



European EMC Products Limited

Ionising Radiation Shielding



EUROPEAN EMC PRODUCTS LIMITED was formed in July 1996 to supply high quality products and services to the EMC (Electromagnetic Compatibility) market worldwide. The emphasis being on EMP and RF shielded chambers and associated products and services.

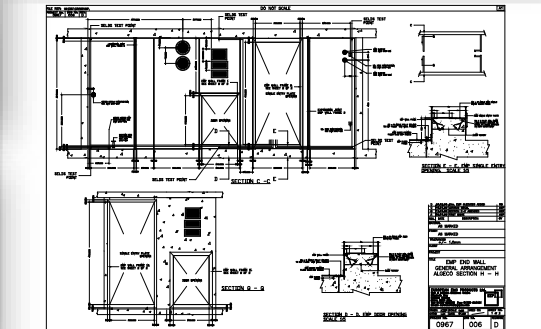
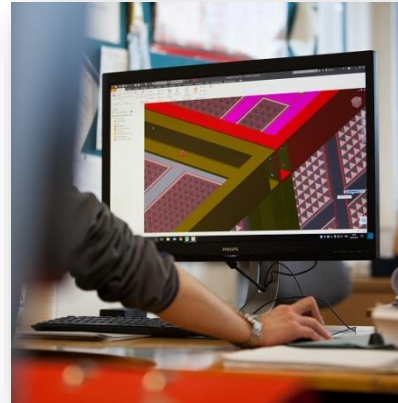
EEP can supply the following range of medical shielding products and services:

- MRI RF Shielded Rooms /Faraday Cages
- MRI Magnetic Field Shielding
- MRI Quench Pipes
- Ionising Radiation Shielding
- Load Bearing Ceilings
- EMP & RF Testing
- Silentlite MRI Lighting & Virtual Skylites



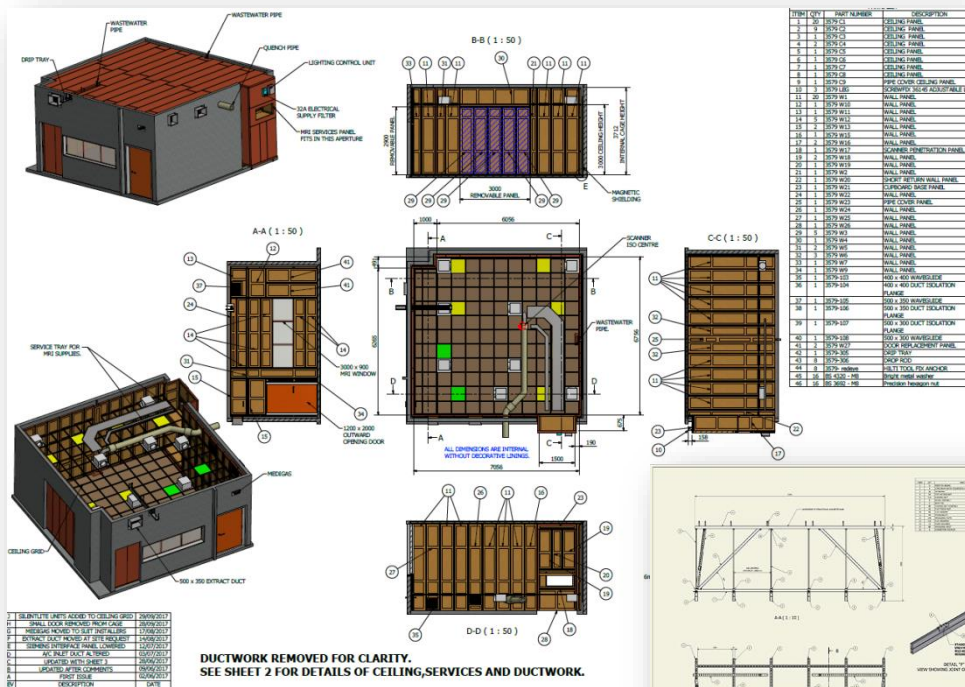
What Services Do We Offer?

- Full Design, Consultancy & Advice Service
- The Supply of Specialist Parts
- Factory Testing with In-house Test Chamber
- Quality Assurance Inspections on Local Manufacture
- Full Installation, or Supervised Installation Service

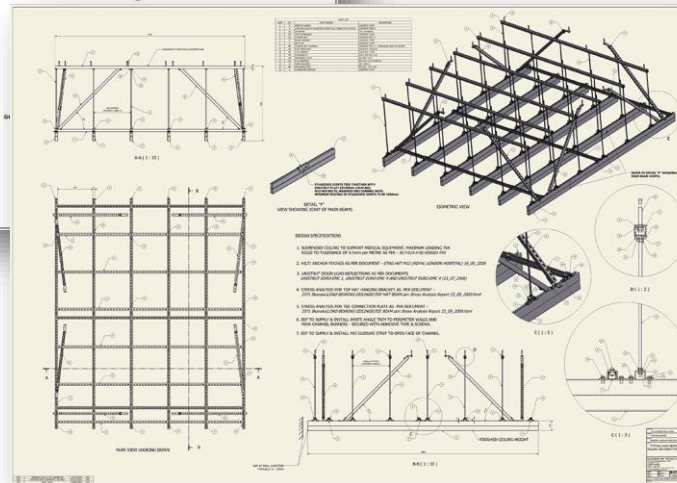




Mechanical Design



EEP will supply full detailed design to manufacturing drawings. These are produced after a detailed site survey, in collaboration with the selected building construction company, to ensure full integration with the host building.





Manufacture

- Specialist Parts Manufacturing by EEP
- Majority UK Suppliers
- Quality Assurance Assistance, including local Quality Assurance Audits





Installation & Commissioning

EEP Installations and Commissioning Worldwide





Ionising Radiation Shielding

Ionising Radiation Shielding is when the shielding material is used to absorb, or stop, high energy radiation such as Gamma radiation and Neutrons which are produced by today's medical equipment.

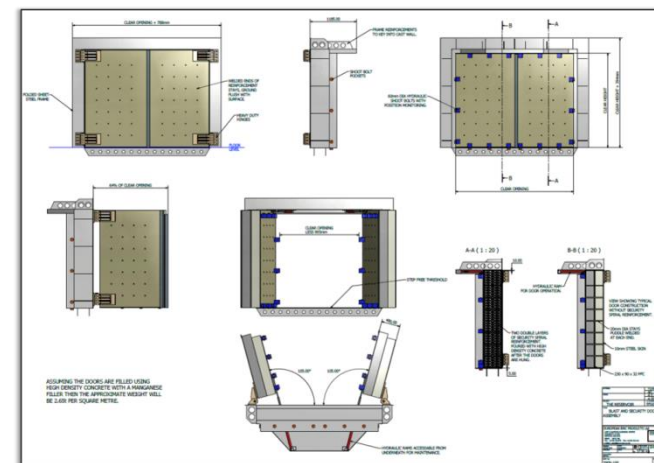
EEP offer a complete design, installation and testing service, or just material supply depending on project requirements.

Other areas we specialise in are Positron Emission Tomography (PET) / Computerised Tomography (CT) Protection shielding.





Radiation Shielded Doors



Our range of bespoke lead shielded doors are designed for ease of use and maintenance, and provide the end user with a practical solution in line with technical specification and design requirements. We are also able to supply individual components such as radiation shielded windows for installation by third parties.



Radiation Shielded Blocks

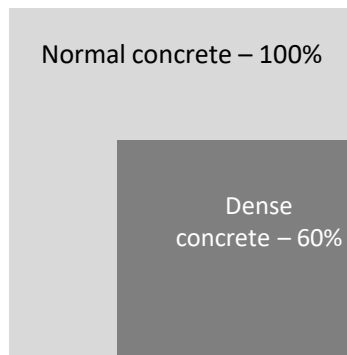
EEP work with LKAB Minerals using their Magnadense material and supply and install pre cast shielding blocks including high density blocks with a material density up to 3900 kg/m

More weight for the same volume

- More weight per cubic metre compared to normal concrete (60% heavier)

Same weight with less volume

- Reduced volume for a given weight, 40% less volume for a given weight



Thermal properties

- High specific heat capacity
- Significantly reduces risk of thermal cracking

Other properties

Chemically inert (pH neutral), non-hazardous and durable

Mohs hardness 5.5

Thermal expansion ($\sim 0.0015/100^{\circ}\text{C}$)

Low water absorption $< 0.3\%$

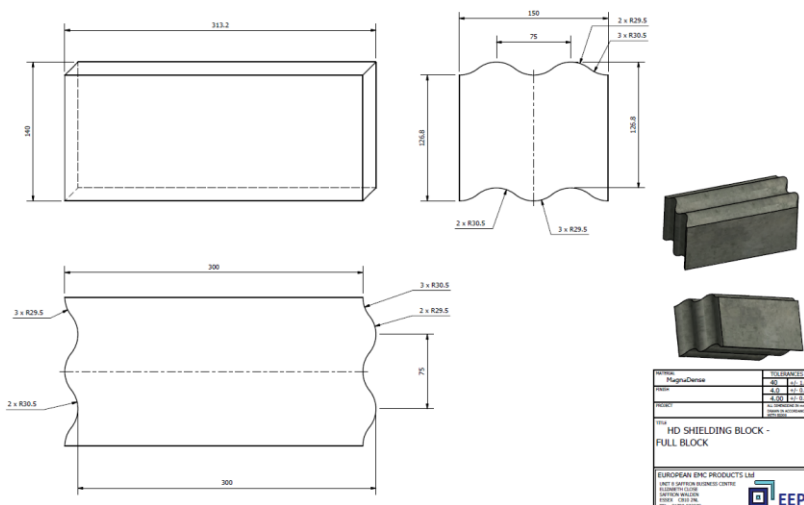
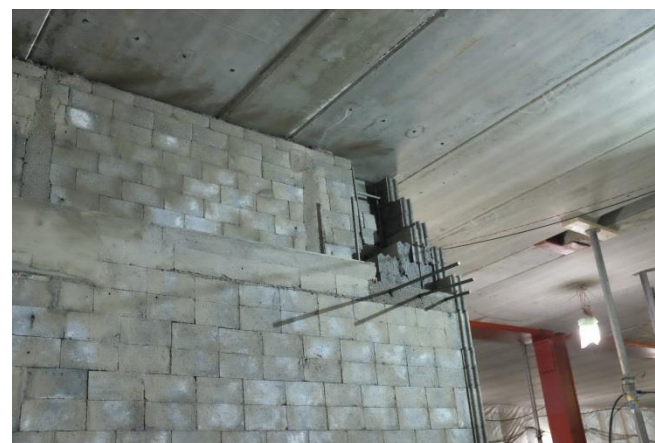


Radiation Shielded Blocks

EEP supply a range of size and configurations of blocks cast to our design by several UK based pre-cast concrete companies.

Depending on the space constraints and design blocks can range from 1800 x 600 x 600 mm to small blocks for hand installation.

Purpose made blocks for specific projects can be supplied.





Radiation Shielded Block Projects

Project: FREIA Linac facility, Uppsala, Sweden

- Large pre-cast concrete modules
- Concrete Density: 3.9 t/m³





Radiation Shielded Block Projects

Project: New Karolinska Linac MRI project, Solna Sweden

- Small pre-cast concrete modules
- Concrete Density: 3.9 t/m³





Radiation Shielded Block Projects

Project: DSTL Project, UK

- Large pre-cast concrete modules
- Concrete Density: 2.4 t/m³





Project List

- Worcester Royal Infirmary
- Derby General Hospital
- Southampton General Hospital
- Royal Brompton Hospital, London
- John Radcliffe Hospital, Oxford
- Royal London and Saint Bartholomew's Hospitals, London
- New Papworth Hospital, Cambridge
- Rosie Maternity Hospital, Cambridge
- Chase Farm Hospital, London
- Lund Hospital, Sweden
- Nya Karolinska Sjukhuset, Solna, Stockholm

*Please note this list is not exhaustive.



Quality Standards

Quality

European EMC Products Ltd are registered to BS EN ISO 9001:2015.
Certificate number: FS38901

Registered Activities:

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.





Quality Policy

European EMC Products Limited specialises in the design, assembly, installation, servicing and testing of R.F. shielded structures and equipment including EMI shielding, gas tight doors and specialised mobile electromagnetic pulse protection (E.M.P.P.) 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, assembly and installation of dimmable LED lighting systems.

Our objective is to fully satisfy our customers' requirements by supplying high quality products and services which are delivered on time at competitive and profitable prices, and which conform to all current relevant statutory standards.

All Company personnel will strive to increase business volume on an on-going annual basis by responding comprehensively to all potential customer stated requirements, by conducting continuous customer dialogue at all technical and commercial levels, by ensuring that all projects installed and commissioned fully satisfy customers' operational needs and intentions. Individual customer projects will be managed and monitored during all phases and dialogue maintained with customers during these phases to satisfactory conclusions.

It is the policy of European EMC Products Limited to establish, maintain and develop an effective and efficient Quality Management System that both contributes to the above objectives and conforms to the total requirements defined in ISO 9001 - 2015

The Quality Management System manual and associated documented procedures outlines the activities required of all Company personnel to maintain and develop the system to conform to the above.

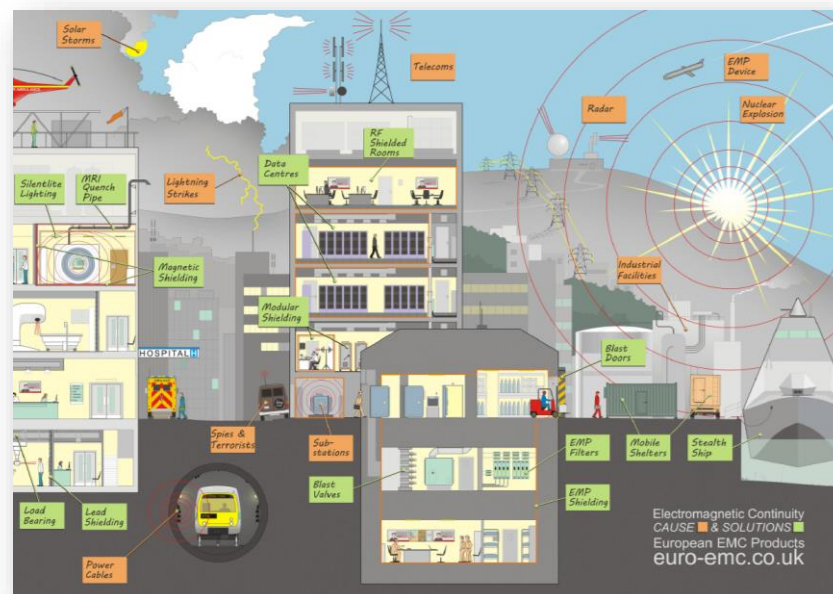
All staff are required to:

- Be completely familiar with all procedures related to their activities within the Company
- Follow and comply with requirements of all above relevant procedures and objectives
- Continually seek to improve both the effectiveness of the Company's focus on customer satisfaction and seek to improve effectiveness of the QM System.

This Quality Policy statement has been adopted by European EMC Products Limited and supersedes all previous policy statements.



Shielding Solution Specialists



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