

## CERTIFICATE OF PRODUCT CONFORMITY

*Dubai Central Laboratory Department (DCLD) of Dubai Municipality,*

*hereby attests that the product(s)*

**THERMAL SOLAR SYSTEM AND COMPONENTS – SOLAR COLLECTORS**

*(Details as per the attached Scope of Certification)*

*manufactured by:*

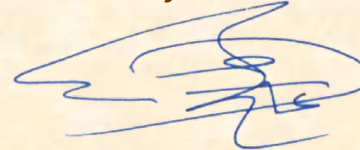
**SOLIMPEKS SOLAR ENERGY CORP.**

**Fevzi cakmak M.10753, S.No. 3/3A, 42050, Karatay, Konya – Turkey**

*have been assessed in accordance with DCLD Document Ref. No. RD-DP21-2001 (IC) “General Rules for DM third party product certification system through factory assessment” and the relevant Specific Rules, and were found in conformity with the standard specification:*

**BS EN 12975-1:2006+A1:2010**

*Accordingly, DCLD hereby authorizes the above manufacturer to affix the DCL Product Conformity Mark to the above-mentioned product(s).*



for / **ENGR. AMIN AHMED AMIN**

**Director, Dubai Central Laboratory Department**

**Dubai Municipality**

Verify:



**Certificate No: CL16020345**

**Valid Until: 01 May 2019**



**Current Issue Date: 02 May 2018**

**Original Issue Date: 02 May 2016**

F-IC-2031 REV 11

*The attached Scope of Certification bearing the same Certificate No. forms an integral part of this Certificate.*

*This Certificate is an electronic document, subject to the Terms and Conditions of the Product Certification System and shall not be reproduced except in full.*

DUBAI CENTRAL LABORATORY DEPARTMENT  
DCL PRODUCT CONFORMITY CERTIFICATION SCHEME

**SCOPE OF CERTIFICATION  
FOR CERTIFICATE NO. CL16020345**

<b>Certificate Issued To:</b>	<b>SOLIMPEKS SOLAR ENERGY CORP.</b> Fevzi Cakmak M. 10753, S. No. 3/3A, 42050, Karatay, Konya, Turkey
<b>Applicable Standard Specification:</b>	BS EN 12975-1:2006 +A1: 2010 – Thermal solar systems and components – Solar Collectors – Part 1: General requirements
<b>Applicable Specific Rules:</b>	RD-DP21-2178 (IC) – Specific Rules Certification of Solar Collectors as per BS EN 12975-1 Through Factory Assessment  RD-DP21-2084 (IC) – Guidelines for Factory Production control Plan for Solar Collector Manufacturers

S/N	PRODUCT DESCRIPTION	BRAND NAME(S) / MODEL(S)	PRODUCT DETAILS
1.	<p><b><u>Glazed Flat Plate Solar Collector WUNDER ALS DRAIN family</u></b></p> <p>Absorber Materials: Full Plate Almeco-Tinox Highly Selective Aluminum with 0.20mm thickness, 0.95 absorptance and 0.03 emittance, laser welded into 10mm riser copper tubes joint with 18mm header copper tubes ;</p> <p>Low Iron Tempered Glass 4mm thickness with 0.91 transmittance top cover;</p> <p>Rockwool thermal insulation with density of 52 kg/m<sup>3</sup>, thermal conductivity of 0.037 W/(m.K) and thickness of 50mm for insulation;</p> <p>Frame structure made of Electrostatic Painted Aluminum Case and Embossed- Finished Aluminum sheet for base sheeting;</p> <p>Silicone, EPDM and Aluminum Frame for sealing materials;</p>	<p><b>“SOLIMPEKS” Brand</b></p> <p><b>WUNDER ALS DRAIN 2510</b></p> <p><b>WUNDER ALS DRAIN 2108</b></p>	<p>Gross area of 2.42 m<sup>2</sup>; Aperture area of 2.24 m<sup>2</sup> and Absorber area of 2.23 m<sup>2</sup>;</p> <p>Gross dimensions: 1988 x 1218 x 90 mm;</p> <p>Weight (dry &amp; packed): 44 kg; Heat Carrier Volume: 1.27 Liters Absorber pipe dimensions: Header - 18 x 0.7mm and Risers – 10 x 0.45mm; Number of Tube is 1 (Meander System); Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 120 lt/h; Maximum stagnation temperature is 211 °C; Inroof-Onroof-Flat Roof mounting</p> <p>Gross area of 2.07 m<sup>2</sup>; Aperture area of 1.92 m<sup>2</sup> and Absorber area of 1.89 m<sup>2</sup>;</p> <p>Gross dimensions: 1988 x 1041 x 90 mm;</p> <p>Weight (dry &amp; packed): 37.2 kg; Heat Carrier Volume: 1.07 Liters Absorber pipe dimensions: Header - 18 x 0.7mm and Risers – 10 x 0.45mm; Number of Tube is 1 (Meander System); Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 105 lt/h; Maximum stagnation temperature is 211 °C; Inroof-Onroof-Flat Roof mounting</p>

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<p>2.</p>	<p><b><u>Glazed Flat Plate Solar Collector WUNDER ALS family</u></b></p> <p>Absorber Materials: Almeco-Tinox Highly Selective Aluminum with 0.30mm thickness, 0.95 absorptance and 0.04 (2510 &amp; 2108) &amp; 0.03 (1808) emittance, laser welded into 8/10mm riser copper tubes joint with 18/22mm header copper tubes ; Low Iron Tempered Glass 4mm thickness with 0.91 transmittance top cover; Rockwool thermal insulation with density of 52 kg/m<sup>3</sup>, thermal conductivity of 0.037 W/(m.K) and thickness of 50mm for insulation; Frame structure made of Electrostatic Painted Aluminum Case and Embossed- Finished Aluminum sheet for base sheeting; Silicone, EPDM and Aluminum Frame for sealing materials;</p>	<p><b>“SOLIMPEKS” Brand</b></p> <p><b>WUNDER ALS 2512</b></p> <p><b>WUNDER ALS 2510</b></p> <p><b>WUNDER ALS 2110</b></p>	<p>Gross area of 2.42 m<sup>2</sup>; Aperture area of 2.24 m<sup>2</sup> and Absorber area of 2.23 m<sup>2</sup>; Gross dimensions: 1988 x 1218 x 90 mm; Weight (dry &amp; packed): 44 kg; Heat Carrier Volume: 1.27 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 12; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 120 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting</p> <p>Gross area of 2.42 m<sup>2</sup>; Aperture area of 2.24 m<sup>2</sup> and Absorber area of 2.23 m<sup>2</sup>; Gross dimensions: 1988 x 1218 x 90 mm; Weight (dry &amp; packed): 44 kg; Heat Carrier Volume: 1.27 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 12; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 120 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting</p> <p>Gross area of 2.07 m<sup>2</sup>; Aperture area of 1.92 m<sup>2</sup> and Absorber area of 1.89 m<sup>2</sup>; Gross dimensions: 1988 x 1041 x 90 mm; Weight (dry &amp; packed): 37.2 kg; Heat Carrier Volume: 1.07 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 105 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting</p>
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		<p><b>WUNDER ALS 2108</b></p>	<p>Gross area of 2.07 m<sup>2</sup>; Aperture area of 1.92 m<sup>2</sup> and Absorber area of 1.89 m<sup>2</sup>; Gross dimensions: 1988 x 1041 x 90 mm; Weight (dry &amp; packed): 37.2 kg; Heat Carrier Volume: 1.07 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 105 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting</p>
		<p><b>WUNDER ALS 1809</b></p>	<p>Gross area of 1.79 m<sup>2</sup>; Aperture area of 1.62 m<sup>2</sup> and Absorber area of 1.59 m<sup>2</sup>; Gross dimensions: 1927 x 927 x 90 mm; Weight (dry &amp; packed): 34.0 kg; Heat Carrier Volume: 1.0 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 100 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting</p>
		<p><b>WUNDER ALS 1808</b></p>	<p>Gross area of 1.79 m<sup>2</sup>; Aperture area of 1.62 m<sup>2</sup> and Absorber area of 1.59 m<sup>2</sup>; Gross dimensions: 1927 x 927 x 90 mm; Weight (dry &amp; packed): 34.0 kg; Heat Carrier Volume: 1.0 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 100 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting</p>

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<p>3.</p>	<p><b><u>Glazed Flat Plate Solar Collector WUNDER ANP family</u></b></p> <p>Absorber Materials: Black Paint Coated Aluminum with 0.40mm thickness, 0.94 absorptance and 0.30 emittance, laser welded into 8/10mm riser copper tubes joint with 18/22mm header copper tubes ;</p> <p>Normal IronTempered Glass 4mm thickness with 0.875 transmittance top cover;</p> <p>Glasswool thermal insulation with density of 40 kg/m<sup>3</sup>, thermal conductivity of 0.037 W/(m.K) and thickness of 50mm for insulation;</p> <p>Frame structure made of Electrostatic Painted Aluminum Case and Embossed- Finished Aluminum sheet for base sheeting;</p> <p>Silicone, EPDM and Aluminum Frame for sealing materials;</p>	<p><b>“SOLIMPEKS” Brand</b></p> <p><b>WUNDER ANP 2710</b></p> <p><b>WUNDER ANP 2510</b></p> <p><b>WUNDER ANP 2108</b></p>	<p>Gross area of 2.70m<sup>2</sup>; Aperture area of 2.53 m<sup>2</sup> and Absorber area of 2.53 m<sup>2</sup>; Gross dimensions: 2220 x 1218 x 90 mm;</p> <p>Weight (dry &amp; packed): 48 kg; Heat Carrier Volume: 1.39 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.5mm;</p> <p>Number of Tube is 10; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 20 bars; Nominal Flow Rate is 130 lt/h; Maximum stagnation temperature is 135 °C; Inroof-Onroof-Flat Roof mounting</p> <p>Gross area of 2.42m<sup>2</sup>; Aperture area of 2.25 m<sup>2</sup> and Absorber area of 2.23 m<sup>2</sup>; Gross dimensions: 1988 x 1218 x 90 mm;</p> <p>Weight (dry &amp; packed): 44 kg; Heat Carrier Volume: 1.27 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.5mm;</p> <p>Number of Tube is 10; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 20 bars; Nominal Flow Rate is 120 lt/h; Maximum stagnation temperature is 135 °C; Inroof-Onroof-Flat Roof mounting</p> <p>Gross area of 2.07m<sup>2</sup>; Aperture area of 1.92 m<sup>2</sup> and Absorber area of 1.90 m<sup>2</sup>; Gross dimensions: 1988 x 1041 x 90 mm;</p> <p>Weight (dry &amp; packed): 37.2 kg; Heat Carrier Volume: 1.07 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.5mm;</p> <p>Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 20 bars; Nominal Flow Rate is 105 lt/h; Maximum stagnation temperature is 135 °C; Inroof-Onroof-Flat Roof mounting</p>
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		<b>WUNDER ANP 1808</b>	Gross area of 1.79m <sup>2</sup> ; Aperture area of 1.65 m <sup>2</sup> and Absorber area of 1.63 m <sup>2</sup> ; Gross dimensions: 1927 x 927 x 90 mm; Weight (dry & packed): 34.0 kg; Heat Carrier Volume: 1.0 Liter Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.5mm; Number of Tube is 8; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 20 bars; Nominal Flow Rate is 100 lt/h; Maximum stagnation temperature is 135 °C; Inroof-Onroof-Flat Roof mounting
4.	<b><u>Glazed Flat Plate Solar Collector WUNDER ANSG family</u></b>  Absorber Materials: Almeco-Tinox Highly Selective Aluminum with 0.30mm thickness, 0.95 absorptance and 0.04 emittance, laser welded into 8/10mm riser copper tubes joint with 18/22mm header copper tubes ; Normal Iron Tempered Glass 4mm thickness with 0.91 transmittance top cover; Glasswool thermal insulation with density of 52 kg/m <sup>3</sup> , thermal conductivity of 0.037 W/(m.K) and thickness of 50mm for insulation; Frame structure made of Electrostatic Painted Aluminum Case and Embossed- Finished Aluminum sheet for base sheeting; Silicone, EPDM and Aluminum Frame for sealing materials;	<b>“SOLIMPEKS” Brand</b>  <b>WUNDER ANSG 2510</b>         <b>WUNDER ANSG 2108</b>	Gross area of 2.42m <sup>2</sup> ; Aperture area of 2.24 m <sup>2</sup> and Absorber area of 2.23 m <sup>2</sup> ; Gross dimensions: 1988 x 1218 x 90 mm; Weight (dry & packed): 44 kg; Heat Carrier Volume: 1.27 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 12; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 120 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting  Gross area of 2.07m <sup>2</sup> ; Aperture area of 1.92 m <sup>2</sup> and Absorber area of 1.89 m <sup>2</sup> ; Gross dimensions: 1988 x 1041 x 90 mm; Weight (dry & packed): 37.2 kg; Heat Carrier Volume: 1.07 Liters Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 105 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting





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		<b>WUNDER ANSG 1808</b>	Gross area of 1.79m <sup>2</sup> ; Aperture area of 1.62 m <sup>2</sup> and Absorber area of 1.59 m <sup>2</sup> ; Gross dimensions: 1927 x 927 x 90 mm; Weight (dry & packed): 34.0 kg; Heat Carrier Volume: 1.0 Liter Absorber pipe dimensions: Header – 18/22 x 0.7mm and Risers – 8/10 x 0.45mm; Number of Tube is 9; Tube Pitch is 110mm; Maximum operating pressure is 10 bars; Test Pressure is 25 bars; Nominal Flow Rate is 100 lt/h; Maximum stagnation temperature is 232 °C; Inroof-Onroof-Flat Roof mounting
5.	<b><u>Glazed Flat Plate Solar Collector EXCELL ALS family</u></b>  Absorber Materials: Almeco-Tinox Selective Aluminum with 0.40mm thickness, 0.95 absorptance and 0.04 emittance, laser welded into 8mm riser copper tubes joint with 18mm header copper tubes ; Low Iron Tempered Glass 3.2mm thickness with 0.94 transmittance top cover; Glasswool thermal insulation with density of 50 kg/m <sup>3</sup> , thermal conductivity of 0.03 W/(m.K) and thickness of 40/20mm for insulation; Frame structure made of Aluminum Case and Embossed- Finished Aluminum sheet for base sheeting; Silicone, EPDM and Aluminum Frame for sealing materials;	<b>“SOLIMPEKS” Brand</b>  <b>EXCELL ALS MA- 0643</b>	Gross area of 1.94m <sup>2</sup> ; Aperture area of 1.88 m <sup>2</sup> and Absorber area of 1.85 m <sup>2</sup> ; Gross dimensions: 1958 x 992 x 50 mm; Weight (dry & packed): 27 kg; Heat Carrier Volume: 1.2 Liters Absorber pipe dimensions: Header – 18 x 0.35mm and Risers – 8 x 0.225mm; Number of Tube is 10; Tube Pitch is 95mm; Maximum operating pressure is 8.6 bars; Test Pressure is 20 bars; Nominal Flow Rate is 110 lt/h; Maximum stagnation temperature is 169 °C; Inroof-Onroof-Flat Roof mounting

NOTE 1: The above products shall bear the DCL Conformity Mark applied on each individual product.

.NOTE 2: This document forms part of the Certificate of Product Conformity bearing the same certificate number

Original Issue Date : 02 May 2016  
Current Issue Date : 02 May 2018  
Valid Until : 01 May 2019

ARIF HUSAIN AL MARZOOQI  
Head of Products Conformity Assessment Section  
Dubai Central Laboratory Department