

EMCOAT PAINT FOR RF REDUCTION IN FACILITIES A FARADAY STRUCTURES SUCCESS STORY

PROBLEM

The ever-increasing density and number of wireless networks, signals, and devices creates many avenues that can compromise information and data. The only sure way to protect wireless signals is to physically block them. Many facilities require architectural shielding solutions that limit radiofrequency (RF) emanation or intrusion. This requirement is not new - past and current shielding solutions consist of rooms constructed with linings of metal sheets, foils, screens, etc. that must be protected between layers of drywall. These solutions are expensive to install and repair when damaged. This has led to a small percentage of spaces actually being shielded, while at the same time, our vulnerabilities have increased. A significant portion of currently in-use facilities would benefit greatly if they could rapidly and efficiently install RF countermeasures

SOLUTION

EMCoat Paint is ideal for new or retrofit office environments because it is topically applied and easily repaired. A 15,000 ft² office space required an upgrade to include RF countermeasures in order to meet the requirements of the tenant. Several options were considered by the building owner and general contractor, including standard metallic foil liner. These approaches would have required the drywall to be removed and replaced, which would increase costs and prolong the disruption to operational activities. Because of the installation and cost benefits, EMCoat paint was selected for the project. EmCoat is a water-based conductive architectural coating product from Faraday Structures. EMCoat does not require special application or mixing equipment, and is applied in two coats. Coated surfaces can also be easily inspected with surface resistivity testing to ensure adequate coverage and conductivity levels before finish coats are applied.



BENEFITS

By selecting EMCoat, the project benefited significantly on both cost and schedule. If a typical foil approach had been used, the contractor would have been required to finish a layer of drywall, install foil liner, install another layer of drywall, then finally apply paints. By using EMCoat, the installer was able to install a single layer of drywall, and then paint a base application of EMCoat, followed by a finish coat. This eliminated the need for a foil application and an additional drywall layer. This saves a tremendous amount of labor which reduces schedule and cost. Furthermore, the streamlined installation process was able to reduce the project timeline and accelerate return to service and operational activities. Overall, three weeks of schedule and 15% on overall project costs were saved by choosing EMCoat over foils. After installation, the space was inspected and accepted as meeting all requirements.

“We use EMCoat on every project we can now - it saves time and money over our other options, and the performance is exactly where our clients need it to be.”

-Scott Griffiths, Turner Tenant Services

