

CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality,

hereby attests that the product(s)

THERMAL SOLAR SYSTEMS AND COMPONENTS – SOLAR COLLECTORS

(Details as per the attached Scope of Certification)

manufactured by:

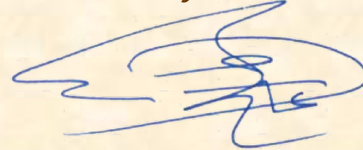
VENMAN S. A.

P.O.BOX. 1091, 570 22 Ind. Area, Sindos Thessaloniki, Greece

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: CL18020617

Valid Until: 29 July 2019



Current Issue Date: 30 July 2018

Original Issue Date: 30 July 2018

DM-DCLD-F-IC-2031 REV 13

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**

**SOLAR SCOPE OF CERTIFICATION
FOR CERTIFICATE NO. CL18020617**

Certificate Issued To:	VENMAN S. A. P.O. BOX 1091, 570 22 Ind. Area, Sindos Thessaloniki, Greece
Applicable Standard Specification:	BS EN 12975-1:2006 + A1: 2010 – Thermal solar systems and components – Solar Collectors – Part 1: General requirements
Applicable Specific Rules:	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

Technical Data	TECHNICAL SPECIFICATIONS OF COLLECTORS H81							
Family Name	H81							
Model / Size	H81-15	H81-17	H81-19	H81-20	H81-21	H81-23	H81-25	H81-26
Brand Name	VENMAN – H81							
Collector Type	Flat Plate Solar Collector							
Max. Operating Pressure, Bar	10							
Max. Stagnation Temperature, °C	162.6							
Insulation Material, Density and Thickness	Rockwool, 50 kg/m ³ and 30mm							
Sealing Materials	Elastomeric Sealant							
Absorbing Surface	Aluminum with Surface Plate Thickness of 0.4mm and Selective Coating treatment							
Frame Material and Thickness, mm	Prepainted steel, 0.5							



Back Cover Material and Thickness, mm	Prepainted steel, 0.5							
Riser tubes material	Copper							
Header Diameter, mm	Inner: 20.6 and Outer: 22							
Covering Materials	Clear Tempered							
Gross Dim. H x L x T (mm)	1460X960X80	1375X1135X80	1455X1255X80	1960X960X80	2000X1000X80	1845X1135X80	1960X1210X80	2000X1210X80
Gross Area, m²	1.40	1.56	1.83	1.88	2.00	2.09	2.37	2.42
Aperture Area, m²	1.32	1.52	1.79	1.79	1.92	2.05	2.27	2.33
Absorber Area, m²	1.35	1.45	1.71	1.83	1.97	2.09	2.33	2.33
Weight Empty, kg	30	34	36	37	38	40	41	42
Fluid Content, L	1.45	1.51	1.57	1.63	1.69	1.75	1.81	1.85
Number of Risers/ Channels, Pcs	10	10	10	10	10	11	11	11
Internal Riser diameter, mm	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
External Riser diameter, mm	8	8	8	8	8	8	8	8

NOTE1: This document forms part of the Certificate of Product Conformity bearing the same certificate number.

NOTE2: The above product shall bear the DCL Conformity Mark.

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ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager

Dubai Central Laboratory Department