



The dnp WVF Screen (Wide View FEL Screen) sets new standards for the compromise on image brightness and wide viewing angles. It offers high contrast, excellent viewing angles and allows design of near-seamless display walls with bright, speckle-free images.



dnp optical rear  
projection screens

The dnp WVF Screen solves the traditional problem of achieving high brightness combined with excellent viewing angles when designing display wall rear projection cubes. The WVF Screen offers a completely unique combination of high brightness and wide viewing angles at an attractive price point. And at the same time you will not see an intermittent change in brightness when moving around the screen - the screen provides a smooth viewing angle experience.

Made from an acrylic styrene copolymer material the dnp WVF Screen is highly resistant to unstable projection environments. While acrylic based screens expand/retract with room humidity, the WVF Screen retains its dimensions. This allows design of cubes and display walls with almost invisible seams.

The structure of the lens is designed to eliminate the image colour shift that occurs when watching the image from different viewing angles.

The advanced lens design includes a Fresnel lens and a contrast enhancing Black Stripe lenticular structure that is unique for dnp screens. As a result, the screen is extremely tolerant to ambient light.

- > Unsurpassed contrast
- > Centre-to-corner brightness uniformity
- > Wide viewing angles
- > No speckle
- > Smooth viewing angle experience
- > No image colour shift
- > Low humidity expansion/absorption
- > Multiple options for focal length
- > Compatible with all standard projectors

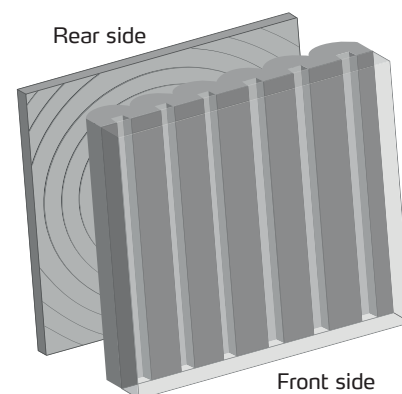
## Product details

WVF Screen		4:3 aspect ratio				16:9 aspect ratio		
Screen size		50"	60"	70"	80"	50"	60"	70"
Dimensions								
Width	mm	1040 +/-1	1245 +/-1	1438 +/-1	1625 +/-1	1140 +/-1	1360 +/-1	1590 +/-1
Height	mm	790 +/-1	940 +/-1	1138 +/-1	1219 +/-1	660 +/-1	780 +/-1	910 +/-1
Thickness	mm	5.4 +/-0.3	5.4 +/-0.3	5.4 +/-0.3	6.0 +/-0.3	5.4 +/-0.3	5.4 +/-0.3	6.0 +/-0.3
Weight	kg	5.2 +/-0.3	7.5 +/-0.3	10.4 +/-0.3	14.0 +/-0.3	4.8 +/-0.3	6.8 +/-0.3	10.2 +/-0.3
Width	inch	40.9 +/-0.04	49.0 +/-0.04	56.6 +/-0.04	64.0 +/-0.04	44.9 +/-0.04	53.5 +/-0.04	62.6 +/-0.04
Height	inch	31.1 +/-0.04	37.0 +/-0.04	44.8 +/-0.04	48.0 +/-0.04	26.0 +/-0.04	30.7 +/-0.04	35.8 +/-0.04
Thickness	inch	0.21 +/-0.01	0.21 +/-0.01	0.21 +/-0.01	0.24 +/-0.01	0.21 +/-0.01	0.21 +/-0.01	0.24 +/-0.01
Weight	lbs	11.5	16.4	23.0	30.9	10.6	14.9	22.6
Image area								
Width	mm	1016	1219.2	1400	1600	1107	1328	1550
Height	mm	762	914.4	1050	1200	623	747	872
Width	inch	40	48	55.1	63	43.6	52.3	61
Height	inch	30	36	41.3	47.2	24.5	29.4	34.3

A wide range of fresnel lens focal lengths are available to match the actual projection engine lens.  
Other screens sizes are available upon request.

## Screen profile (horizontal section)

The ultra fine pitch Fresnel lens focuses the projected image and distributes it through a 2-layer lenticular lens. This element enhances the image for optimum viewing by distributing light vertically and horizontally. The black stripes absorb ambient light, and finally the image is transported through a carrier layer.



## General specifications

### Optical specifications

Peak gain	2.0 +/- 10%
Lenticular pitch	0.146

### Operating environment

Temperature	°C	5-35
	°F	41-95
Humidity (non-condensing)	%RH	30-70

### Humidity/temperature expansion coefficient

Coefficient of thermal expansion ( $10^{-6}$  m/m/°C)

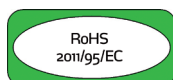
Fresnel element	67
Front side element	67

See [graph](#) for details on humidity expansion

### Included in the package

Gloves, quality certificate

### Certificates



## Gain chart

