

Proj. No.: 40156-1
Lab No.: T-20-021

December 21, 2020

Client : Powers Steel and Wires
4118 East Elwood Street •
Phoenix, AZ 85040
888.525.0108

Subject: **Solar Panel Frame Components**
Specification : Ground Bond Test
Source : Submitted to Laboratory by Client.

Report of Test

I. GROUND BOND TEST

Submitted sample section that was used for freeze-thaw cycle test , was fitted with a copper plate ; and attached (screwed with a bolt) to the plate. A special meter was used to test, if the grounding will be able to pass 25 amperes of current.

II. EQUIPMENTS

Ground Bond Tester; Model 03240
HYAMP 4th Gen. GROUND BOND TESTER
Serial Number: 9800613
Calibration Due: (Recommended): June 30, 2021

III. MATERIAL DESCRIPTION:

8" x 12" section of a Stamped Galvanized sheet, with aluminum extrusion bar fastened with self-drilling tech-screw.
Grounding Plate: Copper Plate 1/16" thick 12" long variable width.

IV. TEST RESULTS

HYAMP meter was set to 25 amps at 1 second dwell

Meter Reading = PASS

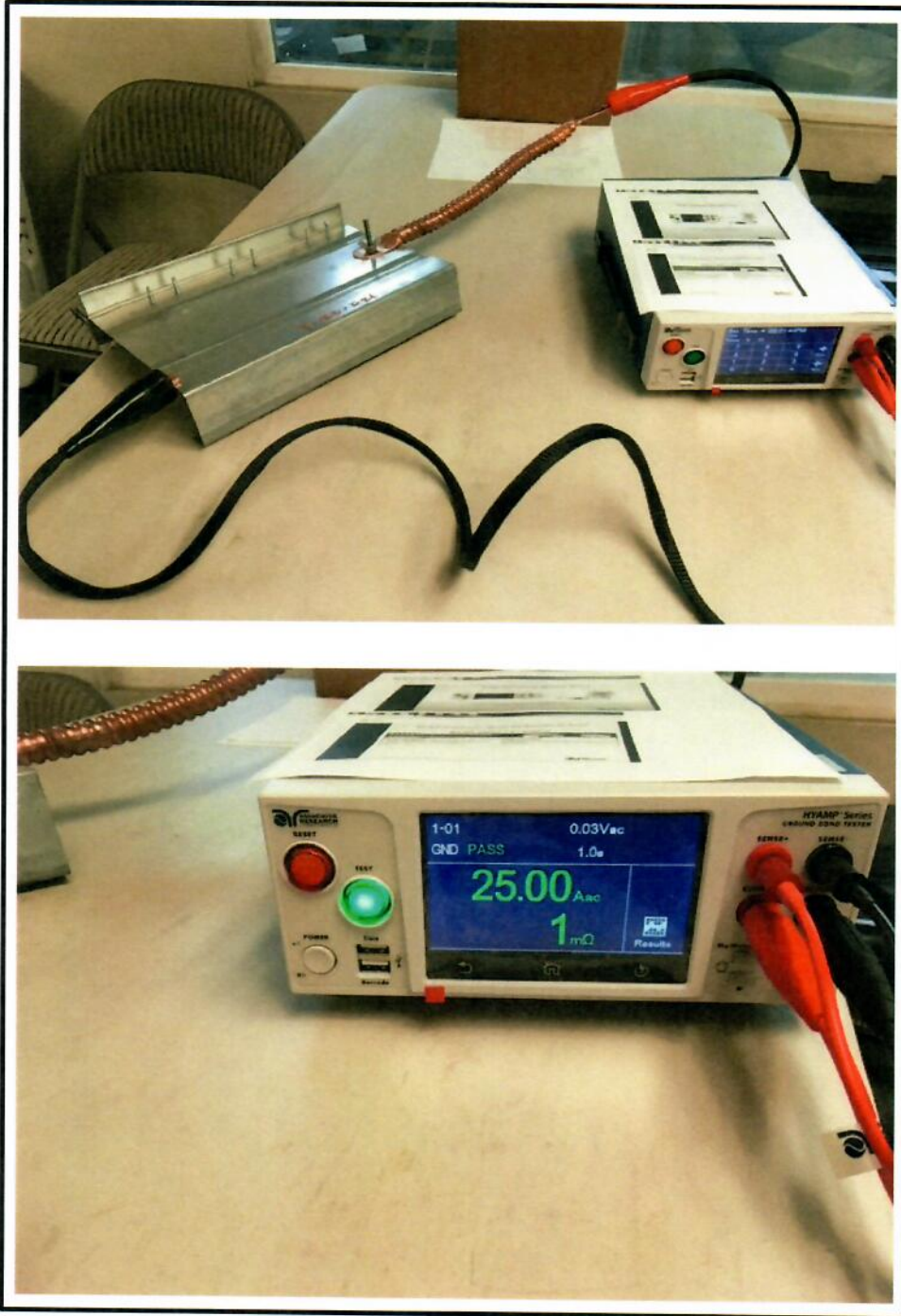
Respectfully Submitted,

SMITH-EMERY LABORATORIES

G. Janeth Quintero
Registered Civil Engineer No.: C 73066
Registration Expires : 12-31-22

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- Materials Tested Comply With Specifications.**
- Materials Tested Did Not Comply With Specifications.**
- No Established Criteria for Acceptable Limits.**
- For Information Only**





SMITH-EMERY LABORATORIES

An Independent Commercial Testing Laboratory

781 E. Washington Boulevard, Los Angeles, California 90021 ♦ (213) 745-5333 ♦ Fax (213) 741-8621

Project/Job No.: 40156-1
Lab. No.: T-20-021

December 10, 2020

CLIENT: **POWER STEEL AND WIRE**
ATTN: JOHN POWERS
4118 EAST ELWOOD STREET
PHOENIX, AZ 85040

PROJECT: **POWER STEEL AND WIRE**

SUBJECT: Solar Panel Frame Components
SPECIFICATION: ASTM C 67
SOURCE: Submitted to Smith-Emery Laboratories by Client.

TEST RESULTS

Cycle No.	16°F	105°F
1	Not Affected	Not Affected
2	Not Affected	Not Affected
3	Not Affected	Not Affected
4	Not Affected	Not Affected
5	Not Affected	Not Affected
6	Not Affected	Not Affected
7	Not Affected	Not Affected
8	Not Affected	Not Affected
9	Not Affected	Not Affected
10	Not Affected	Not Affected

Cycle No.	16°F	105°F
11	Not Affected	Not Affected
12	Not Affected	Not Affected
13	Not Affected	Not Affected
14	Not Affected	Not Affected
15	Not Affected	Not Affected
16	Not Affected	Not Affected
17	Not Affected	Not Affected
18	Not Affected	Not Affected
19	Not Affected	Not Affected
20	Not Affected	Not Affected

Note: Not Affected after 20 Cycles of Freeze and Thawing

Respectfully Submitted,

SMITH-EMERY LABORATORIES

G. Janeth Quintero, P.E.
Registered Civil Engineer No. 73066
Registration Expires : 12-31-21
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CC: SMITH EMERY LABORATORIES

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