



SOLAR RATING
& CERTIFICATION
CORPORATION

OG-100 ICC-SRCC™ CERTIFIED SOLAR AIR HEATING COLLECTOR #10002067

SUPPLIER:
Trigo Energies Inc.
2405, Jules-Vachon
Trois-Rivières, QUÉBEC
G9A 5E1 Canada
trigoenergies.com

BRAND: Trigo Energies
MODEL: Acero LT
COLLECTOR TYPE: Air Transpired
CERTIFICATION NUMBER: 10002067
ORIGINAL CERTIFICATION DATE: May 14, 2018
RENEWAL EXPIRATION DATE: May 31, 2019
Certifications are subject to annual renewal

The solar collector listed below has been evaluated by the Solar Rating & Certification Corporation™ (ICC-SRCC™), an ISO 17065 accredited Certification Body, in accordance with ICC-SRCC OG-100, *Operating Guidelines and Minimum Standards for Certifying Solar Collectors*, and has been certified by ICC-SRCC. This award of certification is subject to all terms and conditions of the OG-100 Program Agreement and the documents incorporated therein by reference. This document must be reproduced in its entirety.

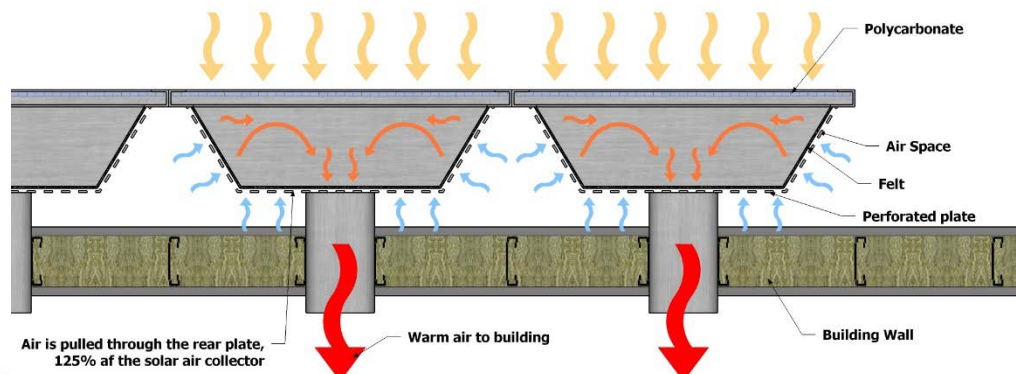
OG-100 COLLECTOR EFFICIENCY RATINGS ¹ (η)			
Air Flow Rate	Low Wind ² (1.0 m/s, 2.2 mph)	Medium Wind ² (2.0 m/s, 4.5 mph)	High Wind (3.0 m/s, 6.7 mph)
1.4 scmm/m ² (4.2 scfm/ft ²)	0.570	0.570	0.570
2.4 scmm/m ² (7.4 scfm/ft ²)	0.656	0.656	0.656
3.8 scmm/m ² (11.8 scfm/ft ²)	0.704	0.704	0.704

1: Thermal Efficiency is based on collector aperture area at a single wind speed of 3 m/s. Efficiency data is based on test data for the specific collector described in the "Certified Collector Specifications" and "Collector Test Sample Details" sections below.

2: Efficiency values were only measured for the high wind condition (3.0 m/s) since the collector is glazed, per ISO 9806, Section 24.4.2.3. The collector was not tested at 1.0 or 2.0 m/s, but is assumed to be insensitive to wind speed.

CERTIFIED COLLECTOR SPECIFICATIONS			
In order to be considered certified, installed collectors must match the following specifications. Collectors must match the design of the sample tested for certification.			
Collector Type	1-Stage, Open-Loop, Unitary, Transpired Solar Air Heating Collector	Absorber Description	Polyester felt (Polyethylene Terephthalate) over perforated plate –
Glazing Type	<input type="checkbox"/> Unglazed	Air Inlet	Rear perforated panel
	<input checked="" type="checkbox"/> Glazed	Air Outlet	150 to 600 mm or 200 mm typ.*
Max. Air Flowrate	404 m ³ /h *	Glazing Description	Polycarbonate twin-wall sheet, 10 mm thick, 84 % transmissivity*
Gross Dimensions (LXWXH)	1.974 x 1.004 x 0.305 m* (6.48 x 3.29 x 1 ft)		
Gross Area	1.982 m ² (21.33 ft ²)*		

* Data supplied by collector manufacturer and was not measured independently by the testing laboratory.





TESTING SUMMARY

TRIGO ACERO LT COLLECTOR

ICC-SRCC OG-100 CERTIFICATION #10002067

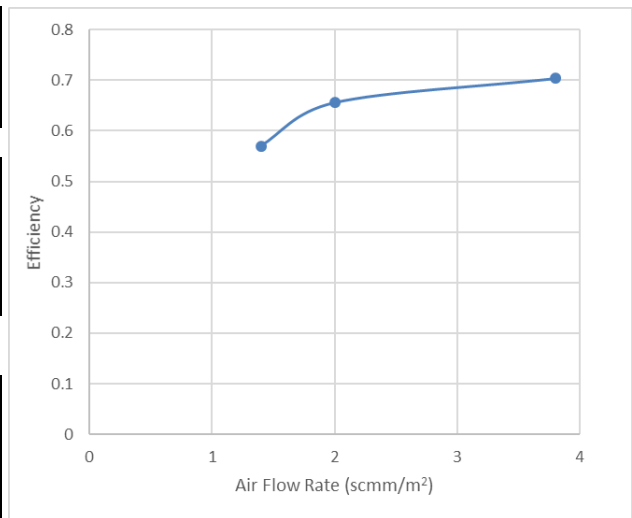
Test Lab	Fraunhofer ISE	Laboratory testing of a collector sample is required for OG-100 certification to confirm that the collector passes qualification tests and to obtain performance results. The following sections provide information on the collector tested for the purposes of OG-100 certification.
Test Report Number	2014-21-k	
Test Report Date	November 25, 2014	
Test Standard	ISO 9806:2013	

COLLECTOR TEST SAMPLE DETAILS	
Aperture Area (Net)	1.84 m ² (19.81 ft ²)
Dry Weight	10.0 kg (22.04 lb)

TEST RESULTS	
Max. Stagnation Temp**	100 °C
Time Constant	31 sec.
Capacitance	15.51 kJ/K

** Based on 1000 W/m² irradiance and ambient tem of 30 °C.

THERMAL EFFICIENCY TESTING DETAILS	
Testing Location	Outdoors (Freiburg, Germany)
Installed Tilt Angle	80° - 90° from horizontal (tracked)
Added Back Insulation	None
Average Irradiance	1020 W/m ²
Average Wind Speed	3 m/s



THERMAL EFFICIENCY DATA SUMMARY			
Air Flow Rate	η	ΔT (K)***	G (W/m ²)
1.4 scmm/m ² (4.2 scfm/ft ²)	0.570	22.5	1036
2.4 scmm/m ² (7.4 scfm/ft ²)	0.656	15.3	1055
3.8 scmm/m ² (11.8 scfm/ft ²)	0.704	10.1	1048

*** ΔT defined as $T_m - T_a$ where T_m is the mean temperature of the air in the collector and T_a is the ambient (inlet) air temperature.

REMARKS:

- Performance is unreliable if the collector is used at a pressure drop of less than 25 Pa.
- Each collector installation must be marked with an indelible label or mark in a location visible on the exterior of the collector. Marking must provide the model name and number and the SRCC OG-100 certification number, in accordance with the requirements of the *ICC-SRCC Trademark, Certification Mark and Certificate Policy*.

Shawn Martin

Vice President Technical Services, ICC-SRCC