

# Electromagnetic Pulse (EMP) Shielded Doors

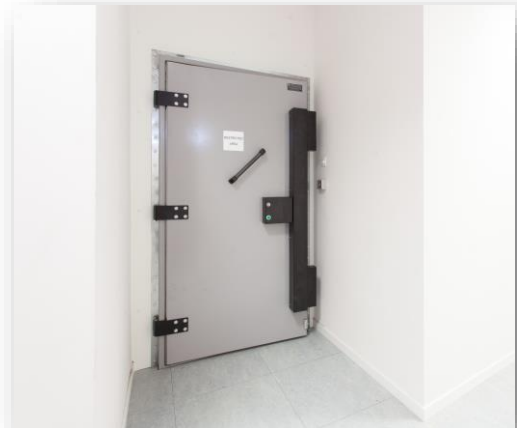


European EMC Products design a wide range of EMP Shielded Doors to meet all performance levels and applications, for both internal and external use. This includes doors for mobile containers, anechoic chambers and Tempest applications.

In addition to providing high levels of Electromagnetic Pulse Protection, our doors can be manufactured to provide fire resistance, thermal, acoustic, NBC (Nuclear, Biological and Chemical) and blast protection.

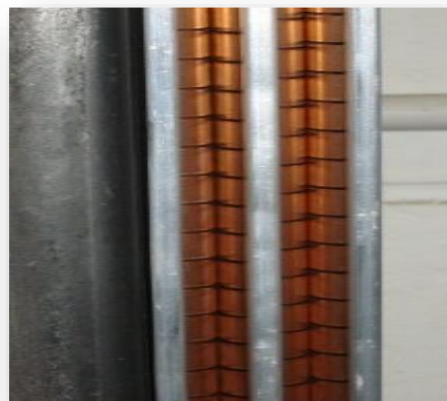
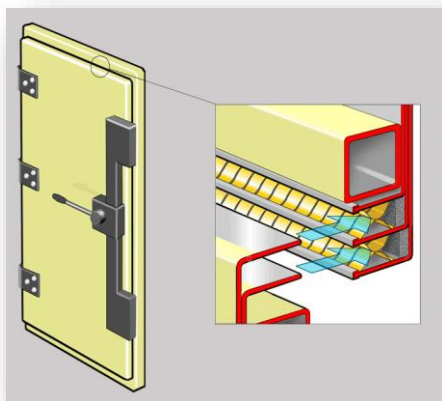
As most shielding projects are unique, we adapt our designs to meet your specific needs. All doors are designed for ease of use and maintenance, and comply with all UK, NATO and international security and performance standards.

Our range of bespoke EMP Doors and EMP Shielded Rooms provide the end user with a practical solution in line with technical specification and design requirements.



## Knife Edge Doors

The performance of an RF Shielded Door is achieved by the 'knife' on the door leaf making contact with Copper Beryllium contacts sitting within channels on the door frame, see below.



## Performance

Mil Std 188-125 Part 1 is a military document titled HIGH ALTITUDE ELECTROMAGNETIC PULSE (HEMP) PROTECTION FOR GROUND-BASED C4I FACILITIES PERFORMING CRITICAL, TIME URGENT MISSIONS. This describes the protection and testing required for these types of facilities.

Shielding effectiveness (SE) for radiated signals:

Magnetic mode: 20dB at 10 kHz rising to 80 dB at 10 MHz  
Electric mode: 80 dB from 10 MHz to 1 GHz

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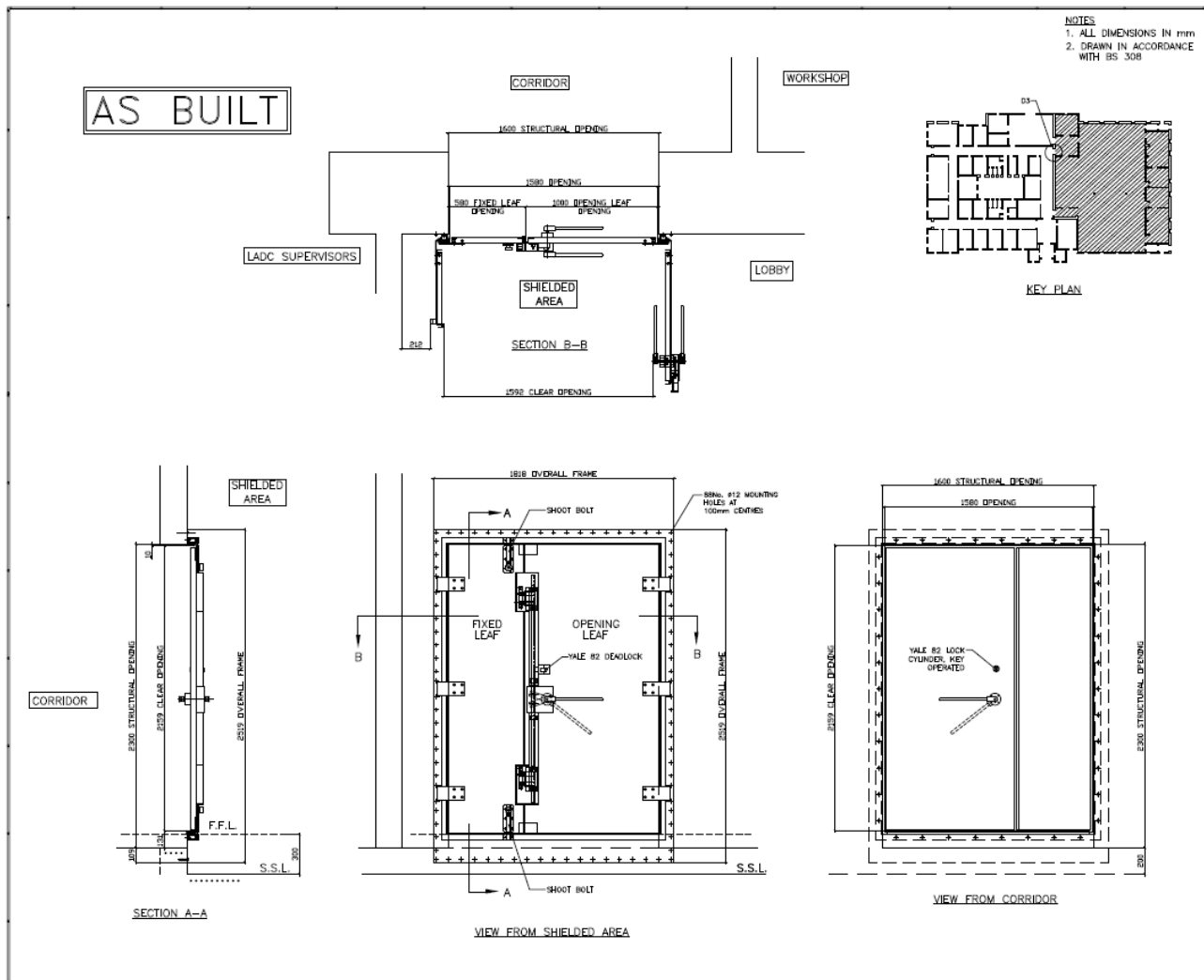
## Design

Galvanised steel door leaves finished with twin pack polyurethane paint.

Steel box section frames.

Copper beryllium finger contacts.

Typical Double Leaf Door configuration as below.



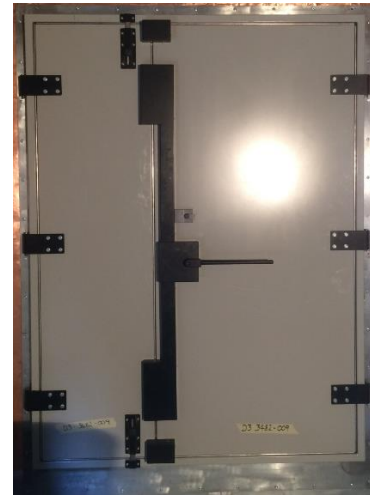
Typically, the opening leaf is supplied with powered latching, the secondary leaf of the pair being manually operated when required.

## Installation

Complete or supervised installation is optional by EEP.

Below are examples of EEP produced double leaf doors designed to meet site specific requirements.

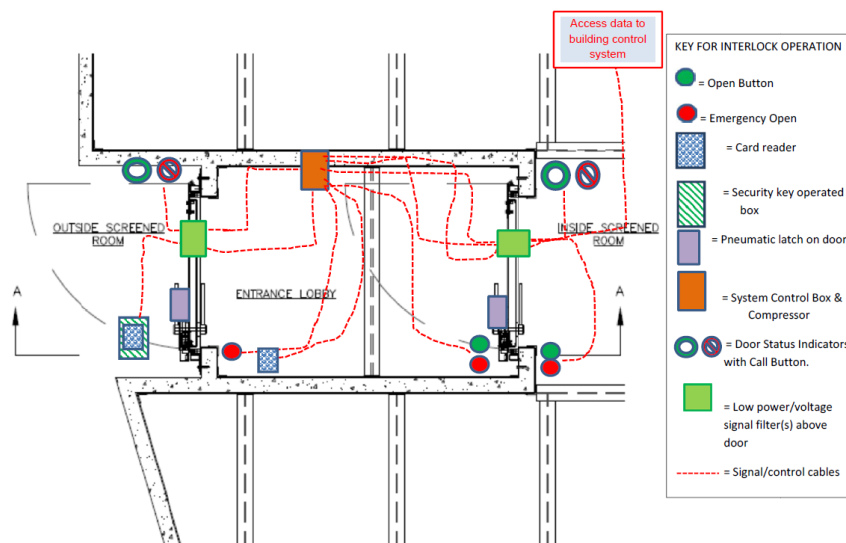
# Electromagnetic Pulse (EMP) Shielded Doors



## Interlocking Doors

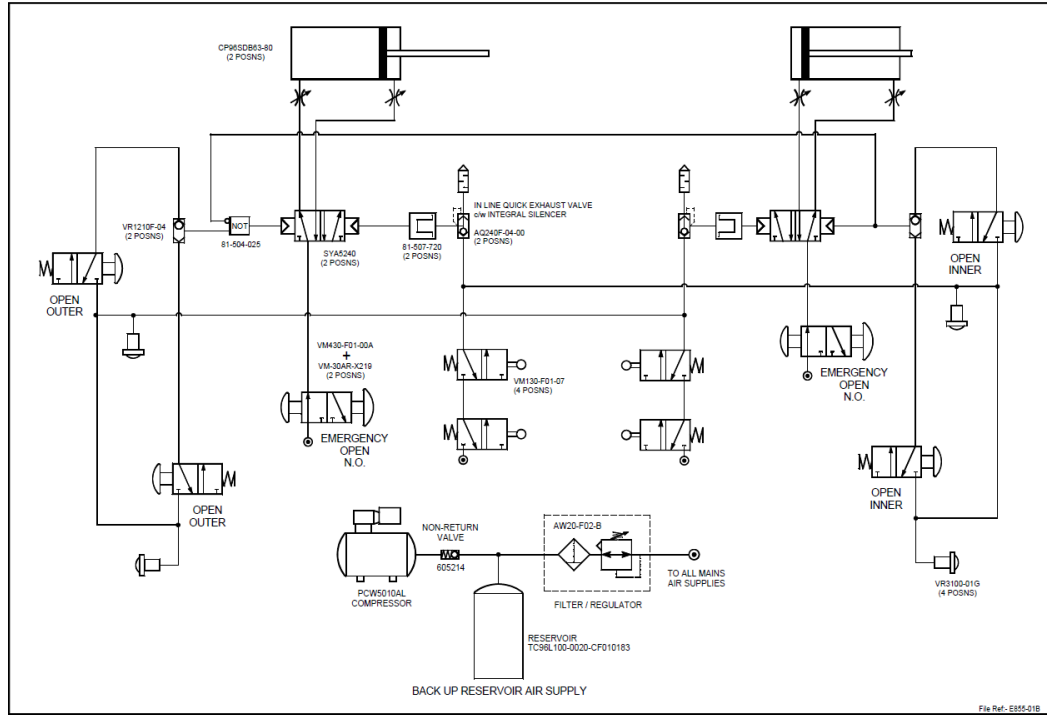
EEP can produce interlocking doors to meet the end users' specific requirements.

A typical interface would be configured as below.



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The schematic for the door controls would typically be as below.



## About Us

Established in 1996, European EMC Products (EEP) are an established British company whose experience and understanding of the science of shielding makes it an ideal partner in whom you can place your trust with confidence. The purpose of installing EEP shielding systems is to protect people and equipment against the threats posed by electromagnetic and radio frequency (RF) interference, radiation, magnetic fields and electromagnetic pulses. Our diverse range of turnkey products and services, including design, project management, testing and consultancy are delivered across multiple sectors to an international client base.

## Quality

European EMC Products Limited are registered to BS EN ISO 9001:2015, Certificate Number FS38901. Registered Scope: The design, assembly, installation, servicing and testing of RF Shielded Structures and equipment including EMI Shielding, Blast Doors, Gas Tight Doors and specialised mobile Electromagnetic Pulse Protection (EMPP) containers.

Radio Frequency, Magnetic Shielding and Quench systems for MRI (Magnetic Resonance Imaging) scanners. The design, assembly and installation of Ionising Radiation Protection facilities.

The design, manufacture and installation of LED lighting systems for medical applications.

EEP Filters Limited are registered to BS EN ISO 9001:2015, Certificate Number FS38901.

Registered Scope: The design, manufacture, management of installation and testing of high performance EMC and EMP Power and Data Line Filters.

## Disclaimer

NB: All the information provided within this datasheet is for reference only. Product specifications are subject to change without notice.