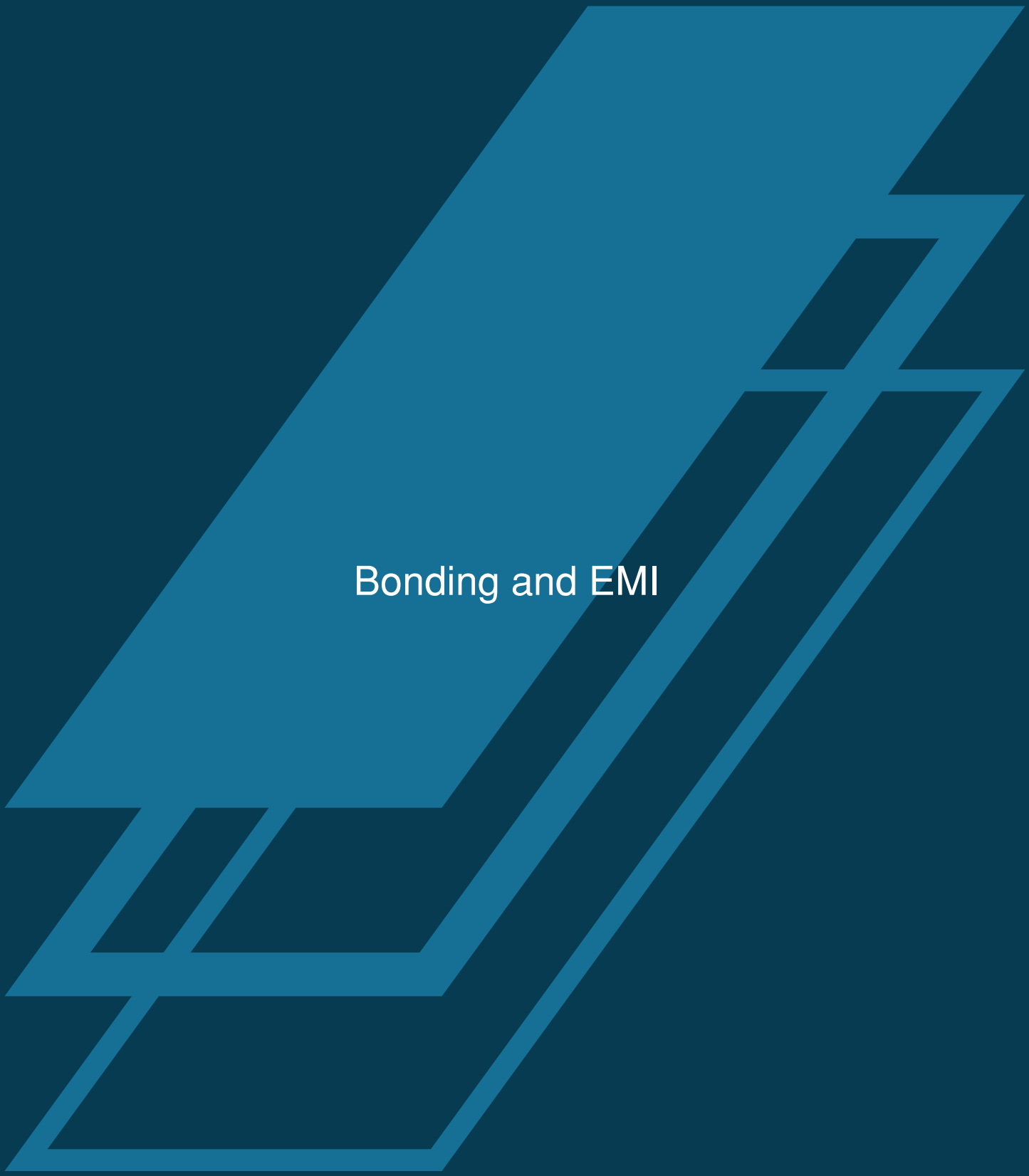
Bonding and EMI



INTERSTITIAL SYSTEMS

CCJM

CCJM Engineers, Ltd.
550 West Washington
Boulevard
Suite 950
Chicago, Illinois 60661-2703
(312) 669-0609
Fax: (312) 669-0525

July 23, 2007

RE: Executive Summary

The object of this report is to provide technical review of test results to determine whether product meets the grounding resistance limitation for Signal Reference Structure (SRS) as described in following standards:

1) IEEE standard 1100-1999 Recommended Practice for Powering and Grounding Sensitive Electronic Equipment

2) NEC-2005, Article 645.15 -Grounding for Information Technology Equipment

3) ANSI/TIA-942 Telecommunications Infrastructure Standard for Data Centers

4) J-STD-607-A-2002 Commercial Building Grounding and Bonding Requirements for Telecommunication

The materials used to assemble the two-tier raised floor system are conductive galvanized steel components. Test results verify that two tier floor conductor support system structure of raised floor exceeds bonding resistance limitation for SRS.

Attached Test data and photographs have also concluded that on conductor support mid-level steel plans system offers a maximum of2.4 milliohm de resistance up to 4ft between conductor support pans. All perimeter support structure bonding resistance test data recorded an even lower resistance. Based on test data, it can be concluded that proposed system can go up to 200 feet without bond to building ground system, and will not exceed 0.1 Ohm value. This test further confirms that conductor support pans locking mechanism on midlevel pans exhibit bonding resistance of less than 1.5 milliohm.

If field installation quality is in conformance with the manufacturer's instructions, this system will meet all standards listed above for Signal Reference Structure.

Test data if presented to any third party for review, shall be presented in its entirety and not portions.

Sincerely,

Anil Ahuja, PE, RCDD, LEED
President
CCJM Engineers, Ltd.

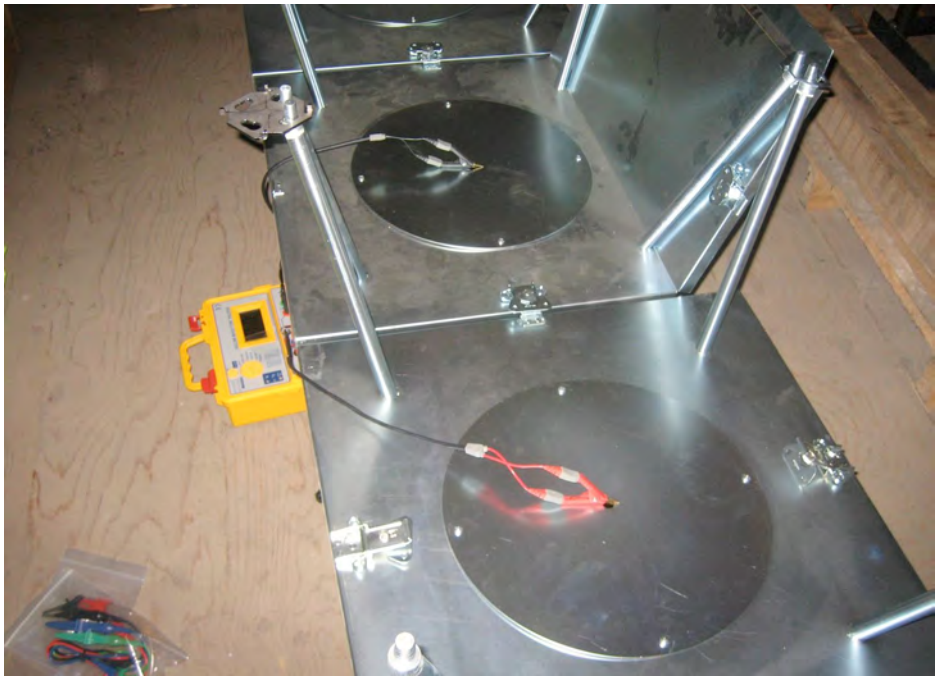
Ann Arbor
Baltimore
Camp Hill
Chicago
Columbia
Detroit
Grand Rapids
Washington, DC
Cairo, Egypt

Engineering Infrastructure Solutions

Bonding Test Results for Interstitial

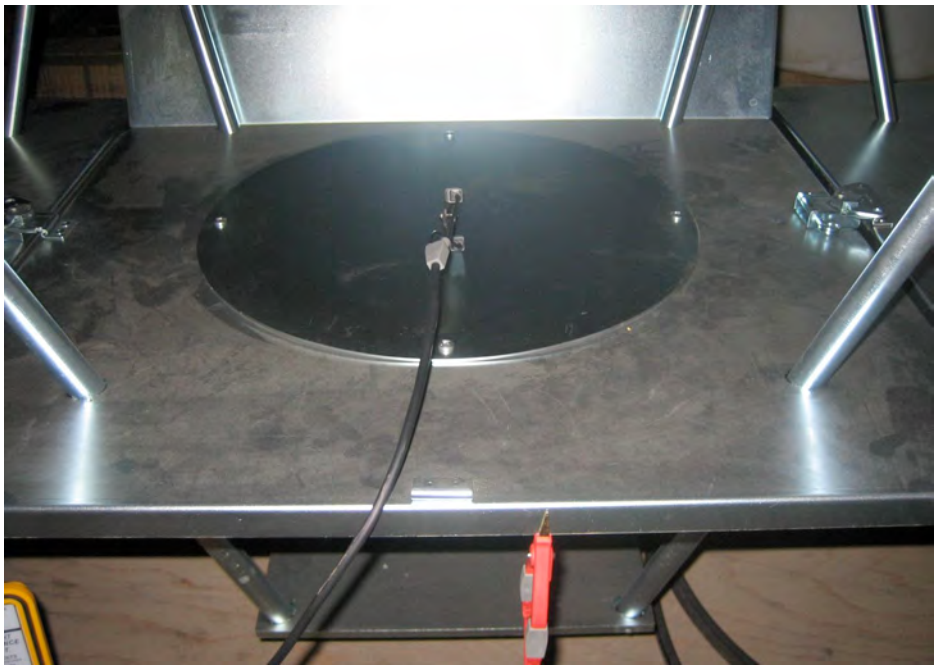
Test	Location	Reading
1	Center of Module 1 to Center of Module 3	2.4
2	Center of Module 2 to Center of Module 3	1.3
3	Center of Module 2 to Top of Outside Perimeter	0.3
4	Center of Module 2 to Outer Edge of Pan	0.2
5	Center of Module 2 to Edge of Bottom Support Plate	0.1
6	Center of Module to Top Panel Support Lug	0.7
7	Edge of Center Cover to Outer Edge of Pan	0.3
8	Edge of Module 1 Bottom Support Plate to Edge of Module 3 Bottom Support Plate	2.3
9	Edge of Module 1 Bottom Support Plate to Edge of Module 2 Bottom Support Plate	1.2
10	Edge of Module 2 Cover Plate to Edge of Module 3 Cover Plate	1.3
11	Edge of Module 1 Cover Plate to Edge of Module 3 Cover Plate	2.4
12	Top Panel Lug Module 2 to Top Panel Lug Module 2	1.2
13	Top of Leveling Leg to Edge of Bottom Support Plate	0.4
14	Edge of Pan Module 1 to Edge of Pan Module 2	1.2

Pic. 1- Center of Module 1 to Center of Module 3-Reading 2.4 mOhm

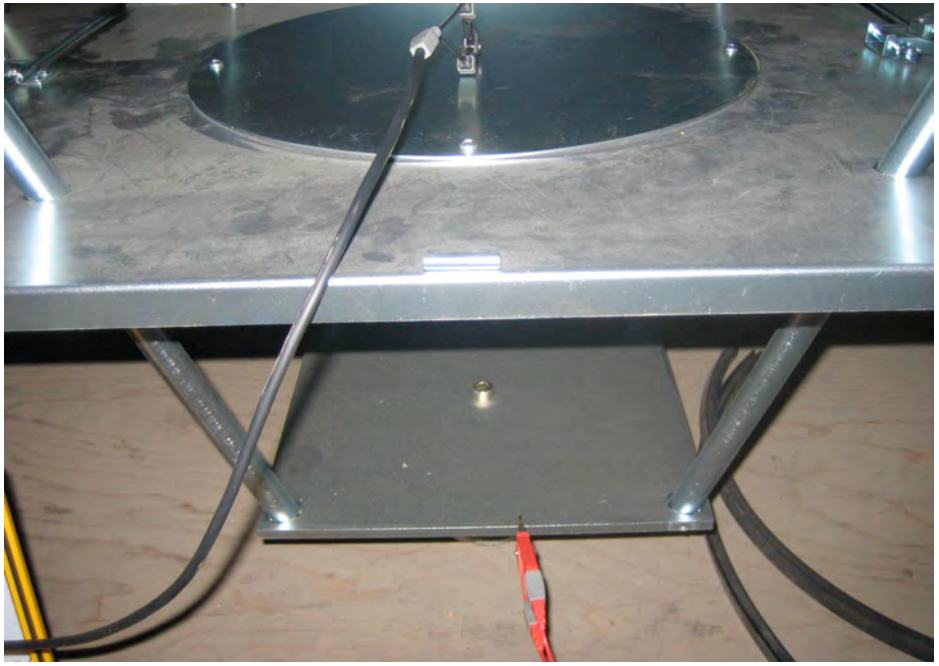


Pic. 2- Center of Module 2 to Center of Module 3-Reading 1.3 mOhm

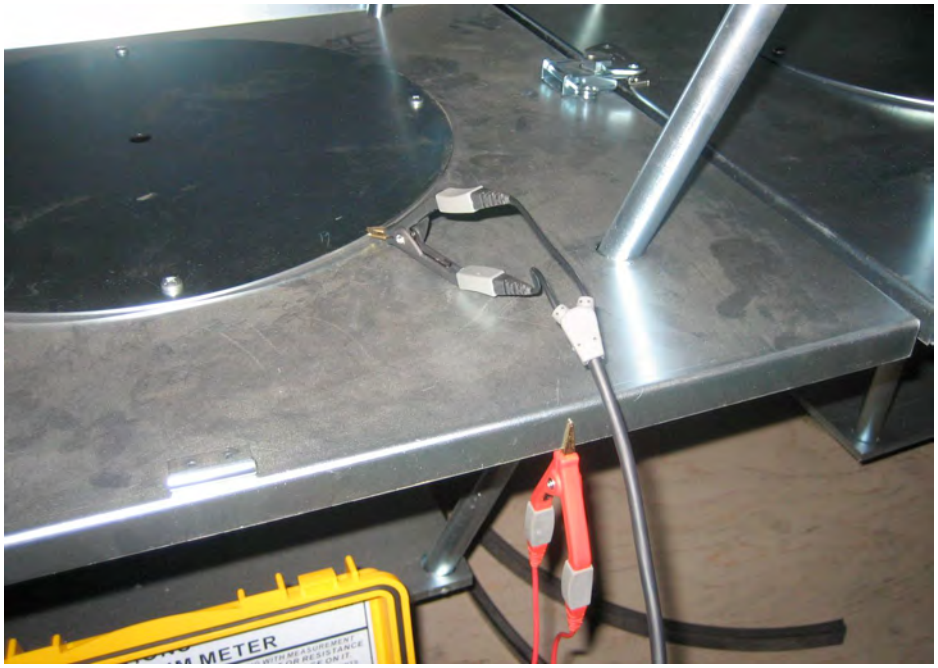
Pic. 3- Center of Module 2 to Top of Outside Perimeter-Reading .3 mOhm



Pic 4- Center of Module 2 to Outer Edge of Pan-Reading .2 mOhm



Pic 5- Center of Module 2 to Edge of Bottom Support Plate-Reading .1 mOhm

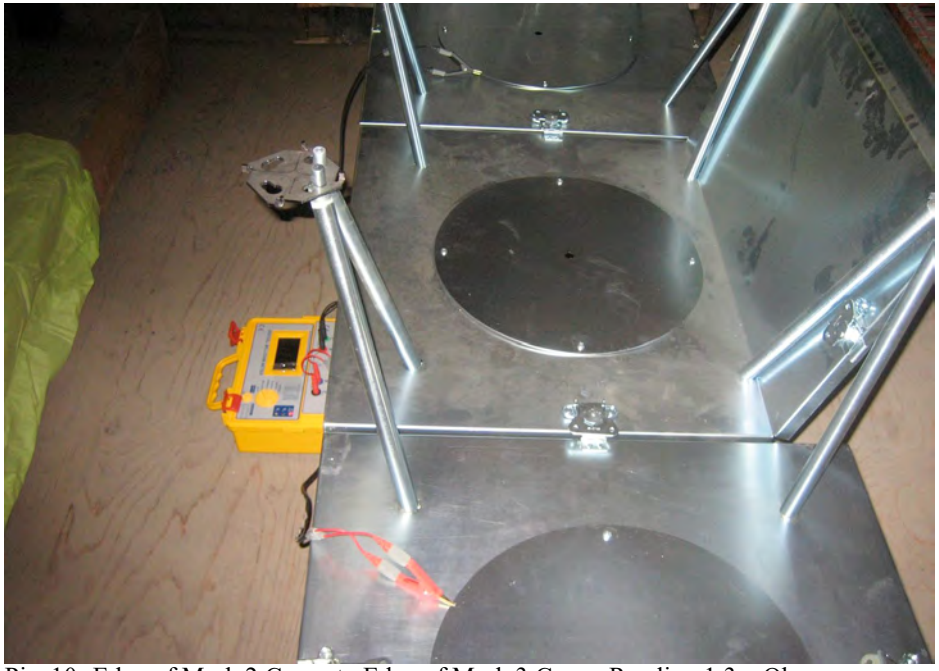


Pic. 7- Edge of Center Cover to Outer Edge of Pan-Reading .3 mOhm

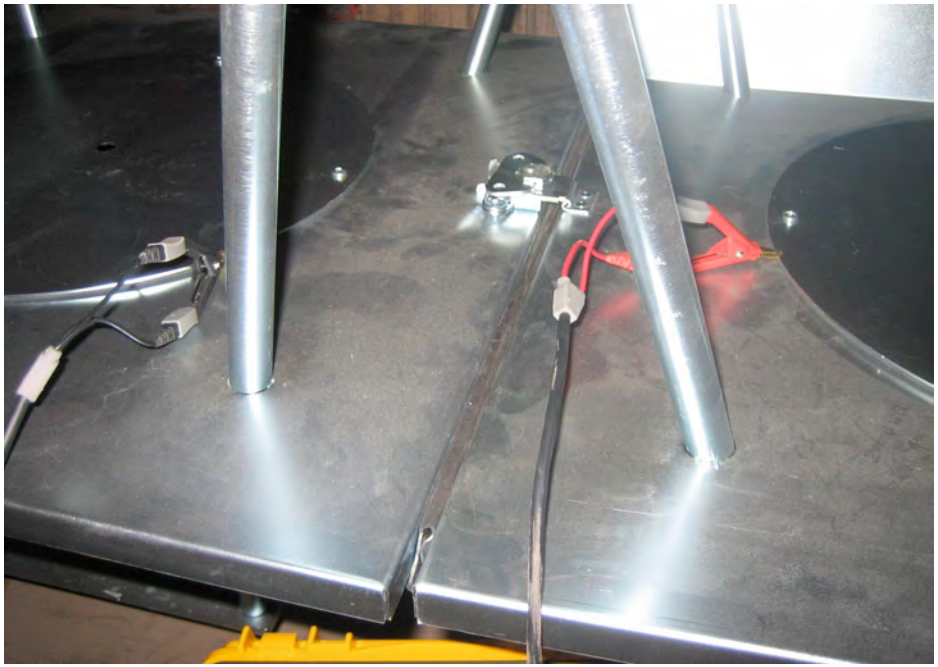
Pic. 6- Center of Module to Top Panel Support Lug-Reading .7 mOhm

Pic. 8-Edge of Mod. 1 Bottom Supt. to Edge of Mod. 3 Bottom Supt.-Read. 2.3 mOhm

Pic. 9-Edge of Mod.1Bottom Supt. to Edge of Mod. 2 Bottom Supt.- Read 1.2 mOhm

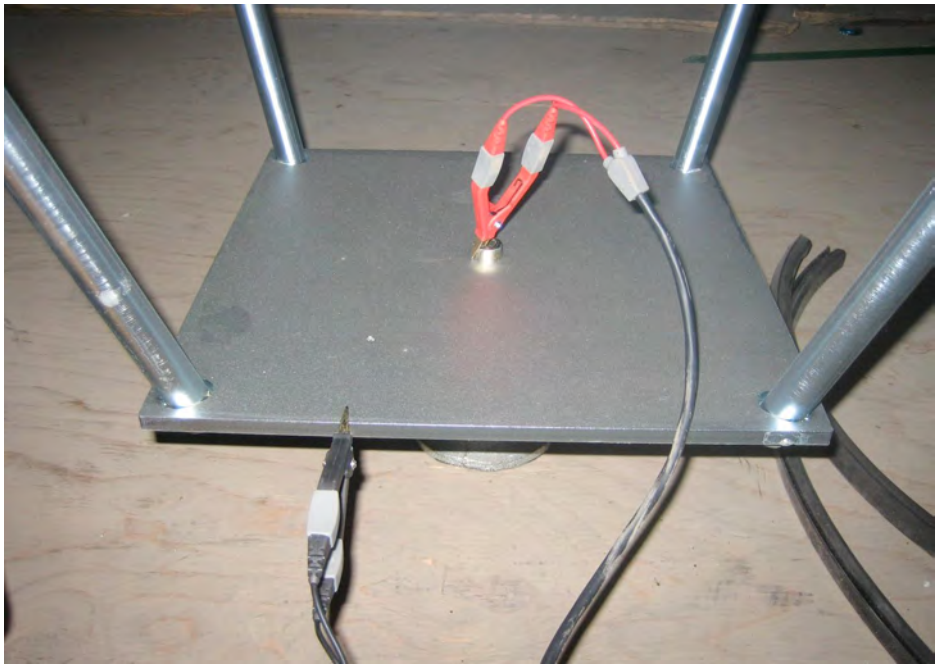


Pic. 10- Edge of Mod. 2 Cover to Edge of Mod. 3 Cover-Reading 1.3 mOhm

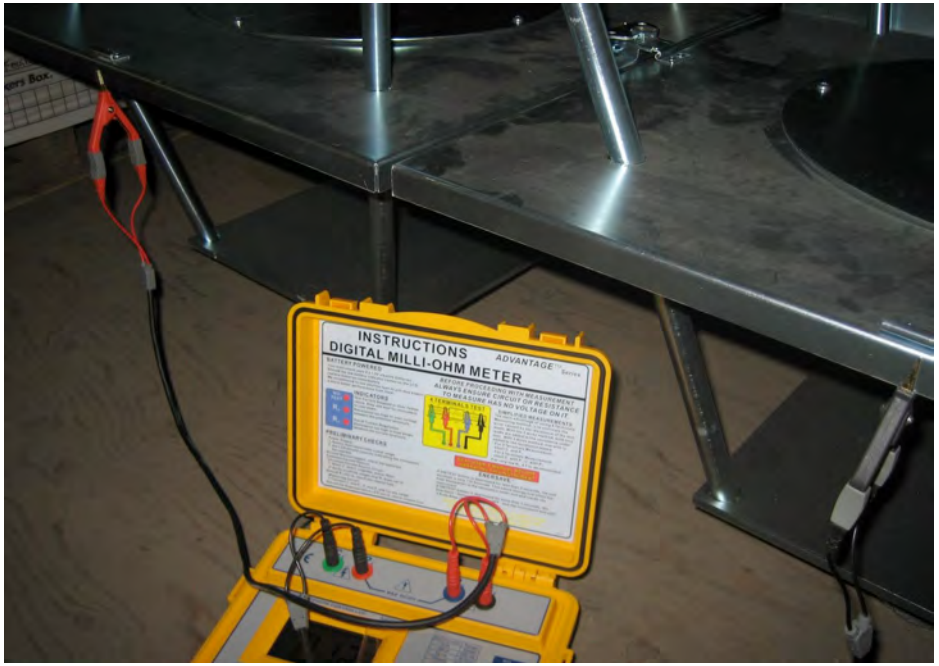


Pic. 11-Edge of Mod. 1 Cover Plate to Edge of Mod. 3 Cover Plate-Reading 2.4mOhm

Pic. 12- Top Panel Lug Module 2 to Top Panel Lug Module 2- Reading 1.3 mOhm



Pic. 13- Top of Leveling Leg to Edge of Bottom Support Plate- Reading .4 mOhm



Pic. 14- Top of Leveling Leg to Edge of Bottom Support Plate- Reading 1.2 mOhm

Test Equipment:

SEW Standard 4137 mO Digital Milliohm Meter

Serial Number:: 09635227

2 Wire Test

Calibration Certificate Available Upon Request (ISO 9001 Registered)

INTERSTITIAL SYSTEMS

The Foundation of Your Data Center

888.763.8421
interstitial-systems.com
info@Interstitial-systems.com