Vortex

Combining the Best of Optical and Diffusion Rear Screen Technology

The Vortex is a marriage of the best features of two rear screen technologies—optical and diffusion.

A 0.5 mm Fresnel lens gathers the light from the projector and directs it at a right angle through the screen. As the light exits the screen on the audience side, a diffusion medium redistributes the light evenly in all directions—up, down, left, right and center. The result is an extraordinary projected image with—

- *Superior resolution*
- *Superb color contrast*
- *Wide viewing cone in both the horizontal and vertical axes*
- *Extraordinary center-to-corner brightness ratio*
- *Uniform brightness without hot spots*

The unique features of the Vortex provide important advantages and benefits—

- *The Vortex is designed for use with single lens projectors*
- *Projected light is collimated, then diffused evenly, making the Vortex well suited for use in videowalls and rooms with tiered seating patterns*
- *Charcoal grey tint provides superior color contrast even under harsh ambient light*
- *The diffusion medium is in the acrylic, so the diffusion medium can't be scratched or damaged*

Large Sizes

The Vortex is available in sizes up to and including 160″ diagonal NTSC Video format.

Installation

When framing a single screen, select Draper's System 100, 200 or 400 framing systems. See details on page 41. For multiple screens or VideoWall applications, our Zero Edge, Clear Lexan or System 200 VideoWall Framing Systems are compatible.

Dimensions & Data—Vortex

Nominal Diagonal	Image Size	Overall Size	Net Wt. (lbs.)
NTSC Video Format (3:4)			
60″	36″ x 48″	37″ x 49″	16
67″	40¾″ x 54″	41¾″ x 55″	18
72″	43¼″ x 57⅝″	44¼″ x 58⅝″	20
84″	50⅜″ x 67¼″	51⅜″ x 68¼″	27
90″	55″ x 73″	56″ x 74″	31
96″	58⅝″ x 77¾″	59⅝″ x 78¾″	44
100″	61″ x 81″	62″ x 82″	46
120″	73″ x 97″	74″ x 98″	66
125″	74¾″ x 99¾″	75¾″ x 100¾″	71
140″	85⅜″ x 113⅜″	86⅜″ x 114⅜″	128
150″	91⅜″ x 121⅜″	92⅜″ x 122⅜″	146
160″	97⅜″ x 129⅜″	98⅜″ x 130⅜″	165

Specifications—Vortex

_____ Rear projection screens to be Draper Vortex, size _____. Material to be cast acrylic, one-piece, not to exceed ¼″ in thickness. Rear (projector) side of screen to be a Fresnel lens, pitch 0.5 mm or 0.8 mm, serving to refract projected light directly toward audience. Light diffusion agents shall feature a dark tint to enhance color contrast. Diffusion agents shall also control vertical and horizontal light distribution. Projector side shall be an ultra-fine Fresnel lens, providing maximum light distribution over a horizontal plane of up to 180°. Front lenses of screen shall be treated with a special anti-reflectance coating, which shall control glare without interfering with the projected image. Screen gain to be 2.0 on axis. Horizontal halfgain angle to be 35° from projection axis. Vertical halfgain angle to be 35° from projection axis.

Options: Screen shall be furnished with factory installed anodized aluminum Cineframe® in (System 100/System 200) style and (black/clear anodized) finish, or System 400 in black finish.

Note to Specifiers: Be sure to specify overall screen size. Draper cannot recommend field cutting or alteration.