR
WALLS OF SMALL
ROOM/STUDIO

PODIUM - 4'H X 2'D X 21"D

50" DSMS



THEARENT INC
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THEARENT PROJECT NUMBER

N/A

CLIENT

N/A

PROJECT NAME

BROADCAST EVENT SET

VENUE/LOCATION

TBD

THEARENT ACCOUNT MANAGER

RB

THEARENT PROJECT MANAGER

RB

SHEET TITLE

[Sheet Title]

SCALE PAPER DIMENSIONS

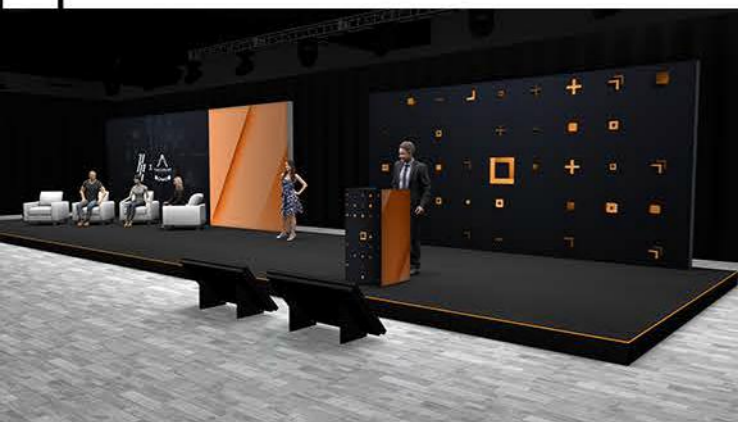
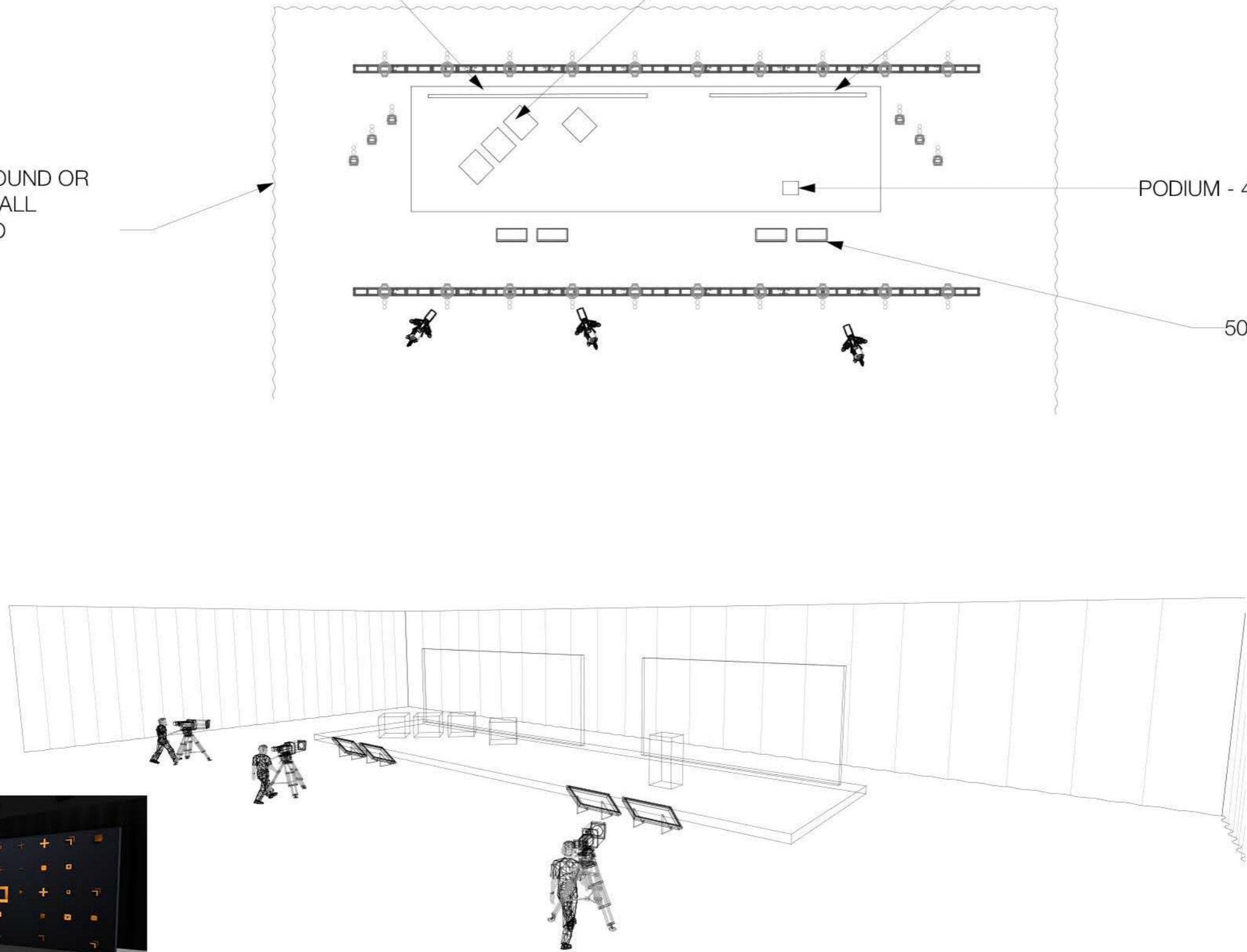
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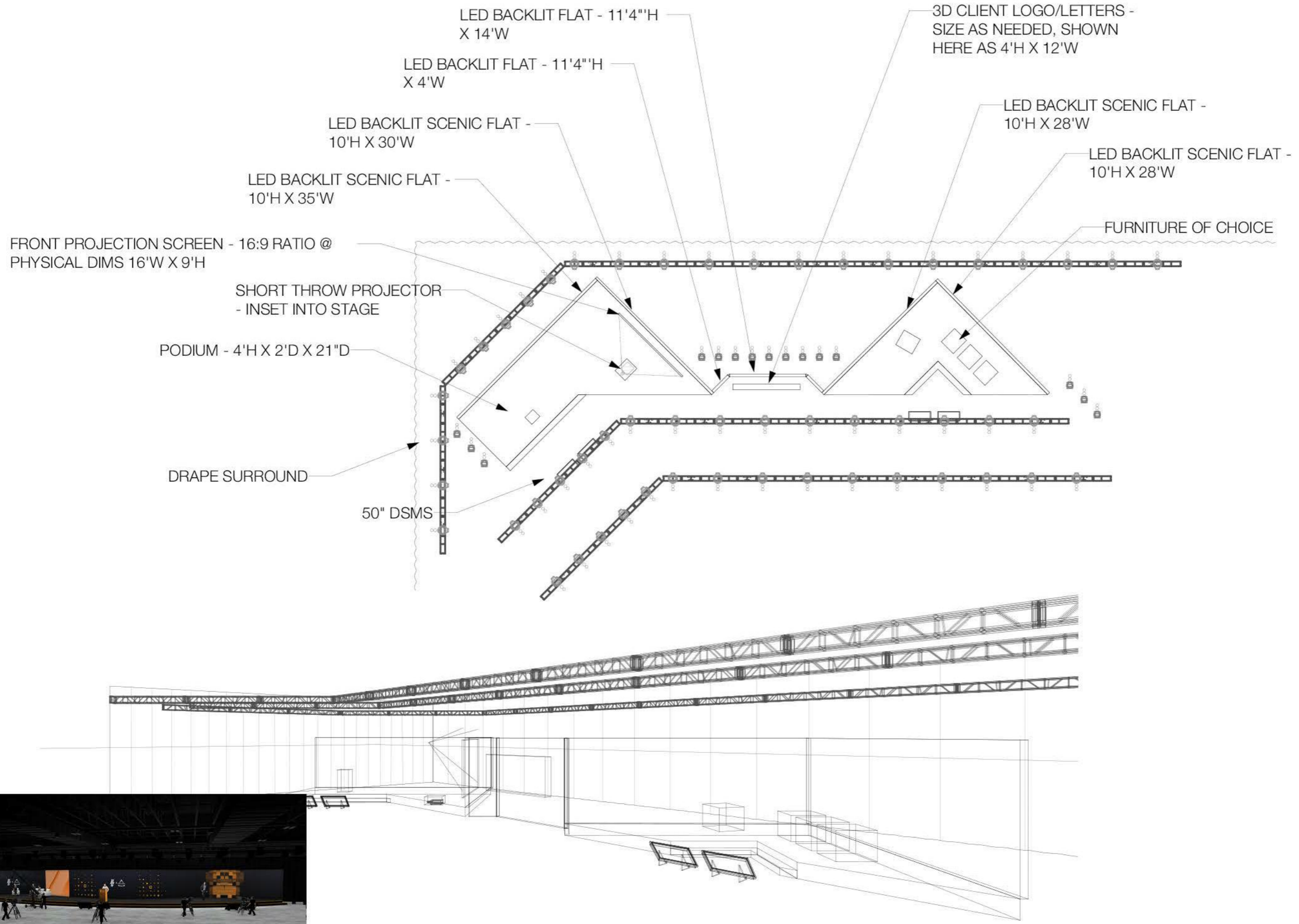
DRAWN BY PRINT DATE

NAME 00.00.0000

DRAWING DETAILS

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THEARENT PROJECT NUMBER

18-0000

CLIENT

Client

PROJECT NAME

Project name

VENUE/LOCATION

Venue, City

THEARENT ACCOUNT MANAGER

MW

THEARENT PROJECT MANAGER

MW

SHEET TITLE

[Sheet Title]

SCALE PAPER DIMENSIONS

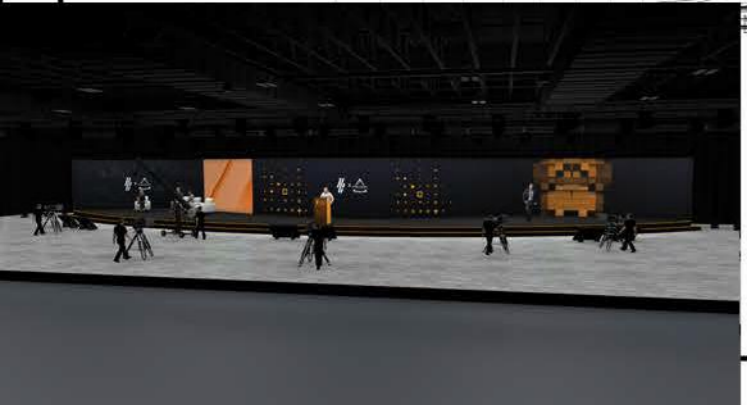
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DRAWING DETAILS

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GROUND PACKAGE
MOVING LIGHTS

CURVED WALL - 10'H X 120'W
OF CURVE SURFACE

FURNITURE

50" DSMS

3D LOGO/LETTERS - SIZE AS NEEDED,
SHOWN HERE @ 12'W X 4'H

PODIUM - 4'H X 2'D X
21"D

HOLGRAM SCREEN W/PERSON IN ONE VERSION
- CAR/TRUCK IN THE OTHER W/PRESENTER
INTERACTING WITH HOLOGRAM IMAGE - 16:9
RATIO @ PHYSICAL DIMS 16'W X 9'H



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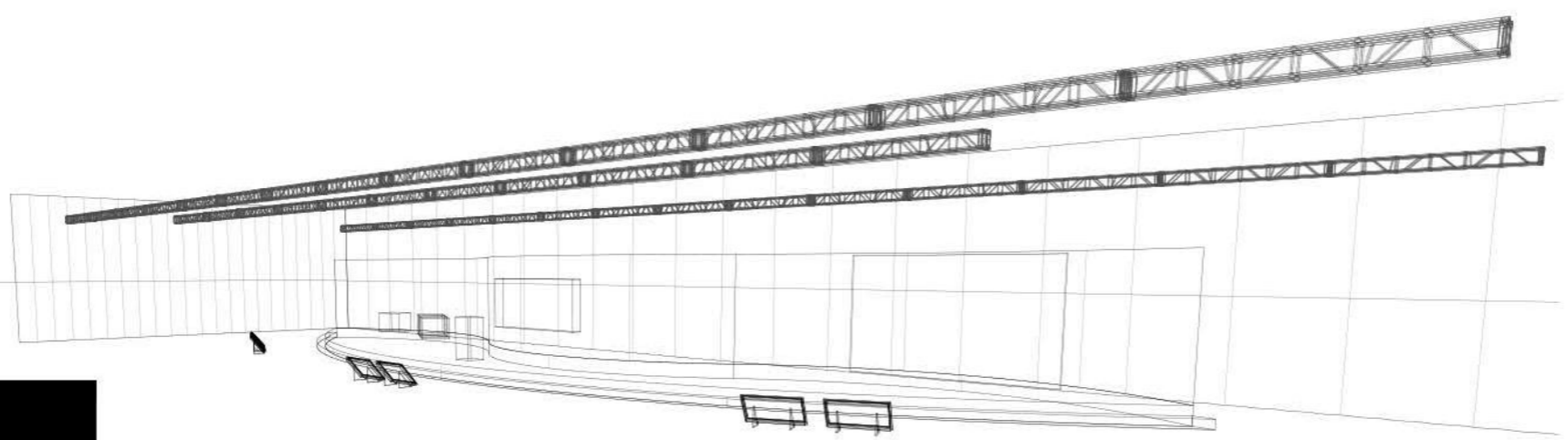
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DRAWING DETAILS

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CARBON

BLACK

HOLOGRAPHIC MATERIALS

introduction

CarbonBlack™ features advanced projection surfaces which combine nanotechnology and sustainable innovation that will revolutionise the display industry.

Introducing the screen of the future; Our unique “CarbonBlack” screen resonates colour in ambient lighting ensuring vividness and extraordinary visual experiences.



4
10
14
22
24
26

information
content
technology
build-up
storage
references

information

CarbonBlack™ screen resonating colour



CarbonBlack™ screen

CarbonBlack™ is a coated projection display surface with unique graphite nanotubes. The specialised properties of CarbonBlack™ produce a superperformance visual, that boosts contrast and vivid images when combined with laser projection sources.

Sensing the need to transcend the outdated projector based screens that have been industry standard over the past 120 years, CarbonBlack™ is prepared to play a starring role in delivering leading display systems with refined production techniques. Our “screen of the future” is called “CarbonBlack”.

Our display screen offers viewers a powerful, compelling and a memorable experience that solves common glare issues by bringing the visual power of LED like picture quality, without the technical and logistical difficulty of LED video walls.

Inspired by the very element that makes this possible, the CarbonBlack™ brand alludes to the display’s ability to showcase cinematic content with rich black and fully realised colours. Backed by brilliant picture quality and an outstanding contrast ratio, CarbonBlack™ provides a viewing experience like never before that traditional projection or LED based displays could never fully conquer.

Features



REDEFINED BLACK

The CarbonBlack™ brings the visual power of active display technology to projection, by delivering vibrant HDR supported content that allows for ambient light without degradation of picture quality. By featuring dark shades within a projection surface, the screen offers viewers the most detail-rich and vivid content possible.



ULTRA CONTRAST

Experience dramatic depth and picture detail with incredibly deep blacks even with the lights on! You benefit from having a realistic picture, whether you are watching in an illuminated room or with no light at all.



HIGHEST BRIGHTNESS

By introducing High Dynamic Range Surface (HDRS) picture refinement technology to the expo booth, live event, theatre or home office, the Carbon graphite coated screen offers dark-to-light-ranges greater than the accepted legacy projection screen standards. This improved brilliance produces a sharper and more detail-rich presentation.



GREATER SPECTRUMS OF COLOUR

Through a fully-aligned picture, the CarbonBlack™ screen prevents AV operators from having to compromise on brightness and colour quality. The display achieves this optimal balance by maintaining perfect colour accuracy for a range of hues even at peak or near-peak brightness.



PERFECT UNIFORMITY

The fibre's distraction-free design ensures audiences stay focused on featured content rather than the display itself. Improved uniformity allows viewers to experience visual details and intricacies that otherwise might be lost or hidden on standard theatre and at-home screens. Unlike standard screens it does not reflect or emit light, it glows at the perfect wavelengths that match your eyes own organic light receiving cones for a natural viewing experience.



EXTREME REALITY

The 3D version of CarbonBlack™ fibre accomplishes the perceived impossible – making 3D content even more vivid and realistic. Featuring high-brightness and industry shattering 3D dimensional depth, this specialised composition brings visual details to the forefront and allows subtle details to be clear and defined.



LIGHTWEIGHT

Because of its a natural composition, the 250g/m² CarbonBlack™ screen is exceptionally lightweight. This gives more flexibility in terms of mounting or building up, as well as transporting.



RESISTANT TO AMBIENT LIGHT

The surface is developed using the newest breakthrough technologies that allow it to absorb a large amount of ambient light. This makes it possible to use the screen also in sunlight, preserving a high quality presentation.



FIRE RESISTANT

The fibre is flame resistant and the break point is at a temperature of 240 - 250°C.



LOW STATIC CHARGE

The CarbonBlack™ material has a low static charge ensuring particles of dust, powder and other electrostatic materials do not stick to the surface. The screen keeps its colour and transparency, this makes it almost invisible to the human eye.

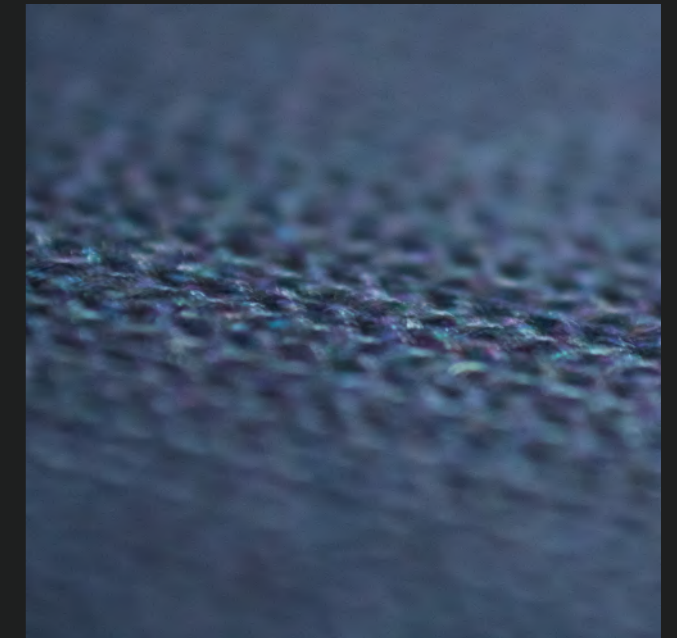
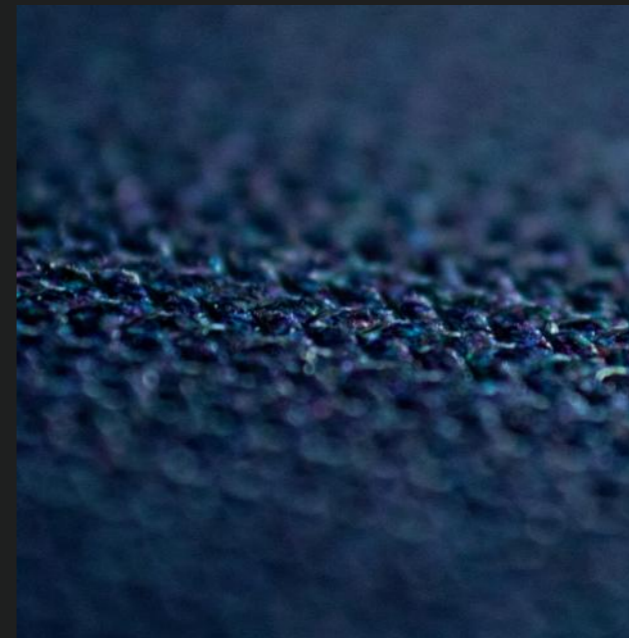
PRODUCT DETAILS

CarbonBlack™ screen

Thickness:	< 1mm
Length:	any requested size
Width:	any requested size
Weight:	250g/m ²
Colour:	mid-black

CarbonBlack™ screen Hybrid

Thickness:	< 1mm
Length:	any requested size
Width:	any requested size
Weight:	250g/m ²
Colour:	dark-gray



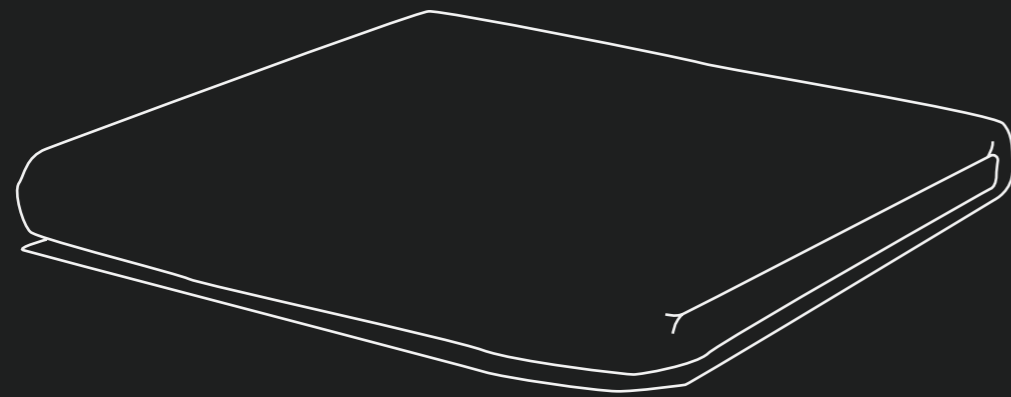
Pros:
Suitable for bigger events with projectors from 10,000 lumens in a darker surrounding

Pros:
Suitable for smaller events and brighter ambient light solutions

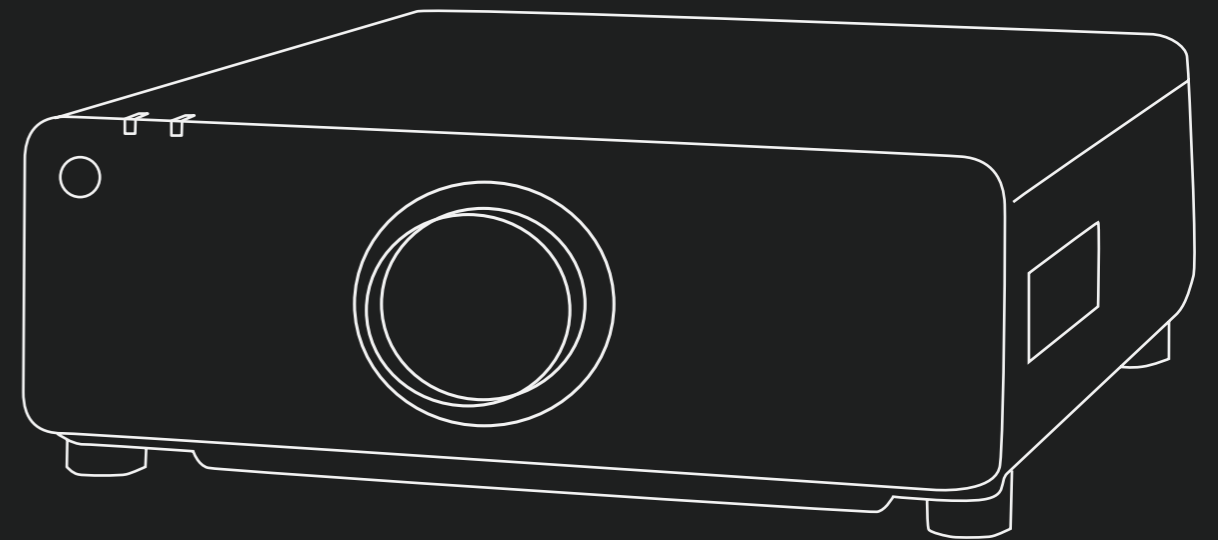
Usage:
Live events, corporate meetings luxury home cinema, retail or entertainment experiences from roadshows to large scale stadiums and much more.

content

To create a professional projection with our products, you will need the following items:



CarbonBlack™ screen



projector

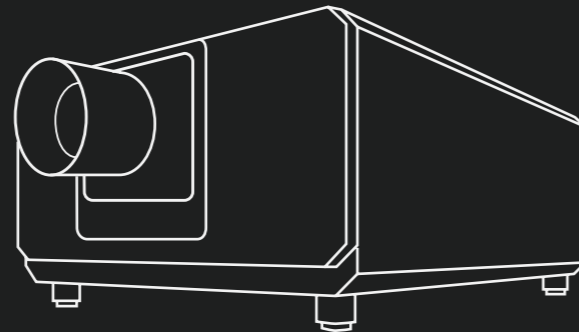
Laser projectors

There is a wide range of professional projectors of different brands. For different events with our product we recommend several projectors from *Panasonic*, due to their performance capabilities.

PT-RZ31K Series

This projector is suitable for mega projections in stadium size events.

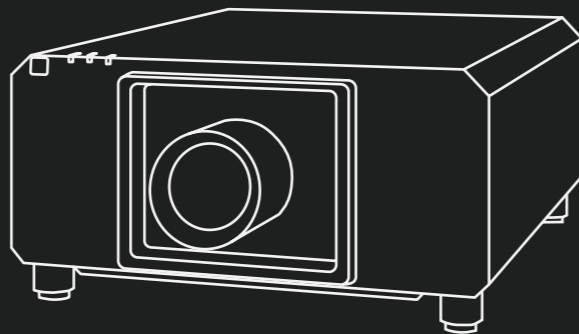
brightness: 31,000-lumen
service-free projection: 20,000 hours
optics: dust-resistant



PT-RZ21K Series

This projector is suitable for large events.

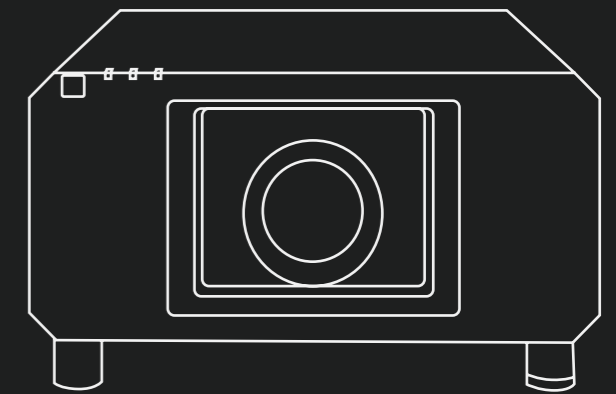
brightness: 20,000-lumens
service-free projection: 20,000 hours
optics: dust-resistant



PT-RQ13K

This projector is suitable for installations and smaller close up events.

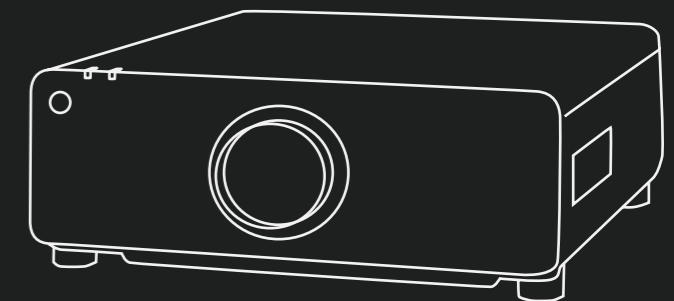
brightness: 10,000-lumens
service-free projection: 20,000 hours
video: 4K+



RZ970 Series

This projector is suitable for smaller installations with lower budgets.

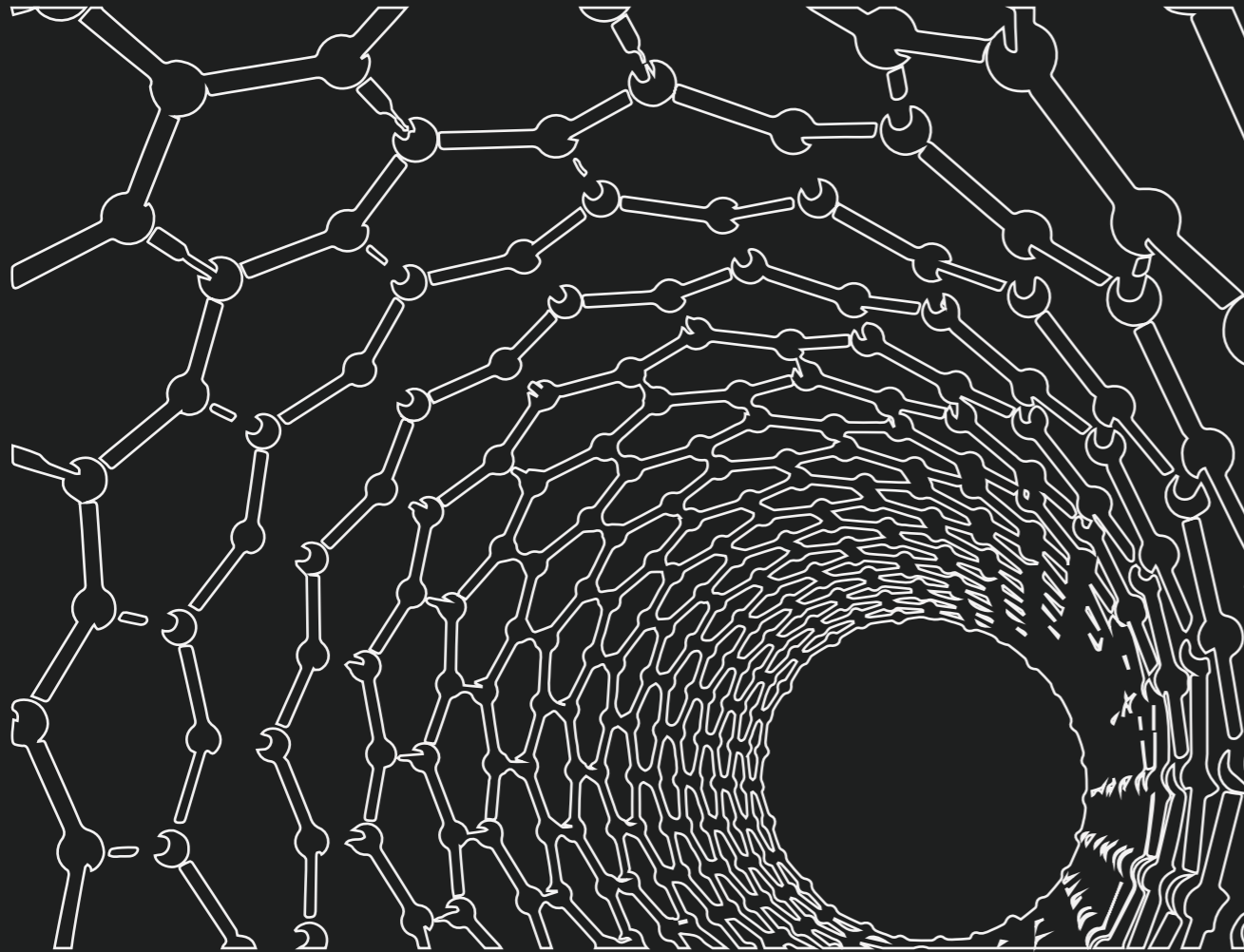
brightness: 8,500-10,000-lumen
low maintenance performance



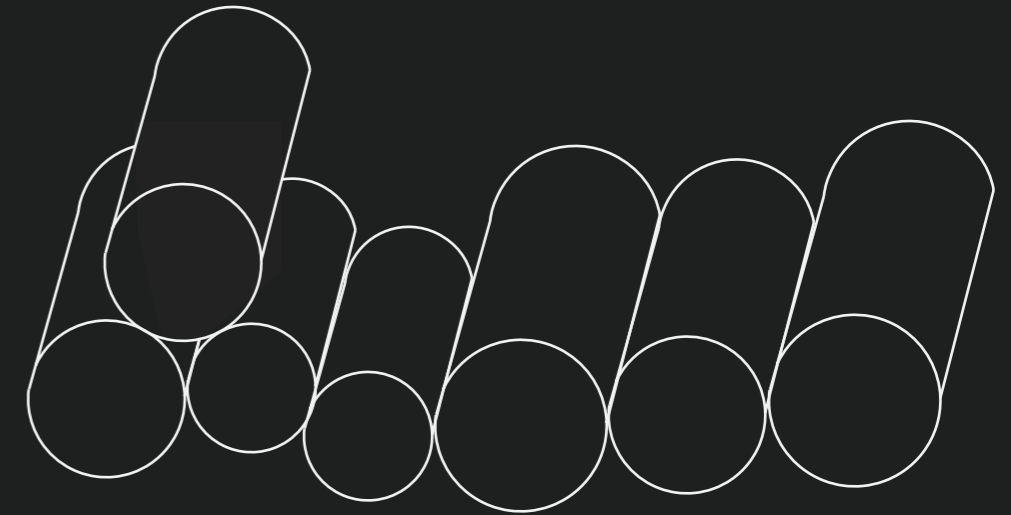
technology

the system behind it

This unique projection surface is developed using the latest breakthrough technologies that utilise the behaviour of light photons within carefully engineered graphite nanotubes. These tubes resonate light waves on the quantum scale to produce a visible pixel of light.



The carbon graphite molecule structure is forming into a nanotube.



Hundreds of thousands of tubes are woven next to each other, creating the surface.

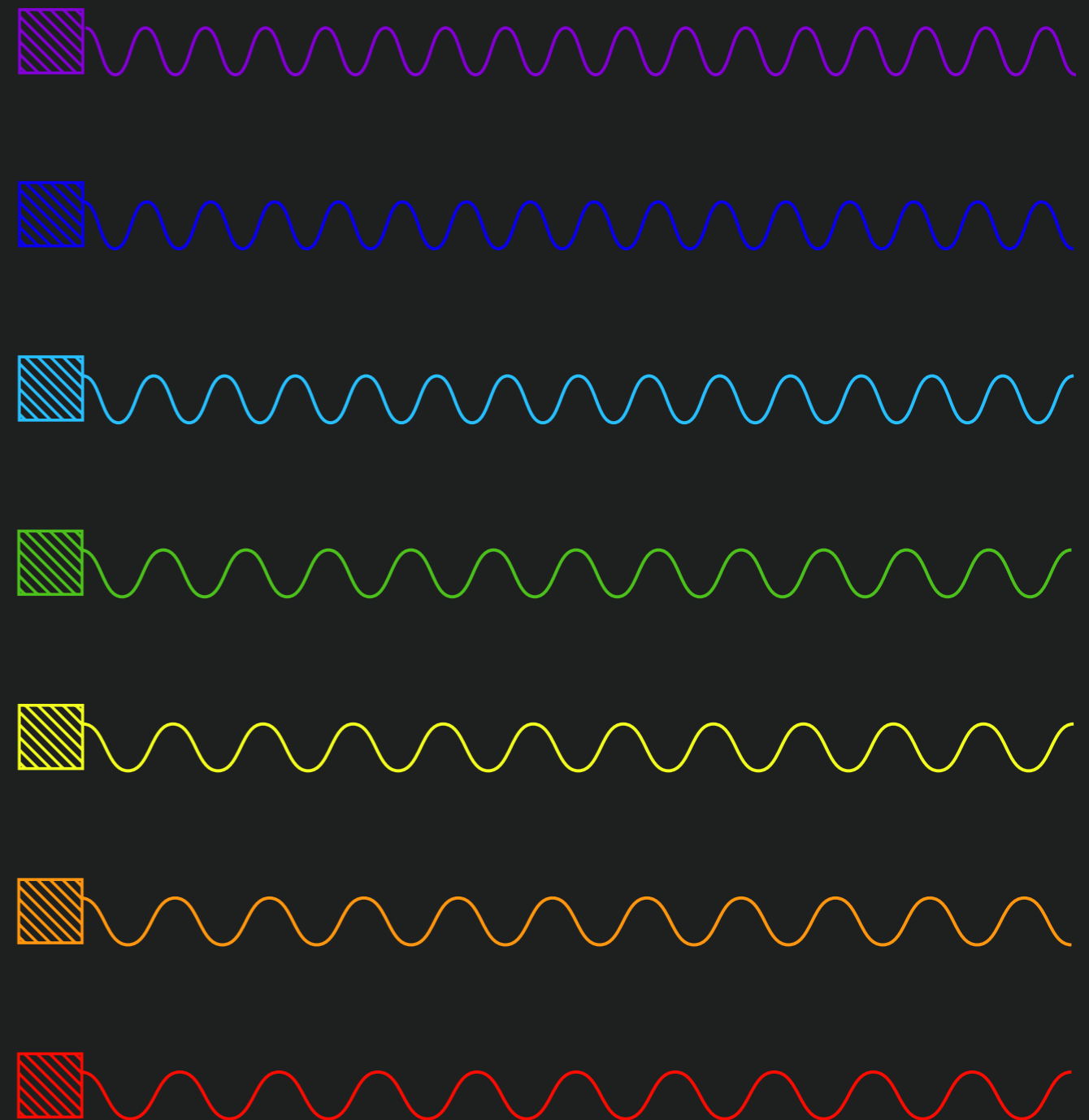


The projector generates a focused beam of light photons, so photons are flying in a consistent chain of particles in a linear direction. If a photon hits a graphite nanotube, it transitions to its wave function and propagates in the tube.



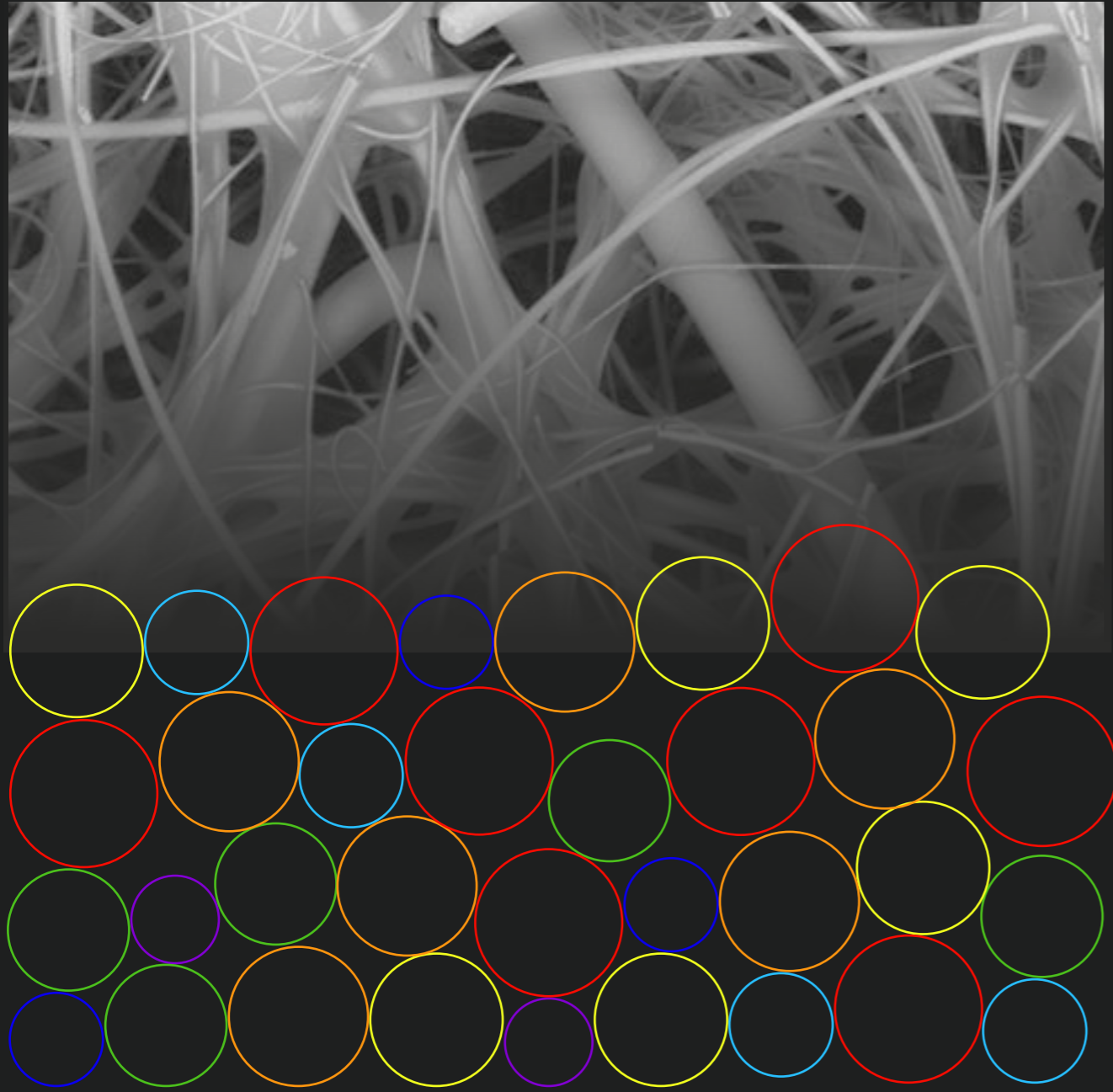
A consistent beam of photons from the projector hit the graphite tube and transition into individual light waves of a specific frequency length. If the diameter of the tube matches the frequency length, the light will resonate and build up within the tube; resulting in a bright point of that specific colour. Capturing the light wave at a quantum scale allows the individual photon hitting the surface of the screen to appear brighter than it's original charge.

When photons from other light sources such as ambient light also enters the tube and they do not have enough consistency to build up a standing wave. This results in the absorption of light, which allows the CarbonBlack™ surface to retain it's depth of darkness in certain areas.



The colours we see with the human eyes have different wave lengths.

To display a wide spectrum of colours, we developed a structure with nanotubes that differ in size depending on their associated colour wave length.



In comparison

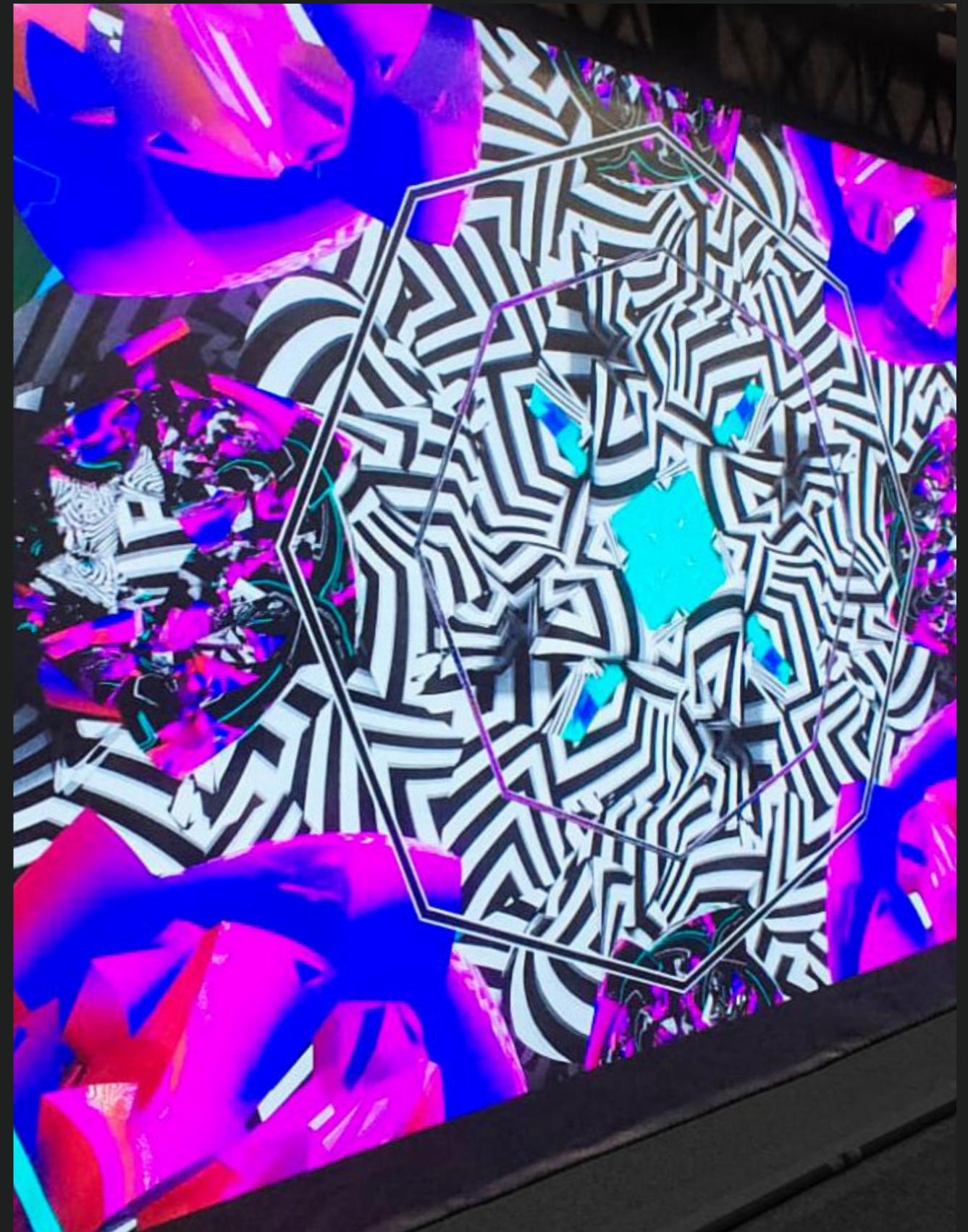
This is a comparison of different technologies to create large installations over 100 inches:

	FPD (LCD)	CarbonBlack™	LED
Large Sizes over 100 inch	✗	✓	✓
Higher Resolution FHD to 4K	✓	✓	available but at high costs
Good Contrast under the Light	✓	✓	✓
Affordable Pricing	✓	✓	Full-HD but high costs
Low Maintenance Durability	✓	✓	pixel defects nonuniformity

✓ CarbonBlack™ has great contrast in ambient lighting and an accurate colour spectrum with less overall brightness and glare compared to LED.

LED :
Existing solution under high ambient light, but is limited to Full-HD, high costs and high risk of periodical maintenance

CarbonBlack™ :
Projection technology will become a leading alternative for over 100" visual solution, with FHD/4K, affordable pricing, and high durability



build-up

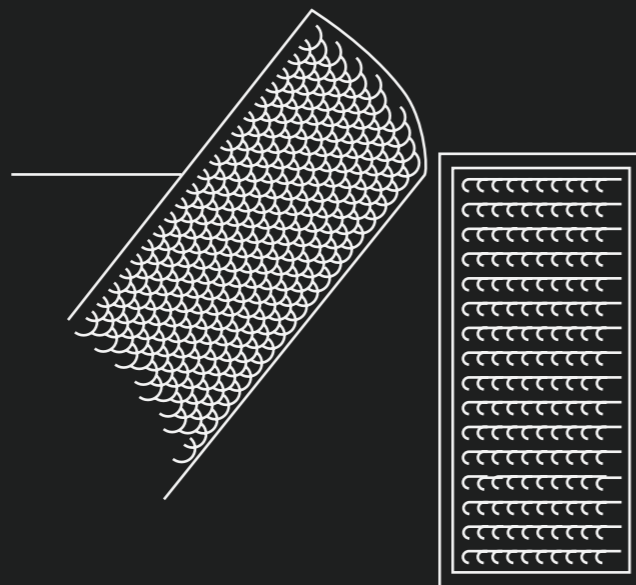
Installation of screens

There are different possibilities to hang the screens:

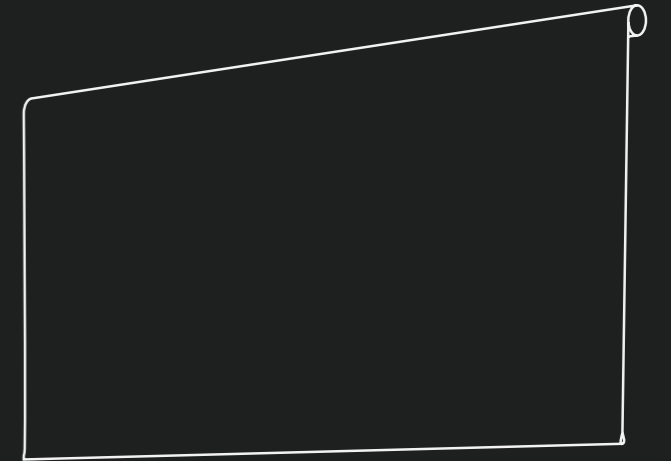
Put the CarbonBlack™ in a flat frame to create a straight screen perfect for projection.



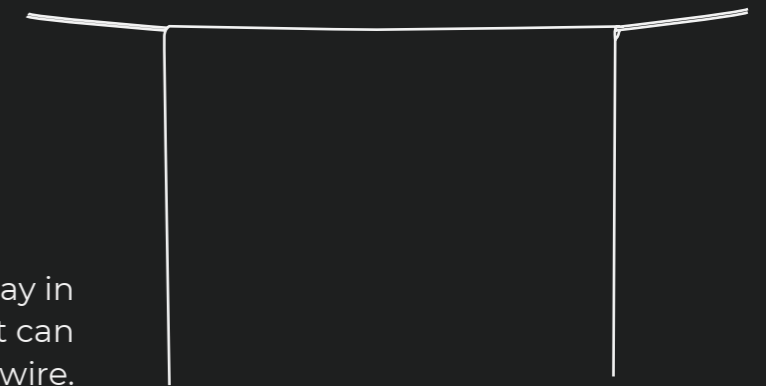
With a velcro fastener, it is possible to hang and stretch the screen ideally.



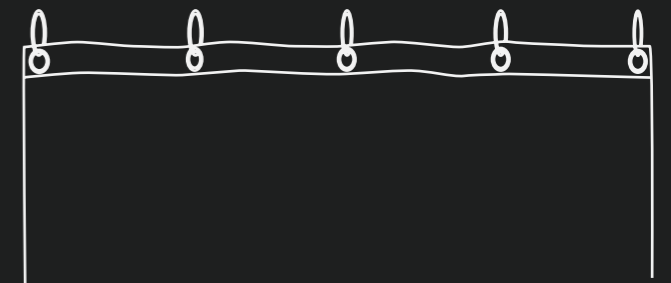
The rolling system integrates the screen into a room in an efficient and tidy way.



To install the display in the centre of a room it can be attached to a wire.



Eyelets are a perfect option to attach CarbonBlack™ edges to the ceiling.



storage



FOLDING

The screen can be folded and stored for space-saving.



NO WASHING

There is no need to wash the CarbonBlack™ fibre. For cleaning wipe it with a duster or light microfibre cloth.



LIGHT

The surface is not photosensitive. This allows it to keep its colour irrespective of storage conditions. We do however recommend storing the screen in its original packaging.



TEMPERATURE

It is possible to store the CarbonBlack™ in a temperature form -30°C to 100°C . The optimal level is from 5°C to 25°C .



references

Some examples of
the CarbonBlack™
screen in use









Perfect for creating a high dynamic range of contrast even in ambient light without image glare, moiré effect and easy to install:
Launching a new era of laser projection

