## Subject: Drift HV to Radiator connection Posted by Clemens Adler on Thu, 23 Sep 2004 07:23:27 GMT

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Hello chamber builders,

We closed one of the chambers that Oleg, Sascha and me built last year in November. I noticed 2 things:

1. obvioulsy we forgot to remove the semiconductive shielding around the HV cable core (the black stuff around the core isolation). This might lead to leak currents from the core to the shielding of the cable. In this case I could not measure the resistance, i.e. it is at least much higher than the resistance of the field cage, therefore leak curents would hopefully be negligible.

However, I would like to remind everybody involved, that this covering is conductive and has to be removed, especially at the Anode HV cables.

2. The copper foil, that is glued onto the Radiator, was coming off a bit on one side. I.e. the silver epoxy alone does not really create a reliable seal. I would propose to seal the edges of this copper strip with some real epoxy (just a little at the corners, so that we don't get any charge build-up).

Or does anyone think that this would be a problem.

The other thing I'm not so sure about is the long term gas tighness of silver epoxy. So far we 'repair' scratches in the Radiator surface with silver epoxy, to make sure that the radiator surface is gas tight. If the silver epoxy is not keeping tight on the long term, this might create serious deterioration of chamber performance.

Does anyone have experience with this?

thanks for any advice, Clemens