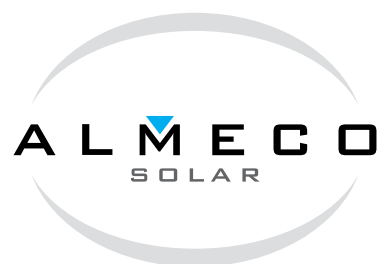
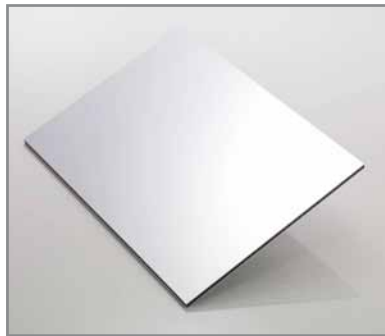


vega prime





vegaprime vegaprime is a composite mirror made using vega WR highly reflective weather resistant aluminium, combined with a plastic core and a corrosion resistant stabilizing aluminum sheet on the back side. The product can be used flat or can be curved to meet special design requirements. Customers can be provided with the complete mirror ready for mounting on a space frame support structure. Low mirror weight simplifies the construction process and mounting requirements, significantly reducing costs. The exact shape and dimensional characteristics can be designed to meet customer requirements. vegaprime offers an excellent blend of flexibility, light weight and mechanical resistance and can be used flat or formed to a curve and the materials and manufacturing process employed impart excellent shape retention whatever your special design. vegaprime can be offered in many configurations in terms of size, thickness and rigidity. The max size is 1250 mm x 6000 mm.

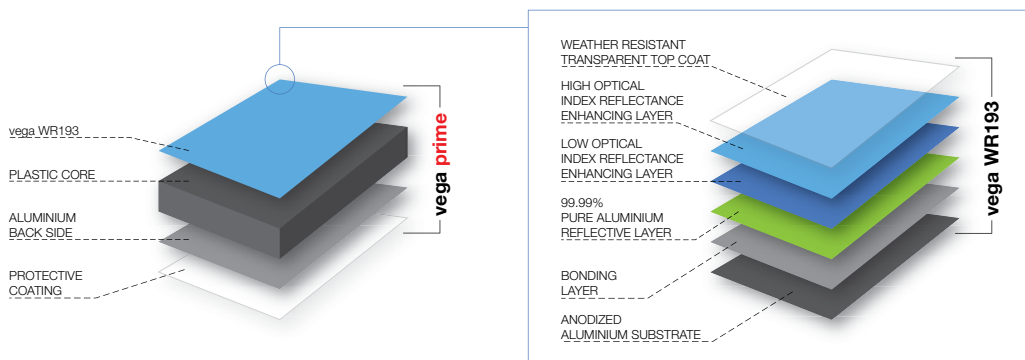
Applications Laminated vegaprime mirrors provide customers with a wide range of production possibilities. vegaprime can be supplied in several sizes, weights and thicknesses; this makes this product suitable for different High, Medium and Low Concentration Solar Power applications like:

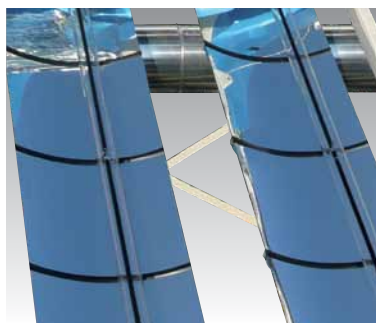
- Low concentration photovoltaic systems
- Fresnel systems
- Parabolic trough collectors
- Heliostats for central receiver tower plants



The mirror surface The vega high reflectance layers are deposited on a substrate of mirror finished brightened and anodized high purity aluminium, which provides a high quality chemically stable surface to give maximum durability to the product and good bonding characteristics to the panel. The PVD applied reflection enhancing system comprises a layer of 99.99% pure aluminium surmounted by two transparent optical layers of alternate low and high refractive index which increase the total reflectance of the surface to over 95%.

The PVD layers are finally protected by a highly transparent, hard, weather resistant top coat which maintains a high reflectance performance (>93% TR) against the effects of abrasion and weathering of the mirror surface.





Standard dimensions	Unit of measurement	2 mm	3 mm	4 mm	5 mm	6 mm
Aluminium thickness	mm	0,30	0,30	0,50	0,50	0,50
Panel Weight	Kg/m ²	2,9	3,8	5,5	6,4	7,3
Standard Width	mm	1250				
Panel tolerances						
Thickness	mm	±0.2				
Length	mm	≤ 4000 mm: -0.0 /+4 4001-6000 mm: 0.0 / +6				

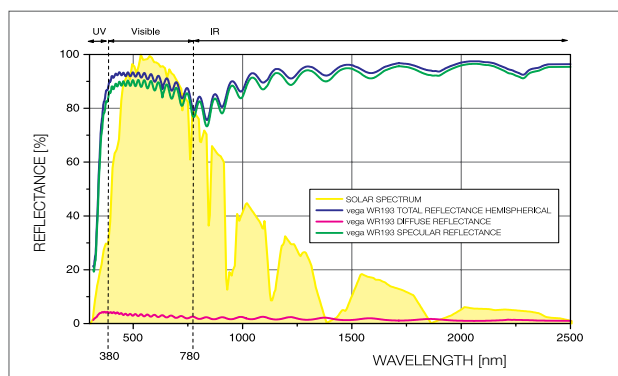
Technical properties						
Rigidity	[E] kNcm ² /m	291	727	2036	3358	5011
Modulus of Elasticity	[E] N/mm ²	70000				
Linear Thermal Expansion	mm/m/°K	2.4 x 10 ²				

Temperature behaviour						
Operational temperature range	°C	-40° ; +80°				

Optical properties						
Total Solar reflectance [ASTM G173]	%	89,9				
Total reflectance "Visible range" [ASTM E1651]	%	>93				
Diffuse reflectance [ASTM G173]	%	1,6				

Physical tests						
Cross hatch adhesion test [EN ISO 2409]		No loss of coating adhesion				
Falling ball impact test [BS EN ISO 6272-1]		No coating failure				

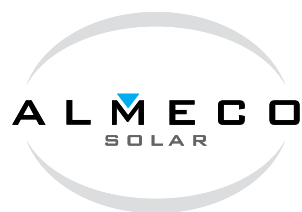
Durability and corrosion test						
UV resistance [EN ISO 4892-3]		< 0,5 % reflectance change in 1000 h				
Neutral salt spray [ASTM B 117 - ISO 9227 NSS]		< 1 % reflectance change in 3000 h				
Humidity resistance [ISO 4623]		< 0,5 % reflectance change in 500 h				



Graphs showing the spectral hemispherical, specular and diffuse reflectance of vega WR193 compared with the solar spectrum. See key for details.



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