

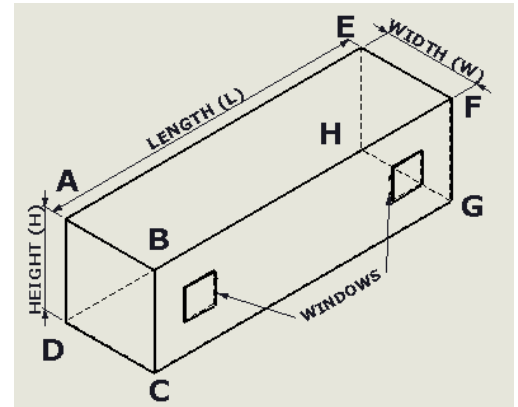


SHIELDED ANECHOIC CHAMBER-

A total low cost solution of Shielded Anechoic Chamber for antenna measurements and RCS measurement.

FEATURES:

- ❖ 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).
- ❖ TSS offers years of maintenance free, high RF attenuation.
- ❖ Easy expandability and relocation using less parts.
- ❖ P.U. Foam based pyramidal/wedge/walk –on/corner absorbers as required.
- ❖ Access Panel: Providing access to outer and inner signal. Consists of various RF connectors with matched terminations on both ends.
- ❖ Provided power line filter one phase, 2 lines, 15 Amperes, 220V.
- ❖ Various accessories and components available to utilize chamber in best possible way for various tests.



SPECIFICATIONS:

- ❖ **Frequency Range:** 800MHz – 18GHz and beyond.
- ❖ **Shielding Effectiveness (SE):** Min.-80 dB on walls and -80 dB on windows or door. SE tested as per IEEE STD, 299.
- ❖ **Quiet-Zone size:** 0.5m X 0.5m Cross section. Length of quiet zone can be customized.
- ❖ **Quietness Level:** Min -30 dB at 800MHz raising to -40 dB at 3.0 GHz and higher frequencies.
- ❖ **Microwave Absorbers-**
 - P.U. Foam based absorber tested as per IEEE STD. 1128.
 - All Absorbers to be used are Fire Retarded: Passes NRL-8093, USA test 1, 2 & 3 With Zero Halogen Means.
- ❖ **Chamber Construction Details-**
 - PAN Type Shielded structure.
 - 2mm thick hot galvanized sheets used for PAN manufacturing.
 - Cutting and bending by Laser / CNC machines.
 - Radiography quality TIG welding of corners of panels.
 - Joining of PANs using Rail Road wire mesh based metallic Gasket.
- ❖ **Shielded Window-**
 - Windows are designed to open approx.180°.
 - Rail Road gasket used between the window frame and the basic Pan structure.
 - Two rows of Copper Beryllium fingers are provided for ensuring Shielding Effectiveness.



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APPLICATIONS:

- ❖ For various RF and Microwave Measurements under controlled conditions.
- ❖ RF Noise Security.
- ❖ EMI/RFI testing and research.
- ❖ High security communications.
- ❖ Areas of high security, such as government or commercial communication centers.

AVAILABLE SIZES OF SHIELDED ANECHOIC CHAMBERS (SAC):

SR.No.	Model No.	Width (W)	Height (H)	Length (L)
1.	SAC -1	1.2m	1.2m	3.6m
2.	SAC -2	1.5m	1.5m	4.8m
3.	SAC -3	1.8m	1.8m	6.0m

ACCESSORIES (Optional):

- ❖ Antenna Positioner-
 - Advanced Antenna positioner with turntable capable of 360 degree azimuth rotation with 1 degree step precisely controlled by PC software.
 - Load bearing capacity 5.0Kg.
 - Antenna positioner can be synchronized with various analyzers like VNA, Power Meter etc. to record power reading automatically at various positions.
 - PC interface software to operate positioner & to draw polar plots.
- ❖ Low RCS stands for both transmitting & receiving antennas mounting.
- ❖ Various RF cables & connectors to be used inside chamber.