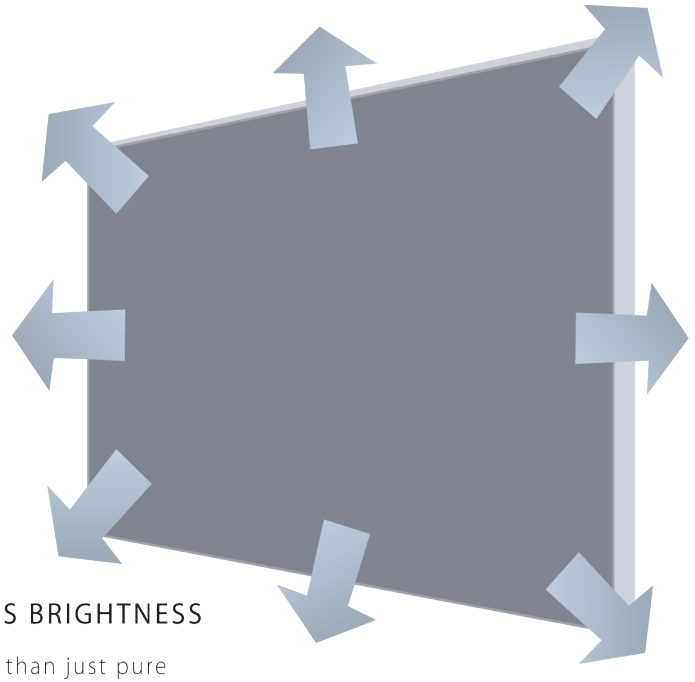
DIFFUSION TECHNOLOGY

Pro Display's diffusion technology uses an advanced optical substrate hand cast to enable increased control over the projected image capturing and diffusing the light at all angles. The result is up to 10 times the brightness and perfect image uniformity without the hot-spots found in traditional projection screens.



DIFFUSION SCREEN PRODUCTION

Producing a hand cast diffusion screen is an art in itself and far more labour intensive than the production methods used for other coated or extruded screens. Pro Display diffusion screens are produced in glass moulds using a very technical and precise process. At Pro Display, we insist on perfection. Our failure rate is running at 17 – 20% meaning 1 in every 5 sheets produced will not pass our stringent quality control procedures.

THE PRODUCTION PROCESS

» Production, planning and preparation (2 - 3 days)
» Creation of diffusion material (7 days)
» Add colour dye. Mix under vacuum conditions (2 days)
» Prepare glass moulds and add diffusion material
» Oven bake (36 hours)
» Cooling process (24 hours)
» First inspection and sample batch test using projection
» Add protective film and store
» Screens are then cut and crated

CONTRAST IS AS IMPORTANT AS BRIGHTNESS

There's more to a great visual display than just pure power (brightness). Contrast is key to the perfect image - especially when using single lens projectors, which are often very bright but have relatively poor black-levels. For use in brightly-lit rooms and outdoor environments Pro Display has developed special contrast enhancers within our diffusion screens which improves the perceived contrast and black levels of your projected image.