

SUMMARY OF SHIELDING SYSTEMS			
WELDED STEEL ENCLOSURE	MODULAR PAN ROOM	COPPER SHEET SYSTEM	COPPER COATING SYSTEM
CONSTRUCTION			
Shielding steel min. 28 gauge on structural frame or attached to existing walls	Min. 24 gauge galvanized steel pans	Copper sheets (3" x 2' or)	Component systems (water-based copper paint, fire-rated doors, vents, laminated windows, power and data filters, copper tape)
JOINING METHODS			
Welded or bolted	Bolted through RF gasketing	Soldered, brazed, or stapled	Copper sealant vs. lacure, wood, and concrete; copper-lapled joints
TYPICAL ATTENUATION			
1. Magnetic field only 50 dB @ 60 Hz 170 dB @ 200 kHz	80 dB @ 60 Hz 170 dB @ 200 kHz	90 dB @ 200 MHz	—
2. Electric field only 120 dB @ 100 kHz to 50 MHz	120 dB 1200 kHz to 50 MHz	90 dB 10-50 MHz	Minimum + 50 dB 10-50 MHz
3. Plane wave ~ 10 dB 50 MHz to 10 GHz	~ 100 dB 50 MHz to 10 GHz	90 dB 50 MHz to 10 GHz	Minimum + 50 dB 10 MHz to 1 GHz
4. Waveguide 100 dB @ 94 GHz	—	—	—
FEATURES			
Highest structural strength, easy to assemble	High structural strength, easy to assemble	Nonferrous materials, quick installation	Easy to design, ready to install, convenient for on-site installation for new and existing construction
INSTALLATION COST			
Highest	Medium	Low	Lowest
APPLICATIONS			
60 Hz magnetic field shielding for electrical substations, power substations, LEO systems, highest possible security, protection, research and development, and MR rooms and data processing centers	High security areas, government and commercial communication rooms, secure installations, conference rooms or rooms that require architectural finishing	Military, LLC rooms, government secure installations, conference rooms or rooms that require architectural finishing	Data processing centers, hospital audio/visual/psychiatric rooms, radio, TV recording studios, manufacturing facilities for electronic equipment