

New material qualities for roller blinds and vertical louvre blinds



The new, attractive screen fabric with its thin aluminium vapour coating can be combined with the following WAREMA products:

- Basic roller blind • Cassette roller blind • Object roller blind
- Vertical louvre blinds with 127 mm slats

This screen is an attractive proposition thanks to its open, woven structure, which still provides a view to the outside. Contact to the outside and good daylight utilisation are both provided with the roller blind closed. The opening factor of 3% essentially prevents direct glare and strong light contrasts on the facade. The fabric is also suitable for office buildings, where high demands are made of glare protection.

The optimised aluminium vapour coating on the outside provides perfect visual privacy and reduces the amount of sunlight entering the room considerably more than conventional roller blind and vertical louvre blind designs. The total energy transmission coefficient g_{tot} provides an indication of this by specifying the degree of attenuation of solar radiation by the combined glazing and sun shading system (see above diagram).

However, the optimised aluminium vapour coating does not just play an important part during the day and in the summer. On cold nights and in winter it saves energy by improving the heat insulation of the windows. The heat insulation of a typical window nowadays can be improved by more than 30% and even up to 50% in existing buildings with older glazing (see diagram below).

The screen reduces the strong temperature fluctuations that are passed from outside to inside via the glazing both in

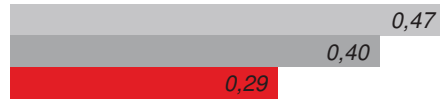
winter and in summer, and therefore increases the comfort level in the room considerably.

The fabric quality, which is available in different colours, is categorised in fire class B1 in accordance with DIN 4102-1.

Total energy transmission coefficient

according to DIN EN 13363-2 based on type of glazing

Glazing with g 0.58



Glazing with g 0.22



■ Polyester, design 40007

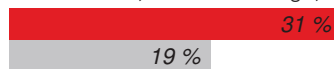
■ Trevira with aluminium vapour coating, design 43138

■ Screen with aluminium vapour coating, design 43166

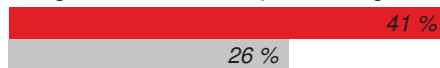
Heat insulation improvement

by an internal roller blind

Conventional, uncoated design, $\epsilon = 0.90$



Design with aluminium vapour coating, $\epsilon = 0.41$



Screen with aluminium vapour coating, $\epsilon = 0.17$



■ Heat transmission coefficient improvement in combination with double glazing from the 1970's (existing building $U_g=2.8$ W/m²K)

■ Heat transmission coefficient improvement in combination with normal heat protection or sun shading system glazing ($U_g=1.13$ W/m²K)