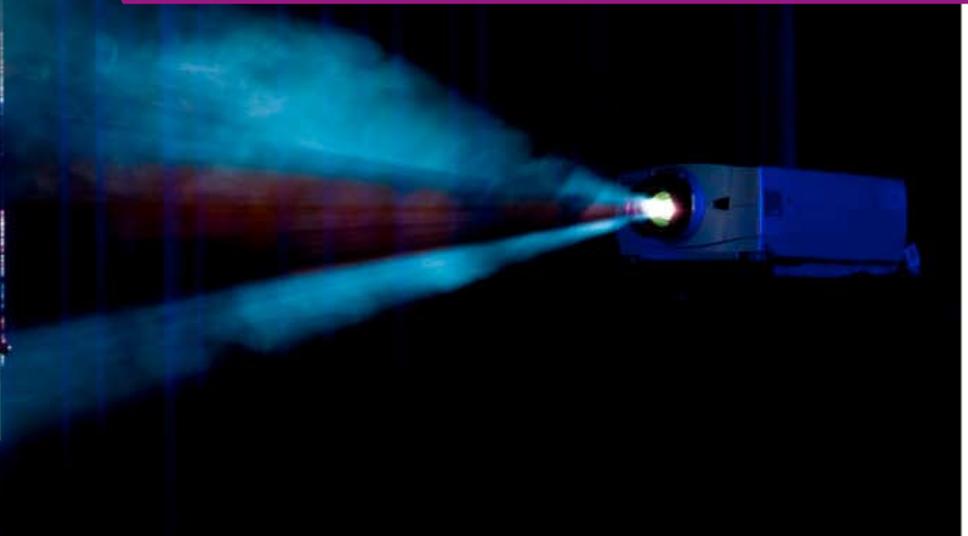


PLEXIGLAS® RP

High Quality Rear Projection



 **PLEXIGLAS®**
the original from Röhm

PLEXIGLAS® RP: Projection with strong contrast – even in bright environments

The Product Range

PLEXIGLAS® RP was especially developed for rear projection to ensure optimal image generation in this demanding field of application.

The base material is highly transparent PMMA with its excellent light transmission (92%). It offers very good mechanical strength, which makes the rear projection screens extremely hard-wearing.

Evonik Röhm offers three types of RP screens that are optimized for different applications.

The Daylight Screen is 3mm thick and is a universal product that is suitable for every environment. It represents the ideal compromise between contrast, gain and half-gain. All this is combined with an excellent price/performance ratio and a tough configuration.

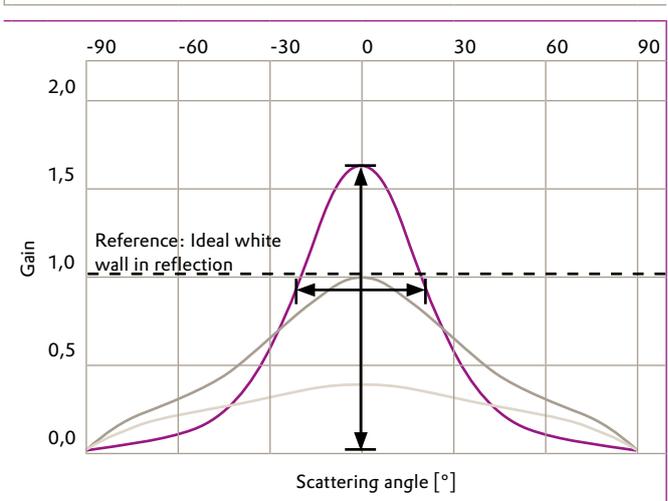
Optimized Contrast

The light grey color of PLEXIGLAS® RP enables very good contrast. Any environmental light is absorbed by this color, which provides a brilliant image.

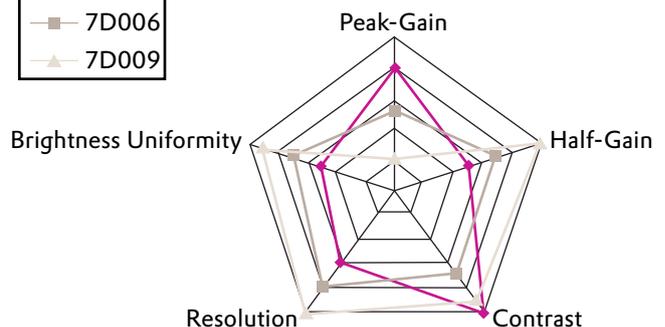
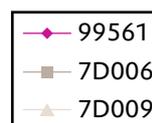
The conference room requires less darkening than usual.



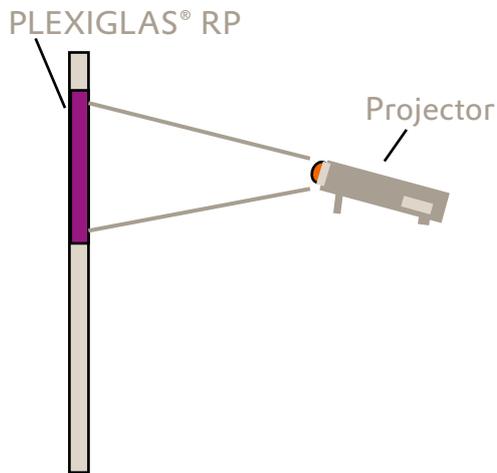
Gain chart



— Daylight 99561 RP — Studio 7D006 RP — Control 7D009 RP



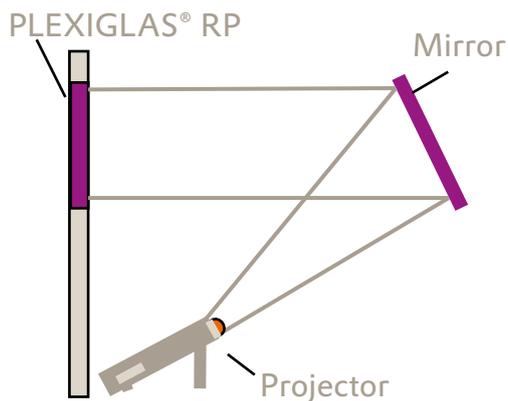
PLEXIGLAS® RP – Examples of setups



Setup using rear projection

Direct projection requires a distance of approx. 1.5 x screen diagonal between the projector and the RP screen.

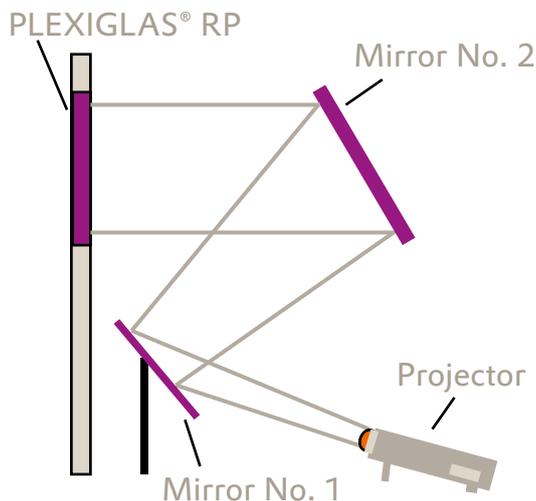
This distance can be reduced to a third using wide-angle projectors with a short throw.



Rear projection in cubes, using a single-mirror light path

Cubes are also based on rear projection technology.

Besides special wide-angle light engines, the depth of the device is reduced by folding the beam path using a mirror.



Rear projection using normal lens and two mirrors

Minimization of the required space by using mirrors

By folding the projector beam using special mirrors, the space required for setup can be reduced to a minimum.

Since adjustment of the total light path is more labor-intensive, this variant is more suited to permanently installed systems.

PLEXIGLAS® RP

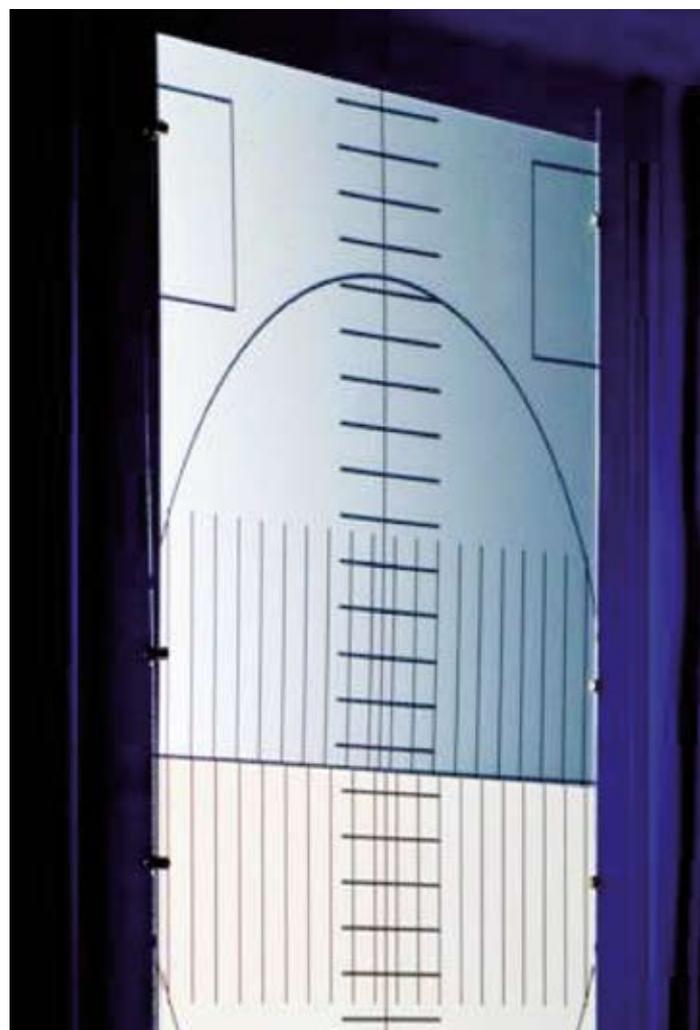
Technical Data

Technical Data

| | PLEXIGLAS® RP Daylight 99561 | PLEXIGLAS® RP STUDIO 7D006 | PLEXIGLAS® RP CONTROL 7D009 |
|---------------------------|---|--|--|
| Standard formats | Thickness 3 mm 3050 mm × 2050 mm 6000 mm × 2050 | Thickness 5 mm 2200 mm × 1600 mm | Thickness 5 mm 2200 mm × 1600 mm |
| Environmental light level | Daylight High contrast in bright environments | Indoor Good contrast – also in in bright environments | Daylight High contrast in bright environments |
| Color | Anthracite | Light Grey | Anthracite |
| Optical data | | | |
| Gain | 1,6 | 1,0 | 0,4 |
| Half-gain | ± 24° | ± 38° | ± 65° |
| Light transmittance | 42% | 45% | 24% |
| Surface gloss ISO 2813 | | R(20°) ~ 3 R(60°) ~ 20 R(85°) ~ 20 | |

Further Material Data

| | |
|---|-----------------------|
| Elastic modulus (ISO 527-2/1B/1) | 3300 MPa |
| Tensile strength (ISO 527-2/1B/5) | 72 MPa |
| Elongation at break (ISO 527-2/1B/5) | 4,5% |
| Notched impact strength (ISO 179/1eA) | 1,6 kJ/m ² |
| Charpy (ISO 179/1fu) | 15 kJ/m ² |
| Vicat softening temperature (ISO 306, B50) | 105 °C |
| Water uptake (24h, ISO 62) | 38 mg |



PLEXIGLAS® RP – Professional Screens

Professional environments such as TV studios or control rooms make very stringent requirements in terms of projection contrast and homogeneity.

The quality of the image is close to that of “optical” projection screens, which are built by means of complex technologies including Fresnel lenses.

In the high-end PLEXIGLAS® RP products, highly effective light-diffusing particles are concentrated in a thin surface layer using a new production method. This enables us to manufacture high-resolution screens with very good brightness uniformity.



* = registered trademark

PLEXIGLAS is a registered trademark of Evonik Röh m GmbH, Darmstadt, Germany.

Certified to DIN EN ISO 9001 (quality) and DIN EN ISO 14001 (environment)

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Evonik Röh m GmbH
Performance Polymers
Kirschenallee
64293 Darmstadt
Germany
info@plexiglas.net
www.plexiglas.net
www.evonik.com

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