

Series 71 Shielded Rooms



The Series 71 Copper Screen Room is designed to provide a radio-silent environment to perform electronic product development and trouble-shooting, as well as conducted emissions and radiated emissions EMC testing.

With 32 standard sizes to choose from, the ETS-Lindgren Series 71 Copper Screen Room can be utilized in almost any type of manufacturing or testing environment. The design consists of a double-layer of 55.9 cm x 55.9 cm x .04 cm (22 in x 22 in x .015 in) copper screen with steel framing and steel-clad structural panels. The room provides excellent attenuation to magnetic fields, electric fields and plane wave

Key Features

- "Hat & Flat" Clamping System for Shield Integrity
- RFD-60 Door Offers Secure Fit
 - Knife Edge Construction
 - Recessed Contact Mechanism
 - Easy to Maintain
- Utilize in Product Development
- Perform Product Testing and Trouble-shooting
- Perform Conducted Emissions and Radiated Emissions Pre-screen Testing
- Copper Screen Allows for Easy Visual and Verbal Communications

Product Features

Materials

The Series 71 features a double layer of 55.9 cm x 55.9 cm x .04 cm (22 in x 22 in x .015 in) copper screen mesh weave to deliver excellent attenuation levels on the upper half of the wall panels. The lower half of the walls, floors and ceiling panels are constructed using our standard Series 81 panel construction.

Copper is highly recommended for use in shielded screen rooms due to its conductivity and oxidation properties. At the same time, a copper screen mesh affords hear-through, see-through advantages.

Performance

The Series 71 Copper Screen Room shares a clamping system common to that of the Series 81 design. The upper panel section of the room's walls have a double layer of copper screen mesh. The Series 71 Screen Room allows for easy visual and audible communication through the upper panel section and eliminates a sense of confinement that may occur in solid shielded rooms.

Series 71 Copper Screen Rooms are highly recommended for testing applications below 3 GHz for wireless product testing and communications devices.

Series 71 Shielding Applications

- EMC Product Compliance Testing
- Instrumentation Repair and Calibration
- Production and Quality Product Line Testing
- Product Development
- Cellular and Paging Service Centers
- High Voltage Test Labs
- Secure Computer Rooms
- Wireless Product Testing
- Metrology Labs
- Magnetic Resonance Imaging (MRI)
- Medical Equipment and Instrumentation
- Biomedical Engineering Labs
- Embassies and Consulates
- TEMPEST Security Areas

Series 71 System Performance

Magnetic: 14 dB @ 10kHz; 100dB @ 1MHz to 30 MHz

Electric: 100 dB @ 1kHz to 30 MHz

Planewave: 100 dB @ 30 MHz to 450 MHz

Microwave: 85 dB @ 1 GHz; 50dB @ 10 GHz

Construction

In the Series 71 Screen Room, the lower wall sections are manufactured using solid galvanized steel structural panel sections for long-term durability. Panels are joined together with an extruded hat and flat and cove clamping system to provide uniform and consistent pressure contact against the shielded panel mating surfaces. These structural clamping sections are zinc-plated to resist corrosion and are joined with self-taping zinc-plated fasteners spaced four inches on center to ensure a secure shield. The corners of the shielded room are secured with precision-machined trihedral end cap sections. The Series 71 incorporates of copper screen mesh sections on the upper half of the enclosure to allow communication through the screen.

Specifications

Physical Specifications

Length	Height	Width
2.52 m (8.27 ft)	2.51 m (8.23 ft)	2.50 m (8.20 ft)
3.11 m (10.20 ft)	2.51 m (8.23 ft)	2.52 m (8.27 ft)
3.76 m (12.34 ft)	2.51 m (8.23 ft)	2.50 m (8.20 ft)
4.99 m (16.37 ft)	2.51 m (8.23 ft)	2.50 m (8.20 ft)
3.15 m (10.33 ft)	2.51 m (8.23 ft)	3.11 m (10.20 ft)
3.76 m (12.34 ft)	2.51 m (8.23 ft)	3.11 m (10.20 ft)
4.99 m (16.37 ft)	2.51 m (8.23 ft)	3.11 m (10.20 ft)
6.23 m (20.44 ft)	2.51 m (8.23 ft)	3.11 m (10.20 ft)
3.76 m (12.34 ft)	2.59 m (8.50 ft)	3.74 m (12.27 ft)
6.23 m (20.44 ft)	2.59 m (8.50 ft)	3.76 m (12.34 ft)
6.23 m (20.44 ft)	2.59 m (8.50 ft)	3.74 m (12.27 ft)
7.47 m (25.51 ft)	2.59 m (8.50 ft)	3.74 m (12.27 ft)
4.99 m (16.37 ft)	2.59 m (8.50 ft)	4.96 m (16.27 ft)
6.23 m (20.44 ft)	2.59 m (8.50 ft)	4.96 m (16.27 ft)
7.47 m (24.51 ft)	2.59 m (8.50 ft)	4.96 m (16.27 ft)
6.23 m (20.44 ft)	2.61 m (8.56 ft)	6.18 m (20.28 ft)
7.47 m (24.51 ft)	2.61 m (8.56 ft)	6.18 m (20.28 ft)
7.47 m (24.51 ft)	2.61 m (8.56 ft)	7.41 m (24.31 ft)

Available in 3.05 m (10 ft) sizes. Custom sizes available.

Installation requires 50.8 mm (2 in) clearance around the enclosure.

Charts

