

## **DIVISION 16 - ELECTRICAL**

### **Section 16650 - Electromagnetic Shielding Systems**

#### **Introduction**

Electro magnetic shielding is only required when due to the type of testing going on in a building that high levels of electro magnetic fields (EMF) are generated in an area. Typically if personnel are being exposed to levels of EMF higher than 100 mg then electro magnetic shielding should be provided or special consideration should be taken to lower the EMF.

Sometimes it will be necessary to build a specially shielded room for personnel involved in the testing of special systems so as to minimize the amount of EMF and RF (radio frequencies) which would enter the test space.

The design of such a system in either case shall be done only by personnel who are experienced in design of shielded rooms or special shielding facilities. Special grounding systems shall be taken into account to facilitate complete draining of all EMF energies into the ground and thus protect personnel.

#### **Part 1 - General**

- Provide complete submittals for the design whether by the engineering firm or a design build concept is used.

#### **Part 2 - Products**

- All grounding parts shall be copper. Copper shielding shall be utilized in the design. Where required for personnel protection the entire system shall be UL certified.

#### **Part 3 - Execution**

- The installation of the system shall only be accomplished by personnel experienced in the construction of Electromagnetic shielding systems. Following the construction of the system it shall be the requirement of the installer to have the entire system tested to verify that it complies with the minimum design constraints set up prior to the design of the system.
- Foil systems utilizing foil stapled to walls is unacceptable design.
- Consult PDC Engineer for test/compliance of these facilities during design.

#### **End of Section 16650**