High Contrast Black

Specifications—High Contrast Black

Draper High Contrast Black rear screens, size ________ (up to 47” x 63”). Rear (projector) side of screen to be a Fresnel lens, serving to refract projected light directly toward audience. Front (audience) side shall be black bead lens. Screen to be resistant to ambient light. Recommended lens throw ratio range 0.7-2.1.

Options: Single screen to be furnished with factory installed anodized aluminum frame, (System 100/System 200) in (clear/black) finish, or System 400, in black finish. For multiple screens or VideoWall applications, specify Draper’s Zero Edge, Clear Lexan® or System 200 VideoWall Framing Systems.

Note to Specifiers—Be sure to specify overall screen size as well as opening size. Draper cannot recommend field cutting or alteration.

Frame Options:

Single screens—Rigid rear screen installation costs and problems are virtually eliminated with factory-installed Cineframes. Simply place the screen in the finished wall opening, shim into position, and trim as desired. Two styles available, extruded of 6063-T5 alloy anodized aluminum. See back page for diagrams.

Multiple Screens/VideoWalls—Multiple rear screen VideoWalls are used in command and control rooms, network operations centers, sports and gaming venues, point of purchase advertising and the entertainment industry. All VideoWalls are custom designed and manufactured. Technical assistance and CAD design service are available. Two styles available. See back page for diagrams.

Framing by others—Field-installed framing systems may be used and provided by others. Steel, wood and aluminum are all suitable materials. It is essential that any High Contrast Black screen be fully isolated from load bearing, and adequate clearance must be allowed for insertion into the rough opening. Additionally, framing systems should allow for the acrylic expansion-contraction factor. Consult a qualified glazing specialist when planning any High Contrast Black field installation.

Dimensions & Data

<table>
<thead>
<tr>
<th>NTSC 4:3 Diagonal</th>
<th>50&quot;</th>
<th>60&quot;</th>
<th>67&quot;</th>
<th>72&quot;</th>
<th>80&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Size</td>
<td>30½&quot; x 40¼&quot;</td>
<td>37&quot; x 49&quot;</td>
<td>40½&quot; x 54¼&quot;</td>
<td>43½&quot; x 57¼&quot;</td>
<td>47&quot; x 63&quot;</td>
</tr>
<tr>
<td>Viewing Area</td>
<td>29½&quot; x 39¼&quot;</td>
<td>36&quot; x 48&quot;</td>
<td>39½&quot; x 53¼&quot;</td>
<td>42½&quot; x 56¼&quot;</td>
<td>46&quot; x 62&quot;</td>
</tr>
<tr>
<td>Thickness at edge</td>
<td>⅛&quot;</td>
<td>⅛&quot;</td>
<td>⅛&quot;</td>
<td>¼&quot;</td>
<td>¼&quot;</td>
</tr>
<tr>
<td>Screen Focal Length</td>
<td>32½&quot;</td>
<td>32½&quot;</td>
<td>32½&quot;</td>
<td>43½&quot;</td>
<td>49¼&quot;</td>
</tr>
<tr>
<td>Recommended Throw Distance (Nom.)</td>
<td>27&quot;-49&quot;</td>
<td>37&quot;-108&quot;</td>
<td>37&quot;-108&quot;</td>
<td>48&quot;-108&quot;</td>
<td>41&quot;-108&quot;</td>
</tr>
<tr>
<td>Peak Gain</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>85</td>
<td>.85</td>
</tr>
<tr>
<td>Horizontal Viewing Cone</td>
<td>180°</td>
<td>180°</td>
<td>180°</td>
<td>180°</td>
<td>180°</td>
</tr>
<tr>
<td>Horizontal Half-gain Angle</td>
<td>±35°</td>
<td>±35°</td>
<td>±35°</td>
<td>±35°</td>
<td>±35°</td>
</tr>
<tr>
<td>Vertical Half-gain Angle</td>
<td>±35°</td>
<td>±35°</td>
<td>±35°</td>
<td>±35°</td>
<td>±35°</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HDTV 16:9 Diagonal</th>
<th>55&quot;</th>
<th>71&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Size</td>
<td>27&quot; x 48&quot;</td>
<td>34 7/8&quot; x 62&quot;</td>
</tr>
<tr>
<td>Viewing Area</td>
<td>26&quot; x 47&quot;</td>
<td>33 7/8&quot; x 61&quot;</td>
</tr>
<tr>
<td>Thickness at edge</td>
<td>½&quot;</td>
<td>¼&quot;</td>
</tr>
<tr>
<td>Screen Focal Length</td>
<td>32½&quot;</td>
<td>49¼&quot;</td>
</tr>
<tr>
<td>Recommended Throw Distance (Nom.)</td>
<td>37&quot;-108&quot;</td>
<td>41&quot;-108&quot;</td>
</tr>
<tr>
<td>Peak Gain</td>
<td>1.0</td>
<td>.85</td>
</tr>
<tr>
<td>Horizontal Viewing Cone</td>
<td>180°</td>
<td>180°</td>
</tr>
<tr>
<td>Horizontal Half-gain Angle</td>
<td>±35°</td>
<td>±35°</td>
</tr>
<tr>
<td>Vertical Half-gain Angle</td>
<td>±35°</td>
<td>±35°</td>
</tr>
</tbody>
</table>

Please Mark Appropriate Selections

Indicate overall dimension of screen (H X W), as well as opening size:

For Single Screens:

Optional Cineframe®:
- System 100
  - Clear Anodized Finish
  - Black Finish
- System 200
  - Clear Anodized Finish
  - Black Finish
- System 400 (Black Finish)
- Framing By Others

For Multiple Screens or VideoWalls:

Optional VideoWall Framing System:
- Clear Lexan® Framing System
- Zero Edge Framing System
- Screen Configuration (H x W)
- Single Plane
- Curved
- Upper Row Angle (for multi-tiered only)
- Sill Height (distance from floor)

PROJECT: ____________________________
ARCHITECT: ____________________________
CONTRACTOR: ____________________________
SUPPLIER: ____________________________
DATE: ______________ REVISED: ______________
Optional Factory–Installed Framing Systems for Draper High Contrast Black Screens

Rigid rear screen installation costs and problems are virtually eliminated with factory-installed Cineframes. Simply place the screen in the finished wall opening, shim into position, and trim as desired. Three styles available. All are extruded of 6063-T5 alloy anodized aluminum.

**System 400**

System 400 simplifies your installation. Cut a rough opening \( \frac{3}{8} '' \) larger than the overall frame size*, slide the screen in and bolt into place. No finish carpentry required. System 400 has a \( 1\frac{3}{4} '' \) wide dress trim that hides the opening. The audience only sees an attractive frame around a rear screen. Suitable for all sizes of High Contrast Black screens. Black finish. Weighs 1 lb., 7 oz. per lineal foot. Reduces clear viewing area by 1" in each dimension.

*Add \( 1\frac{5}{8} '' \) to overall screen size to calculate the overall size of that portion of the System 400 Cineframe which fits within the rough opening.

**System 200**

Adds \( 4\frac{1}{4} '' \) to overall size of screen; reduces viewing area by 1" in each dimension. Cut a rough opening \( \frac{3}{8} '' \) larger than the overall frame size. Suitable for any size High Contrast Black screen. Choice of clear anodized or black finish. Weighs 1 lb. per lineal foot.

**System 100**

Simple, clean frame for smaller High Contrast Black screens. Cut a rough opening \( \frac{3}{8} '' \) larger than the overall frame size. Adds \( 1\frac{3}{4} '' \) to overall height and width of screen; reduces clear viewing area by \( \frac{7}{8} '' \) in each dimension. Suitable for all sizes High Contrast Black screens. Choice of black or clear anodized finish. Weighs 3 oz. per lineal foot.

**Framing Systems by Others**

Field-installed framing systems may be used and provided by others. Steel, wood and aluminum are suitable materials. The High Contrast Black screen must be isolated from load bearing, and a minimum \( \frac{3}{8} '' \) clearance must be allowed for insertion into the opening. High Contrast Black framing systems should allow for acrylic expansion. Consult a qualified glazing specialist.

**VideoWall/Multiple Screen Frame Systems**

**Zero Edge**

**Clear Lexan®**

Clear Lexan® millions and muntins support screens with minimum separation

www.draperinc.com (765) 987-7999