DiamondScreen

The Brightest Rear Projection Screen in the World

Designed for Video and Data Projection

DIAMONDSCREEN[™]—the first rear projection screen designed specifically for video and data projection. Unlike conventional rear screens, the DIAMONDSCREEN is cast (molded) and derives its incredible optical performance from its patented Fresnel/ lenticular lens system. Particularly well suited for use with CRT or low light output single lens projectors.

The DIAMONDSCREEN offers-

- > The world's most sophisticated, efficient rear projection screen
- A panoramic 180° horizontal viewing cone, and the largest vertical viewing cone of any product of its type
- ► High Contrast grey optical tint, for superior color contrast
- Anti-reflective properties for superior performance even under conditions of high ambient light
- ► Superior corner-to-center brightness ratio, with no "hot spots"
- ► 3.5 gain on axis
- ▶ The widest range of sizes—and the largest sizes—in the industry

DiamondScreen is available in any custom size up to a maximum overall size of 120 $^{\prime\prime}$ x 160 $^{\prime\prime}.$

Factory installed CINEFRAMES[®] are also available to simplify installation—refer to page 41 for details.

Horizontal section through the center of a DiamondScreen





Dimensions & Data—DiamondScreen

Nominal Diagonal	Viewing Area	Overall Size	Factory-Framed Size	Net Wt. (lbs.)
NTSC Video Format (3:4)				
60″	36" x 48"	37" x 49"		19
67″	40¾" x 54"	41¾" x 55"		24
72″	43¼″ x 575⁄8″	44¼″ x 585⁄8″		27
84"	50½" x 67¼"	51½" x 68¼"		37
90″	55" x 73"	56" x 74"		43
96″	585⁄8″ x 773⁄4″	595%" x 7834"		49
100″	61" x 81"	62" x 82"		53
120″	73" x 97"	74" x 98"		76
125″	74¾" x 99¾"	75¾" x 100¾"		79
130″	79" x 105"	80" x 106"		88
135″	82" x 109"	83" x 110"		95
*140"	85¾" x 113¾"	86¾" x 114¾"	90%" x 118%" ¹	103
*150″	91¾" x 121¾"	92¾" x 122¾"	965%" x 1265%" ¹	118
*160″	97¾" x 129¾"	98¾" x 130¾"	1025%" x 1345%" ¹	134
*170″	101¾" x 135¾"	103¼" x 137¼"	1047/s" x 1387/s" ²	148
*180″	107¾" x 143¾"	109¼" x 145¼"	1107/s" x 1467/s" ²	165
*190″	113¾" x 151¾"	115¼" x 153¼"	1167/8" x 1547/8" ²	184
*200″	118½" x 158½"	120" x 160"	1215/8" x 1615/8" ²	200
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* Factory frame required.

¹These sizes require factory installed System 200 frame.

² These sizes require Large Screen System frame (not factory installed).

Specifications—DiamondScreen

DRAPER DIAMONDSCREEN, size ______. Material to be cast acrylic, one-piece, not to exceed 1/4" in thickness, with special patented lens design. Rear (projector) side of screen to be a Fresnel lens, pitch 0.5mm, serving to refract projected light directly toward audience. Light diffusion agents permanently embedded in screen matrix shall be tinted with DRAPER High Contrast tint to enhance color contrast. These diffusion agents shall also control vertical light distribution. Front (audience) side shall be an ultra-fine linear lens,

pitch 0.3mm, providing maximum light distribution over a horizontal plane of 180°. Front lens 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 3.5 ± 0.3 on axis. Horizontal half gain angle to be not less than 33° from projection axis. Vertical half gain angle to be ± 9 -10° from projection axis. Entire screen shall be UL94HB flame class approved.

Option: Screen shall be furnished with factory installed anodized aluminum CINEFRAME in (SYSTEM 100/200) style and (clear/black) finish or in SYSTEM 400 style and black finish.