



# Alubond Solar Collector Mirror

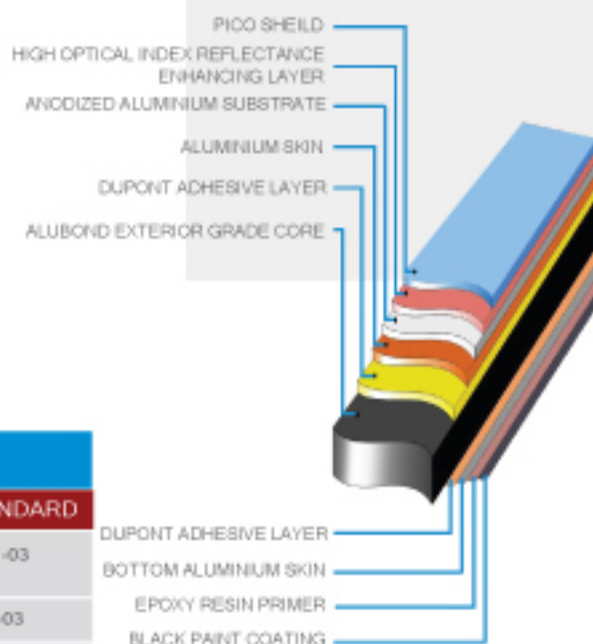
## SPECIFICATION DATA SHEET - ASCM 91

Alubond Solar Collector Mirror ( ASCM ) is a result of pioneering research to create an alternative to Glass mirrors. Conventional glass mirrors currently being used in Concentrated Solar Systems are heavy , expensive and highly breakable.

The Alubond Solar Collector Mirror is the light weight, economical and unbreakable solution.

### ASC 91 - COMPOSITION

Alubond Solar Collector Mirrors (ASC) are the new generation multilayered metal and plastic composite panels.



### CHARECTERISTICS

MECHANICAL PROPERTIES		
DESCRIPTION	ASC 91	TEST STANDARD
TENSILE STRENGTH	26000 / (PSI) 180 N/mm <sup>2</sup>	ASTM D 638 -03
ELONGATION %	4%	ASTM D 638 -03
MINIMUM T BEND RADII	1T	ASTM D 638 -03
YEILD STRENGTH	24000 / (PSI) 165 N/mm <sup>2</sup>	ASTM D 638 -03

WEATHER RESISTANCE PROPERTIES		
DESCRIPTION	ASC 91	TEST STANDARD
QUV TEST IN 3000 H	<1% LOSS OF SOLAR REFLECTANCE	NO VISIBLE CORROSION OR COLOR SHIFT ASTM G154-06
SALT SPRAY TEST 3000H	<1.5% REFLECTANCE	NO CORROSION, PITS, OR OTHER DEFECTS ISO 9227
ACETIC SALT TEST 1000 H	<3%	NO ATTACK AT EDGES ISO 9227
FILFORM CORROSIONS TEST 1000 H	N/A	NO CORROSION, NO UNDER CUTTING AT SCRIBED LINE - GM9682P
COEFFICIENT OF THERMAL EXPANSION (CTE)	+/-0.1 MM PER M <sup>2</sup>	ASTM D696-03
TEMPERATURE RESISTANCE	- 50 TO +80°C	ASTM D976
MAXIMUM OPERATING TEMPERATURE	110°C TO 211°C	ASTM D 648
EXTERIOR & COATING WARRANTY	15 YEARS	
PROTECTIVE COATING	PROTECTALL	

## ASCM 91 - PHYSICAL PROPERTIES

SYSTEM COMPONENT	PROPERTIES
REFLECTOR PANEL	3 MM COMPOSITE METAL
MAINTENANCE	MINIMAL
ABRASION RESISTANCE	GOOD / NO COATING PEEL OFF
PROTECTION IN INVERTED MODE	METAL SKIN PROTECTION
DEEP PARABOLIC SHAPE RETENTION	EASY
WEIGHT	4 KG / M <sup>2</sup>
INSTALLATION	EASY

## PICO SHIELD PERFORMANCE DATA

PROPERTIES	ASCM 91	TEST METHOD
DRY FILM THICKNESS	10-11 MICRONS	DIN EN 13523 - 1, ASTM D 339 - 92a
RESISTANCE TO SALT SPRAY TEST	600 HOURS - PASSES	DIN EN ISO 9227 NSS, ASTM B 117 -07
RESISTANCE TO HUMIDITY	600 HOURS - PASSES	DIN EN ISO 6270 - 2 CH, ASTM D 2247-02
CROSSCUT ADHESION TEST	PASSES	DIN EN 13523 - 6, ASTM D 3359 - 02
T - BEND	1T	DIN EN 13523 - 7, ASTM D 4145-83
MEK TEST	60 DBR	MEK TEST - ASTM D 4752

## REFLECTIVITY PERFORMANCE ASCM 91

ASCM 91	WEIGHTED SOLAR REFLECTANCE
	91.70%

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**Alubond**  
Solar Collector Mirror

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