

PROJECTION SCREENS

Four simple steps to select the right projection screen



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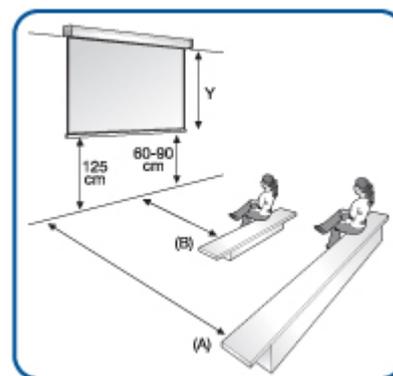
Projecta offers a variety of projection screens in various shapes, sizes, aspect ratios, and screen surfaces. Habitech staff are here to assist you through your projecta screen installation, however, here are some basic considerations to guide you through the extensive range.



1. Room size → size of the projection screen

Check the room dimensions as this is a vital step to help calculate the size of the projection screen necessary. The limitations of the room and the position of the audience determine the dimensions of the projection screen. Fit the screen to the audience, not to the projector.

The height of a projection screen should be approximately equal to 1/6th of the distance from the screen to the position of the last row of seats. This is to ensure text and detail within the projected image is visible to the audience. Ideally, the first row of seats would be approximately 1.5 x the screen height away for professional applications. For Home Cinema applications, this should be increased to 2x (twice) the height. The bottom of the screen should be roughly 125cm above the floor in professional applications, ensuring people in the last row can comfortably see the projected image. For home cinema installations the bottom of the screen should be between 60 and 90 cm above the floor. Although these rules will give you a good indication of the ideal size, you also need to consider the height of the ceiling as this often limits the maximum screen height possible.



For a correct and ergonomic positioning of the projection screen it may be required to have an extended black border above the viewing area. Projecta website provides a Black Drop calculator, which can be found via the following link below:

http://habitech.s3.amazonaws.com/PDFs/PRO/Projecta_2015_EN_customisation.pdf

2. Application → aspect ratio

The aspect ratio of the projector needs to be the same as the projection screen. This will ensure the projected image fits the black border surrounding the viewing area. These black borders serve to increase the perceived contrast, and frame of the image. Common aspect ratios include:



4:3 (Video Format) - Presentations: This used to be the standard TV and computer format.

16:10 (Wide Format) - Presentations: This is the current computer format therefore the logical format for professional presentation applications.

16:9 (HDTV) - Movies: This is the current TV format.

2.35:1 (Cinemascope) - Movies: This is an aspect ratio close to the format of most DVDs.

1:1 (Square) - Overhead projection: This is an old format for overhead projectors but remains frequently misused with current projectors.

Does the installation demand a format that is completely different? Please let us know and we will ask Projecta if it is possible to create a Custom Screen with your exact dimensions.

3. Environment and projector → projection surface

Selection of the ideal projection surface is based on the content, position and performance of the projector, level of ambient light, and also the application. All the above variables need to be taken into account in order to create the optimum projected image. The projection surface is the most important element during the selection process. Projecta's wide range of surfaces allows you to select a fabric with higher gain to counter ambient light, or a low output projector (for example: HD Progressive 1.1 and Datalux 1.5). Optional projection surface can be selected to give your projection a deeper black level, or when the image needs a boost in contrast (for example: High Contrast Cinema Vision and HD Progressive 0.9).



For demanding installations where a high level of detail is necessary we strongly recommend using a tensioned projection surface. A tensioned surface is perfectly flat and is able to display the high level of detail which is necessary in medical and design applications. The following surfaces are available as tensioned: Matte White, HD Progressive 0.6, 0.9, 1.1 and 1.3 gain options, High Contrast Cinema Vision, or High Contrast Cinema Vision Sound, and HD 1.1 Progressive Perforated for Acoustically Transparent Fabrics.



For further information on the available HD surfaces please visit the dedicated pages on the Projecta website, found below:

http://habitech.s3.amazonaws.com/PDFs/PRO/Flyer%20Projecta%20HD%20Progressive_EN.pdf

4. Your demands → The type of projection screen you need

Lastly, you have to decide on the type of projection screen which is required for your installation. You can choose from the following types of projection screens:

- Ceiling recessed ~In-ceiling~ motorised projection screens ~ Tensioned and Non-Tensioned
- Wall mounted projection screens (Motorised) ~ Tensioned and Non-Tensioned,
- Ceiling mounted projection screens (Motorised) ~ Tensioned and Non-Tensioned,
- Fixed frame projection screens,
- Special order Ultra-Thin Bezel, Curved or Giant screens.

Customisation options (Custom sizes, painted casing any RAL colour, Reverse Roll Fabric etc) are also available on almost ALL Screens. For more information, please contact the Habitech team (details can be found below).

If you need any assistance with the selection of a screen for your install, you can always contact Habitech by phone 01256 638500, e-mail sales@habitech.co.uk or the Product Manager: Graham.nash@habitech.co.uk - We look forward to hearing from you.