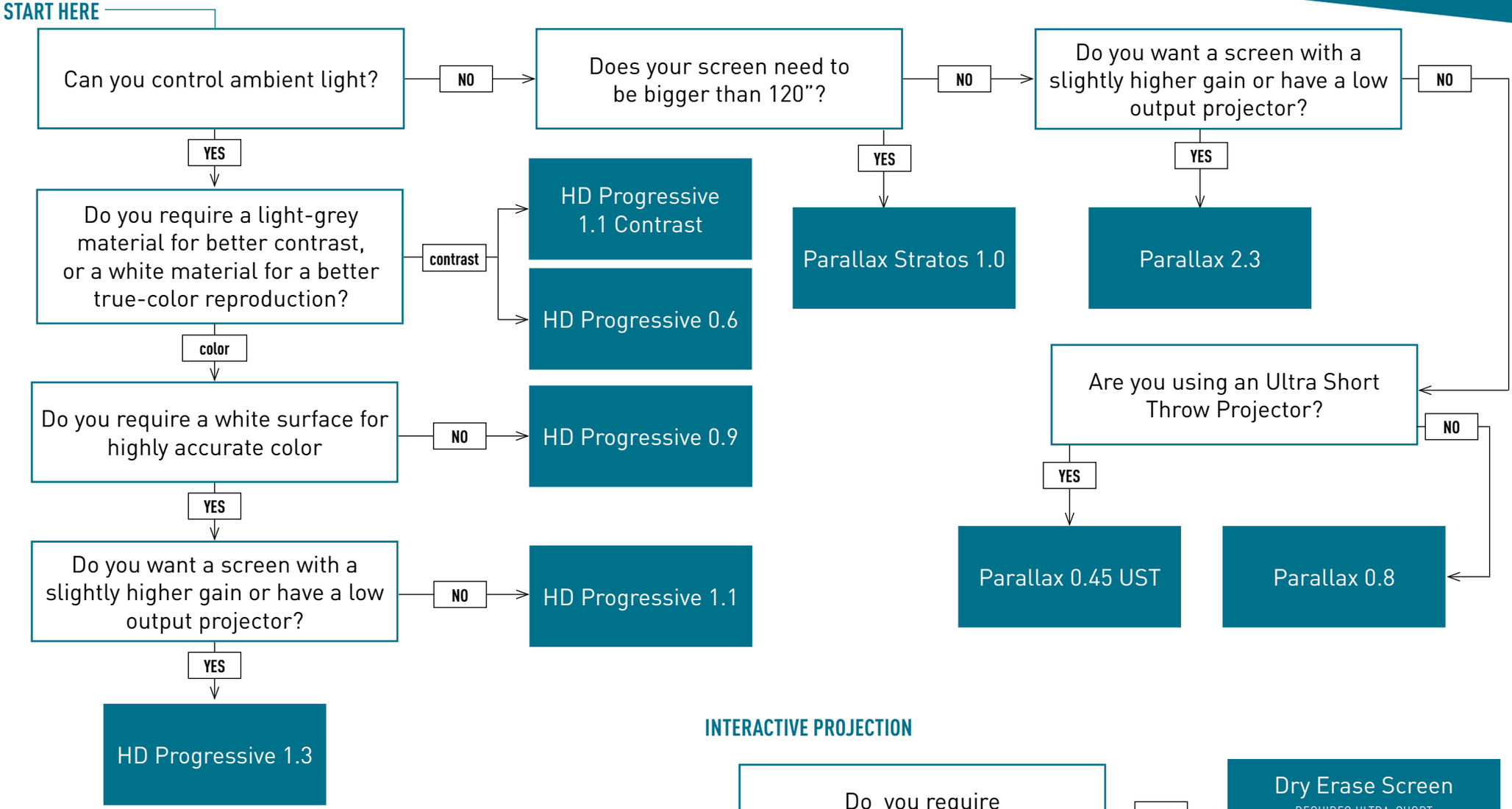
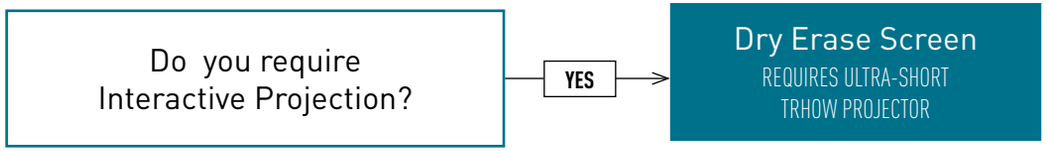
SCREEN SURFACE SELECTION TOOL



INTERACTIVE PROJECTION



PROJECTA

MAKE SURE YOUR PROJECTION IS BRIGHT ENOUGH

Use the LUX FORMULA to determine if your projection will be bright enough for the room conditions. The brightness on the screen is influenced by the projector output (ANSI-Lumen), size of the projected area and the chosen screen gain.

LUX calculation

$$\text{LUX} = \frac{\text{Projector ANSI Lumen}}{\text{Screen surface area in m}^2} \times \text{gain}$$

Brightness scale

Room conditions	LUX
all lights and windows	1100
all lights	850
most lights	650
dim lights	450
dark	200

Please note: To avoid the chance of speckling with laser projection, we recommend a projection surface with a gain below 1.0 - make sure the size and output of the projector accomodate this lower gain to reach the required brightness.

Example

Room: Most lights on during projection
Projector: 4000 Lumen
Screen size: 193 x 310 cm (5.98 m2)
Screen Surface: HD Progressive 0.9

Calculation

$$\frac{\text{4000 ANSI Lumen}}{\text{5.98 m}^2} \times 0.9 = 602 \text{ LUX}$$

Recommended solution

For a room with most lights on we recommend an outcome of at least 650 LUX. The result of this situation will not be bright enough for the room conditions. Update your installation by making one of these changes:

- higher output projector
- smaller screen size
- **higher gain screen**

→ **HD Progressive 1.1**

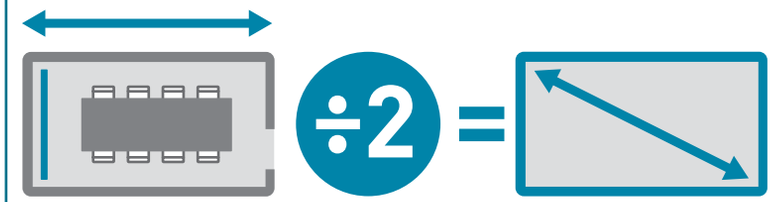
$$\frac{\text{4000 ANSI Lumen}}{\text{5.98 m}^2} \times 1.1 = \textbf{735 LUX}$$

OTHER IMPORTANT STEPS

Match projector and resolution of the surface

Resolution	Pixels	Suggested surface	Front projection
XGA	1024 x 768	Fiberglass STANDARD RESOLUTION	Matte White High Contrast Datalux
HD 720p	1280 x 720		
WXGA	1280 x 800		
WXGA+	1440 x 900	Vinyl - tensioned STANDARD RESOLUTION	Matte White
HD+	1600 x 900		
WSXGA+	1680 x 1050		
HD 1080p	1920 x 1080	Vinyl - tensioned HIGH RESOLUTION RECOMMENDED	HD Progressive
WUXGA	1920 x 1200		
WQHD (2K)	2560 x 1440	Vinyl - tensioned HIGH RESOLUTION NECESSARY	HD Progressive
WQXGA (2K)	2560 x 1600		
4K	4096 x 2160		

Determine the size of your projection surface



Room depth **Diagonal size**

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