

Category 2 Standard

S2509
(Formerly E7206)

Design of signal equipment rooms

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1 Purpose

- 1.1 Signal equipment rooms (SERs) are used to house equipment primarily associated with the safe operation of the railway.
- 1.2 This standard covers the minimum requirements for all signal equipment rooms and their domestic services.

2 Scope

- 2.1 This standard does not cover the installation of signalling equipment and associated power supplies.
- 2.2 This standard replaces E7206 A3, which is withdrawn.

3 Requirements

3.1 Safety considerations

- 3.1.1 Due to the safety critical nature of the equipment housed, signal equipment rooms are required to comply with the minimum level of protection stipulated within this standard.

3.2 Location

- 3.2.1 The preferred location for a Signalling Equipment Room is at one end of a platform of the Line for which it contains signalling equipment, and can either be included into the fabric of an existing structure, or be a stand-alone structure.

Note: The 'preferred location' may be within a 10 metre walk from the platform in question.

3.3 Design and construction

- 3.3.1 Signal equipment rooms shall be classified as a fire compartment as defined in engineering standard 1-080, The application of fire safety principles to LU premises.. The design and construction techniques adopted shall achieve both the fire rating and reliability for signal equipment rooms detailed within engineering standards 1-083, Passive fire protection systems and S1053, Civil engineering – building and station structures.
- 3.3.2 Reference shall be made to engineering standard S1053 for requirements covering construction and ancillary works. The room shall additionally protect the equipment housed against the ingress of dust and water penetration.

Note: Where an existing room is re-used, secondary drip protection shall be provided if necessary.

- 3.3.3 Equipment room size shall be appropriate for the proposed installed equipment. Considerations shall be made to accessibility to equipment for installation, maintenance and operational purposes and to the requirements of the Health and Safety at Works regulations. Requirements for the physical separation of equipment supplied by different phases of the power supply shall be taken into account.
- 3.3.4 All doors shall have a minimum clear opening of 2000mm high by 850mm wide and entry doors shall comply with the requirements of engineering standard 1-134, Premises – Doorsets and glazing.
- 3.3.5 Entry doors shall be fitted with a lock suite approved by the Network Security Manager.