



### FARADAY CAGE / SHIELDED CHAMBER

❖ A PAN type design for high performance shielded chamber, a Total Steel Structure (TSS), an improved design over conventional sandwich type wood core structure (WCS).

❖ Self supporting.

❖ Very easy to construct.

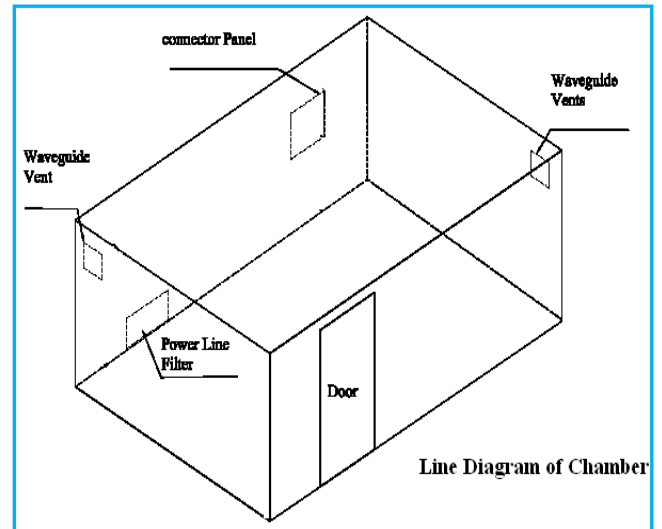
❖ Fitted with RF Gaskets.

❖ Not affected by water and moisture.

❖ Superior Attenuation with less weight.

❖ Cutting and bending by Laser / CNC machines.

❖ Easy expandability and relocation using less parts.



❖ Radiography quality TIG welding of corners of panels.

❖ 100% testing of welding by Radiography Testing Method.

❖ TSS is very desirable in geographic regions with seismic problems.

❖ **Unique Flat Surface Inside/Outside:** The walls and the roof construction by flat surface inside and the floor were constructed by flat outside, which is the most ideal.

❖ **Shielding Effectiveness (SE):** SE tested as per either of IEEE Std, 299 MIL Std 285 or EN 50147-1.

Frequency	Field	Minimum Shielding Effectiveness in dB
10 KHz	MAGNETIC	50 dB
100 KHz TO 1 MHz	MAGNETIC	100 dB
100 KHz TO 10 MHz	ELECTRIC	100 dB
100 KHz TO 500 MHz	PLANE WAVE	100 dB
1 GHz TO 40 GHz	MICROWAVE	100 dB



❖ **Shielded Doors:**

- ❖ 2-point cam locking system.
- ❖ Doors are designed to open approx.180°.
- ❖ Rail Road gasket used between the door frame and the basic Pan structure.
- ❖ Door leaf hanging on the frame by the two hinges mounted in the door frame.
- ❖ Three rows of Copper Beryllium fingers in two pockets were provided for ensuring SE.
- ❖ Ranging from single leaf to big sliding door to accommodate even EMI/EMC testing of air craft.

❖ **Air vents** generally designed with cut-off wave guide characteristics of honey- comb structure.

❖ **Access Panel:** Providing access to outer and inner signal, connectors with matched terminations on both ends.

❖ **Signal Filters:** Power line filters both for single/three phase power supplies of different current ratings, frequencies including DC filters and filters for

- ❖ Telephone line filters.
- ❖ Optical waveguide feed through
- ❖ Isolation transformers, etc

❖ **Single Point earthing to Earthing Pits:** Pipe-in-pipe type electrolytic type maintenance free earthing, Shielded structure, isolation transformers are connected to earth pits,

❖ **Area of Applications:**

- ❖ Noise Security.
- ❖ TEMPEST Security Areas.
- ❖ EMI/RFI testing and research.
- ❖ High security communications.
- ❖ Securing data processing centers.
- ❖ Sophisticated electronic equipment manufacturing test, calibration & repair rooms.
- ❖ Areas of high security, such as government or commercial communication centers.