

Parabolic Mirrors for Concentrating Solar Power (CSP)

This product information is based on FLABEG specification for solar mirrors (Date: 05th February 2009)

Glass Quality

Float glass according EN 572-2: 2004

Available Mirror Types

Type		Dimension and Thickness ^{**)} in mm	Weight approx.	Pieces/ box	Reflection ^{*)} in %
RP 2	Inner	1570 _{+3/-1} x 1400 _{±1} x 4	22 kg	50	≥ 93,5
	Outer	1570 _{+3/-1} x 1324 _{±1} x 4	21 kg	50	≥ 93,5
	Inner	1570 _{+3/-1} x 1400 _{±1} x 5	28 kg	48	≥ 92,5
	Outer	1570 _{+3/-1} x 1324 _{±1} x 5	26 kg	48	≥ 92,5
RP 3	Inner	1700 _{+3/-1} x 1641 _{±1} x 4	28 kg	50	≥ 93,5
	Outer	1700 _{+3/-1} x 1568 _{+4/-2} x 4	27 kg	50	≥ 93,5
	Inner	1700 _{+3/-1} x 1641 _{±1} x 5	35 kg	48	≥ 92,5
	Outer	1700 _{+3/-1} x 1568 _{+4/-2} x 5	33 kg	48	≥ 92,5
RP 4	Inner / Outer	1570 _{+3/-1} x 1900 _{±2} x 4	30 kg	49	≥ 93,5
	Inner / Outer	1570 _{+3/-1} x 1900 _{±2} x 5	37 kg	47	≥ 92,5

^{*)} in average, according to ISO 9050, AM = 1,5

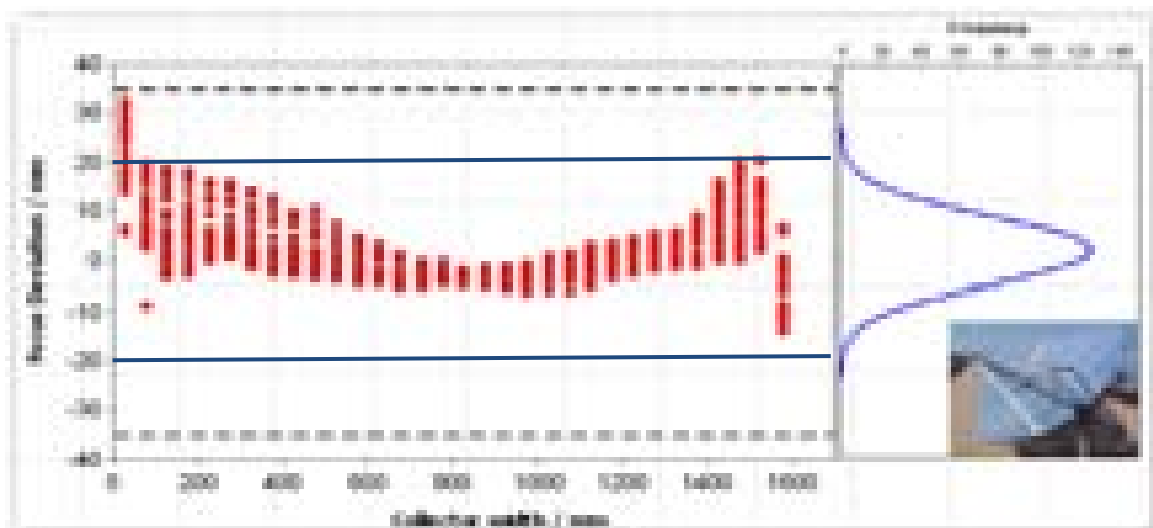
^{**)} Tolerance ± 0,2 mm

Precision of curvature

- Measurement and evaluation by laser beam
- Distance between measuring points – 50 mm in x and y directions
- The series of exterior measurements are 20 mm from the edge
- Intercept factor 70 mm = FDx 12 mm > 99,5%
- Intercept factor 60 mm = FDx 10 mm > 98,5%
- Intercept factor 40 mm = FDx 8 mm > 95%

Durability of silver coating system

- Resistance to humidity as per DIN EN ISO 6270-2 CH 2005: 480 h
- Resistance to salt spray test DIN EN ISO 9227 NSS 2006: 480 h
- Resistance to CASS test DIN EN ISO 9227 CASS 2006: 120 h
- Stability in climatic cycling test 4 h: + 90°C; 4 h: - 40°C; 16 h: DIN EN ISO 6270-2 CH 2005: 10 cycles



Labeling

Each reflector carries a label on the mirror (label size: approx. 50 x 20 mm).

Mounting Elements

- Minimum 4 ceramic elements fastened by adhesive to back of mirror.
- Metal insert nut are inserted in the ceramic elements.
- Adhesive: FLABEG SKS 06
- The tensile strength of each ceramic element is 2000 N (tensile load perpendicular to mirror surface) measured as per FLABEG's tensile strength test in accordance with internal quality assurance instructions.



Packaging

- Alternatively standard packaging in cartons on wood pallets or reuseable racks.
- The carton packaging is suitable only for complete container shipments. Other packaging for individual shipment is available to the Customer on request and at additional cost.
- **Carton packaging is not suitable for outdoor storage.**



Storage of cartons

Cartons must be unloaded from the container not later than 36 hours after delivery. Suitable equipment with sufficiently long loading forks must be used for transporting cartons on the construction site.

Storage facilities must be suitable with regard to size, moisture levels, cleanliness and safety and must ensure that the condition and quality of the mirrors is safeguarded throughout the period of time preceding their installation.

The customer must keep the mirrors separate from other materials and machines on the construction site and provide storage facilities that safeguard the condition and quality of the mirrors.

