

CERTIFICATE OF PRODUCT CONFORMITY

Dubai Central Laboratory Department (DCLD) of Dubai Municipality
hereby attests that the product(s)

Solar Collector

(Details as per the attached Scope of Certification)

manufactured by:

VENMAN S.A.

7 km Old National Road, Thessalniki-Kilkis, 570 22 Ind. Area - Sindos, Thessaloniki, Greece

have been assessed in accordance with DCLD Document Ref. No. DM-DCLD-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 on the above-mentioned product(s).

for / ENGR. ABDULRAHMAN AL ALI
Director, Dubai Central Laboratory Department
Dubai Municipality



Certificate No: CL18020617
Valid Until: 29/07/2023



Current Issue Date: 30/07/2022
Original Issue Date: 30/07/2018



The attached Scope of Certification bearing the same Certificate Number 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. CL18020617

Certificate Issued To: **VENMAN S. A.**
7 km Old National Road, Thessalniki-Kilkis, 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: DM-DCLD-RD-DP21-2178 (IC) – Specific Rules Certification of Solar
Collectors as per BS EN 12975-1 through Factory Assessment

DM-DCLD-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	H81-22	H81-23	H81-25	H81-26
Brand Name	VENMAN – H81								
Collector Type	Flat Plate Solar Collector								
Max. Operating Pressure	10 Bars								
Max. Stagnation Temperature	170 °C								
Insulation Material, Density and Thickness	Rockwool: 50 kg/m ³ and 30mm								
Sealing Materials	Elastomeric Sealant								
Absorber Materials	Aluminum with Surface Plate Thickness of 0.4 mm and Selective Coating treatment								
Frame Material and Thickness	Pre-painted steel: 0.5 mm								
Back Cover Material and Thickness	Pre-painted steel: 0.5 mm								
Riser Tubes material	Copper								
Header Diameter	Inner: 20.6 mm Outer: 22 mm								
Covering Materials	3.2 mm thickness Clear Tempered Glass								



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Gross Dim. H x L x T (mm)	1460 x 960 x 80	1375 x 1135 x 80	1455 x 1255 x 80	1960 x 960 x 80	2000 x 1000 x 80	1960 x 1040 x 80	1845 x 1135 x 80	1960 x 1210 x 80	2000 x 1210 x 80
Gross Area, m²	1.40	1.56	1.83	1.88	2.00	2.04	2.09	2.37	2.42
Aperture Area, m²	1.32	1.52	1.79	1.79	1.92	1.94	2.05	2.27	2.33
Absorber Area, m²	1.35	1.45	1.71	1.83	1.97	2.01	2.09	2.33	2.33
Weight Empty, kg	30	34	36	37	38	38	40	41	42
Fluid Content, L	1.45	1.51	1.57	1.63	1.69	1.71	1.75	1.81	1.85
Number of Risers/ Channels, Pcs	10	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	7.2
External Riser diameter, mm	8	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.

Original Issue Date: 30 July 2018

Current Issue Date: 30 July 2022

Valid Until: 29 July 2023

ARIF HUSAIN AL MARZOOQI

Products Conformity Assessment Section Manager

Dubai Central Laboratory Department