

L1_Cal test stand ORC review responses.

The following responses to the ORC inspection are submitted for your review. If there is anything else we need to obtain the clearance, please contact Linda Bagby, 630.840.3100. Thank you.

1. Check conductivity specifications of the paint used to cover the wooden platform at the test stand since it is suppose to be isolated from the building.

Response: The plywood is painted with Muralo Fire retardant Latex flat paint. The MSDS documentation can be found at

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/paint_msdms.pdf

2. Change 3A fuse on +/-12V ADF power to 2A fuse as shown in documentation.

Response: We have arranged to replace all +/-12V 3A fuses with 2A fuses. They will be delivered tomorrow and installed.

3. Verify that TAB/GAB backplane connection hardware stack uses a copper or brass flat washer between the power cable and backplane.

Response: The hardware stack was inspected for washer material compliance and was found to be stainless steel. All four connections have been made in the following order: Bolt - backplane – brass flat washer – lug – flat brass washer – lock washer – nut.



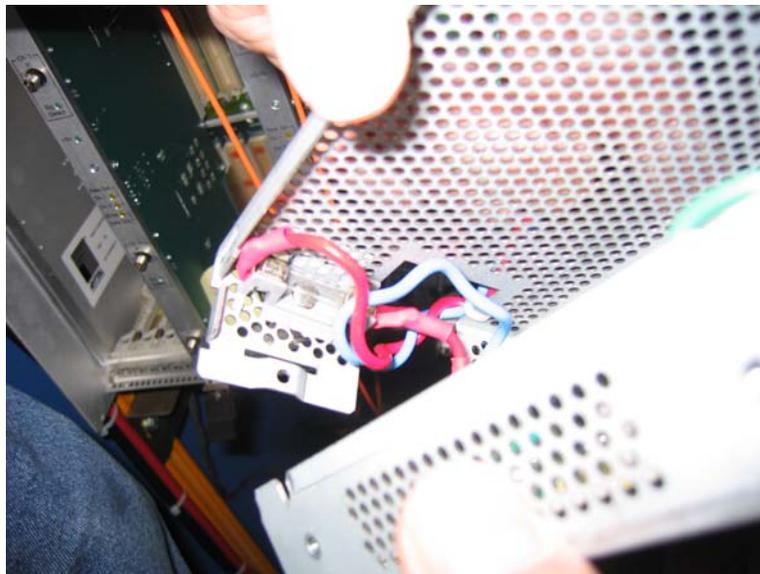
4. Install a cover over the power connections in the VIPA (readout) crate.

Response: A G-10 cover has been attached to the VIPA crate to prevent foreign objects from touching exposed power connections.



5. Install a 5A in-line fuse on the 3.3V power supply to the VIPA (readout) crate.

Response: An in-line 5A fuse has been installed and is positioned inside the power supply housing.



6. Install high current ground fault connection between +5V return lead and rack.

Response: A 4AWG cable has been connected from the +5V return line to the rack. The updated schematic drawing can be found at

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/VIPAPOW.pdf



7. Provide UL certification documentation for the BIT3, SBC, and Wiener PS crate combination unit.

Response: The following URLs are links to the specification documentation for the commercially available products in question:

BIT3 (618):

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/DS_618_620.pdf

This card meets IEEE 1014C specifications as shown on page four.

SBC :

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/vme7750_SBC.pdf

Page 5 of the specifications document shows the voltage and current specifications of the card.

Power Requirements:

+5VDC (± 5 percent), 6A (typical), 7A maximum
+12VDC (± 5 percent), 105mA (typical), 200mA maximum
-12VDC (± 5 percent), 50mA (typical), 75mA maximum

There are no fuses on the card made from 94V-0 flame retardant material.

Wiener 6U crate: The specifications show that this crate is UL1950 certified.

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/Wiener_6U_UL.pdf

Wiener 9U crate: The specifications show that this crate is UL1950 certified.

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/Wiener_9U_UL.pdf

Wiener Power Supply: The specifications show that all Wiener power supplies are UL1950 certified.

http://d0server1.fnal.gov/users/bagby/www/L1_Cal/ORC_Docs/Wiener_PS_UL.pdf