VENUE PACK

EXPO PAVILION
Keel Square, Sunderland

#ExpoSunderlandPavilion

@exposunderland

exposunderland.com/expo-pavilion

Contents

The Expo Sunderland Pavilion structure and the large LED screen are programmed separately. Screen programme, advertising and event space may link, however this is not essential.

Expo Sunderland Pavilion

A ground-breaking centrepiece of Expo Sunderland, the Expo Sunderland Pavilion, is set to redefine the heart of the city with its pioneering programme fusing arts, culture, music and innovative technology.

Situated in Keel Square, this striking modern structure features one of the UK's largest semi-transparent LED screens, measuring an impressive 20m x 5m. Below the screen is a versatile events space, perfect for a variety of experiences, activations and occasions.

Designed to educate, inspire and influence, this structure represents a bold step forward for Sunderland as a Smart City and a hub for innovation. The space will bring to life amazing multimedia displays with an array of arts, culture, music and interactive technologies, offering visitors and residents the chance to connect with pioneering concepts that shape the way we live, work and play.

The Pavilion is a landmark project designed to showcase the city's commitment to innovation, creativity and sustainability. Featuring a state-of-the-art LED screen and events space, it serves as a hub for education, inspiration and community engagement, positioning Sunderland as a global leader in Smart City initiatives.

Sunderland is considered to be the most ambitious city centre regeneration project in the UK, and is on track to become one of the UK's most advanced smart cities. Committed to smart, sustainable growth, and focussed on community life, leisure and culture, Riverside Sunderland is transforming into the UK's first sustainable carbon neutral urban quarter, a unique and extraordinary place to live, work and play.

Expo Sunderland Pavilion

The impressive structure includes a temporary exhibition and events space located within the heart of Riverside Sunderland. This has been designed as a place to showcase and celebrate technological innovations, creativity and culture in a welcoming, playful and inclusive way.

At the heart of the Expo Sunderland Pavilion programme are five key principles:

- **Digital Innovation and Technology**

  Promoting digital inclusion and introducing new technologies and digital artforms
- **Creative Economy and Collaboration**

  Working in collaboration to add value to what already exists in the city and attract new investments in culture
- **Cultural Vibrancy**

  Promoting cultural expression, diversity and heritage across Sunderland communities, fostering a sense of belonging
- **Sustainability**

  Integrating sustainability principles into our programme and practices, embracing activity that raises awareness and action on the climate emergency. The Pavilion's structure has been fabricated from a light gauge steel frame with high recycled content, often referred to as Green Steel. Using this sustainable building material has minimised the carbon footprint of the building
- **Health and Wellbeing**

  Providing opportunities for connection and creative expression to enable Sunderland residents to live fulfilling, healthy and active lives.

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Exhibitions & installations

Display of 2D artwork:
There is no wall hanging space at the Pavilion.
2D artwork must be freestanding.

Use of the windows:
Self-cling window vinyls may be installed to
share imagery and artwork, subject to approval.

Display of 3D artwork and installations:
The steel frame of the building may be used to
hang artworks from above. Plinths or other
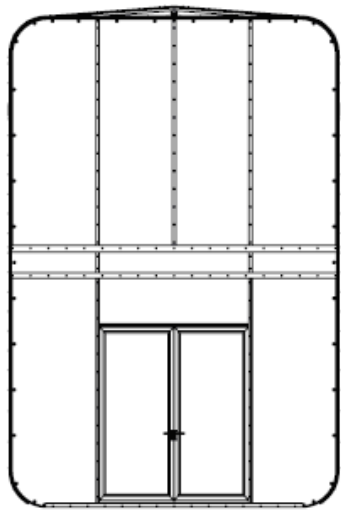means of display may be brought into the
space for exhibitions.

Lighting:
There is no fixed lighting in the space. Please
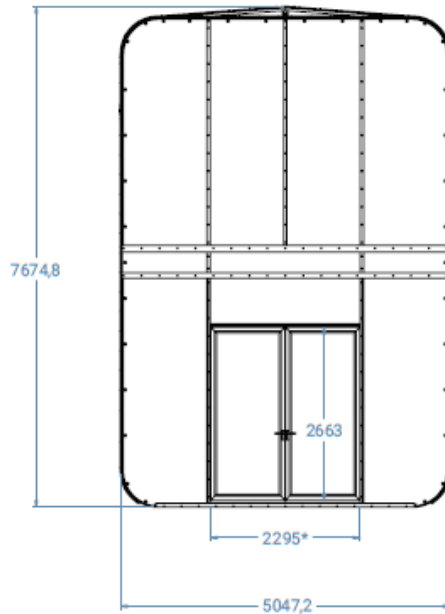consider lighting when designing your
exhibition/installation.

Audiences:

Doors to the Pavilion can either be
closed so that exhibitions are viewed
from the outside only; partly open
(1 door only) so that exhibitions can be
explored by audiences inside the
building, or completely open to
create a corridor through the Pavilion.

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Dimensions

7674,8
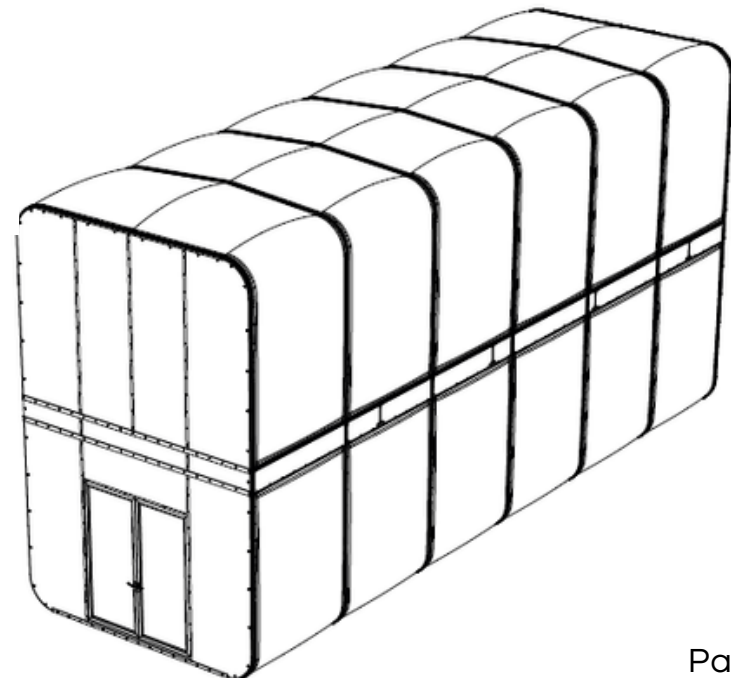
2663

*DOOR OPENING 2150

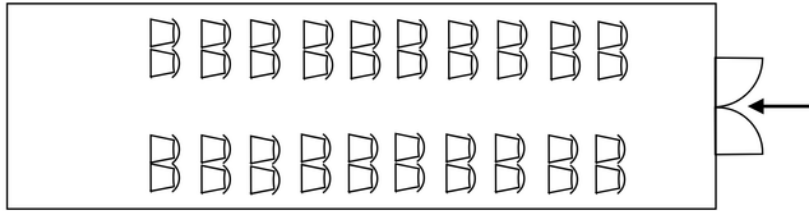2295*

5047,2

REAR ELEVATION   FRONT ELEVATION

The Pavilion is a 5x15m (interior 4.3x14.9m) steel structure clad with clear acrylic panels, and so the interior of the structure is visible from the front and two side faces.

There are two double doors on either side of the building which can be open or closed to the public.

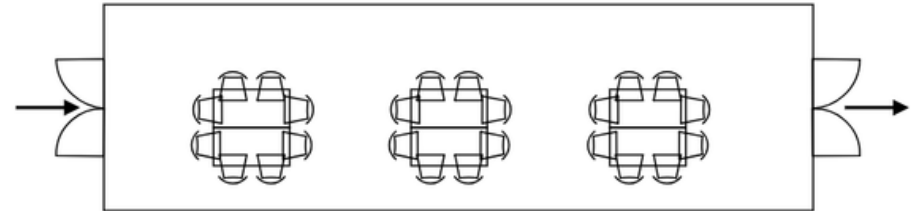Expo Sunderland

CultureHouse Sunderland
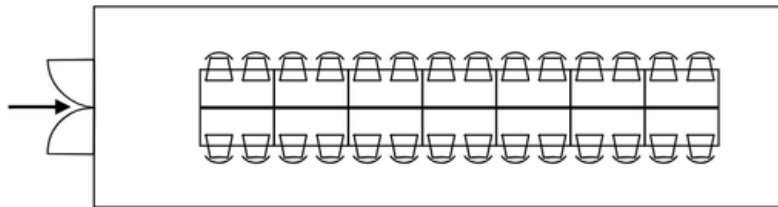
Floorplans (examples)

Theatre style
 - approx capacity x 40 participants, 1 door open

Workshop style
 - approx capacity x 40 participants, 2 doors open

Banquet/Boardroom style
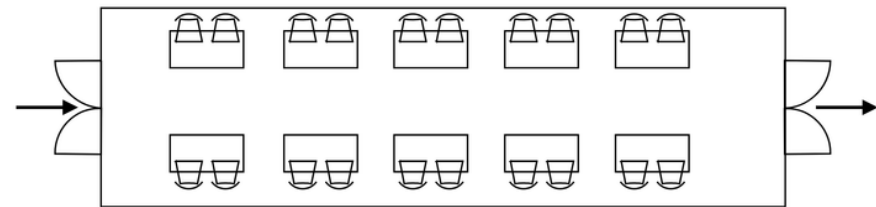 - approx capacity x 28 participants, 1 door open

Table top /exhibition/trading style
 - approx capacity x 10 positions, 2 doors open

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Facilities

Facilities:

There are no toilet, refreshment or wash facilities at the Pavilion. Event timings and plans should take this into account.

Comfort:

There is no heating system in the Pavilion. Please ensure that event organisers, participants and attendees are dressed appropriately for all weather eventualities.

Risk Assessments:

We require all events to be Risk Assessed by the event organiser and for Risk Assessments to be signed off by Expo Sunderland prior to events.

Capacity:

The Pavilion can comfortably and safely hold 15-40 people, depending on layout. Please see the following pages for suggested floor plan layouts for different kinds of events, exhibitions and activations.

Opening times:

The Pavilion will be opened and locked at agreed times (between 9.30am-4.30pm Mon-Sat) at no additional cost if you are invigilating the space yourself and you require the space to be opened or locked outside of these hours then additional charges may be incurred.

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Resources & equipment

Power:
There are 4x double UK standard plug sockets in the space and extension cables may be used.

Water:
No water supply available

WiFi:
Public WiFi is available

Toilets:
Access to public toilets nearby, therefore two representatives would be required for event hosting.

Screens/monitors:
None provided

Furniture:
None provided

Lighting:

There is no fixed lighting in the space. Please consider lighting when designing your exhibition/ installation.

Security:
No security provision in place. To be provided by the event organiser.

Expo Sunderland can look to engage with community wardens depending on the nature of the event/installation.

Access & address

Address:
Expo Sunderland Pavilion
Keel Square
High Street West
Sunderland
SR1 3DZ

Link to Google Maps pin

Vehicle access for load in/load out is available by pre-arrangement only.

Car parking:
Riverside Multi-Storey Car Park (8 minute walk)
St Mary's Multi Storey Car Park (7 minute walk)

Access:
The Pavilion will have ramped access on at least one entrance. There are no toilet facilities or quiet spaces at Expo Pavilion.

There is no specific accessible parking for the Pavilion. The nearest individual spaces are on High Street West but these cannot be guaranteed.
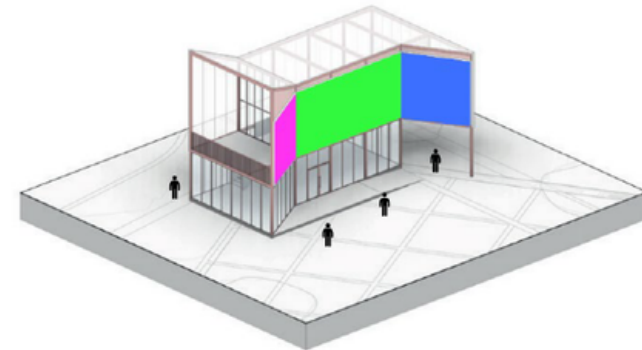
Nearest metro stations:
Sunderland (7 minute walk)
Park Lane (8 minute walk)

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LED screen technical specifications

Screen dimensions & resolution:

- The resolution for a piece of scheduled content for the screen is UHD 4K (3840 x 960) – 30fps
- We accept standard MP4 video codec formats (H.264, H.265) *bright sign compatible
  - Existing content in other formats can be re-encoded to enable playback, at an additional external agency cost
- The screen will only broadcast the top (3840 x 960) pixels of this footage. (see figure 1).
  - This is an ultra-wide aspect ratio of (4:1)
- We can provide template files for Adobe Premier (or After Effects) with this project setup ready*
  - Existing standard HD content can be placed anywhere across that surface (ideally on the centre panel for flat content), with a small letterbox crop. (see figure 3 for crop options)
- Alternatively, we can reformat your existing content for you into one of our templates*

The screen is made up of three, large, semi-transparent LED panels, and a 3D mock-up is shown. Take note that the two side 'wings'' are angled towards the square, giving us a display surface that is not flat, but represents a total width of 20 metres.

3D Mock-up of 3 semi- transparent LED surfaces

*Additional external agency costs may apply

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LED screen technical specifications

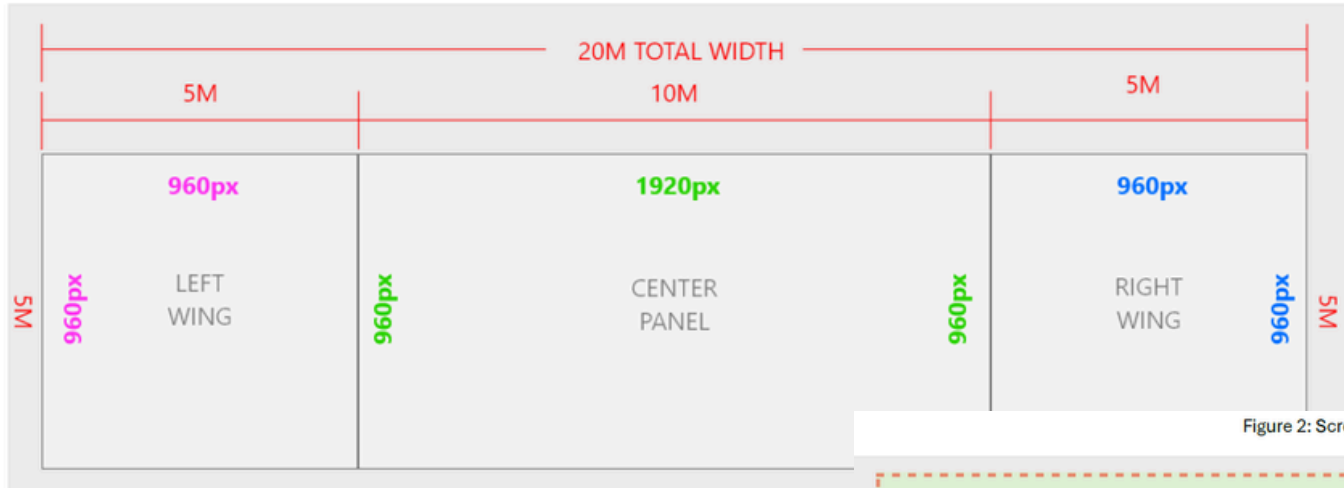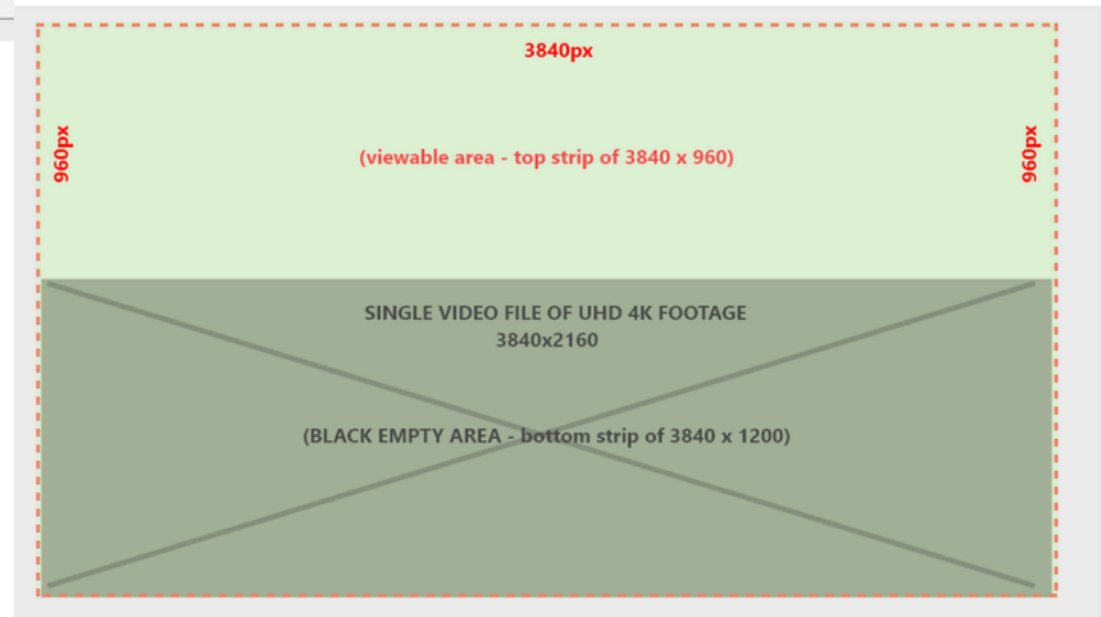Figure 1: The screen pixel size and dimensions

Figure 2: Screen resolution and layout

LED screen technical specifications

Existing video or animated content:

Existing content can be reformatted to play on the screen, with a few options for how much of the LED surface is used during playback. Using one of our supplied templates or our free reformatting service you can choose how to lay out your existing content on the screen.

Our technology partner Animmersion UK can take your existing video content and bring it into one of our prebuilt templates or branded wrappers or provide advice on creating your own wrapper content to fill any areas of the screen not occupied by your existing footage*

*Additional external agency costs may apply

Figure 3: Cropping or placement options for existing HD or 4K footage

Existing video content re-use

Option1: Crop letterbox

LEFT WING — CENTER PANEL — RIGHT WING

Option2: No crop

LEFT WING — CENTER PANEL — RIGHT WING

Option3: Custom crop & position

A large scaled crop like this would only be recommended on 4K footage, to maintain high quality at this size.

Blank areas of the screen can either be left blank or ideally have other related content, info, text, colours or effects rendered into the final piece of footage.

Some branded wrappers (EXPO & SCC) will be used around some content pieces to fill the wings if needed.

Custom wrappers and supporting wing content pieces are available. Please enquire.

LED screen technical specifications

Creating new bespoke content for the screen:
The best way to provide bespoke content for the screen is to provide a single UHD 4k File, with only the top 3840 x 960 pixels featuring content as shown in figure 2.

The refresh rate of the screen is 60HZ with video content preferred in 30FPS.

Using the pixel dimensions from figure 1 you can then creatively have elements of your final content aligned with the wings of the screen or produce interesting creative effects using those 3 angled surfaces and the edges at which they touch.

Realtime content:
The computer system running the LED screen will also be running a license of NOTCH playback allowing any third-party companies with interactive content developed with NOTCH Builder Pro and outputted as an .exe to be played back on the wall at a total resolution of (3840 x 960) -30fps.

Inputs:
The screen will have a microphone and NDI camera mounted facing keel square – exact angles and positions of these input devices are yet to be decided, but both devices will be connected to the PC running the license of NOTCH playback.

*Additional external agency costs may apply

LED screen technical specifications

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Taking advantage of Transparency:
The EXPO pavilion LED screen is a semi-transparent LED surface, giving the capability to produce the visual effect of content floating in front of the pavilion and over the evening and night sky as it darkens.

The estimated overall transparency effect is around 56% transparent, the LED frame and materials are black in colour. Content which features low light levels, and lots of static black areas will not be as impactful and bright colourful content in motion.

Bright content will appear solid and opaque, dark, and black content will appear more transparent.

Video example:
This video shows a similar LED product in motion, to give designers a sense of the very bright screen output and the transparent effect:
https://www.youtube.com/watch?v=Y9IQLlVArO0

LED screen technical specifications

360 video content:
The pavilion screen will be equipped with software to playback 360-degree equirectangular video and reframed 360 content as an MP4 in the resolutions described above, giving the opportunity to show super wide angled (4:1) content across the whole 20 metre surface. This equates to around a 120-degree field of view.

360 Video playback will be available in two modes: Pre-recorded playback of a prerendered MP4 & Live broadcast from specific insta360 cameras owned by Expo Sunderland.

Other live broadcasts:
Please contact Expo Sunderland to discuss any other live video broadcast queries (see page 19 for details).

Prerecorded 360:
We recommend camera operators filming in 360, should focus on the main activity of the scene within the central HD portion of the 4:1 frame, then use their preferred reframing software to select the area of interest for their MP4 edit.

Use reframing tools in your software of choice on a project that is 4:1 – native resolution 3840 x 960, which gives you an ultra-wide canvas to reframe into for stunning panoramas. (An adobe Premier template is available on request)

Live broadcast 360:
The cameras which will be enabled for live broadcast of 360 video content will be an insta360 PRO 2 and an insta360 TITAN.

More information about live broadcast from these Expo Sunderland owned cameras is available upon request.

LED screen technical specifications

Content delivery:

Once an agreement has been made about your content being suitable for broadcast on the screen, a secure link will be sent to you to enable upload of your content.

Content pieces will be collated and organised into a playout schedule by Expo Sunderland, which will be discussed and agreed prior to screening.

For bespoke content pieces and Realtime content projects, you will be connected with our technology partner Animmersion UK LTD to discuss any technical requirements or questions you may have before commencing any development.

*Additional external agency costs may apply

Figure 4: Reframing illustration

Full 360 captured footage

Chosen reframe region (3840x 960)
3840px

LEFT WING   CENTER PANEL   RIGHT WING

960px

*For illustration only - your chosen reframe software will give you options for warping offset

Hire costs, booking & contact information

Pavilion event space:

Price on application

Pavilion LED screen space:

Price on application

Includes 30 x 30 second ad slots per day. 2 x 30 slots per hour, with a 15 hour daily run time of 8am to 11pm. Production costs to be covered by the client.

Booking & enquiries:

Please contact Clair Cogdon from Expo Sunderland if you wish to book the event space or the LED screen, or if you have any enquiries:

e: clair.cogdon@sunderland.gov.uk
m: 07454 252182

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Gallery

EXPO PAVILION
Keel Square, Sunderland

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In partnership with
University of Sunderland

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