

Update on Fire Risk assessment

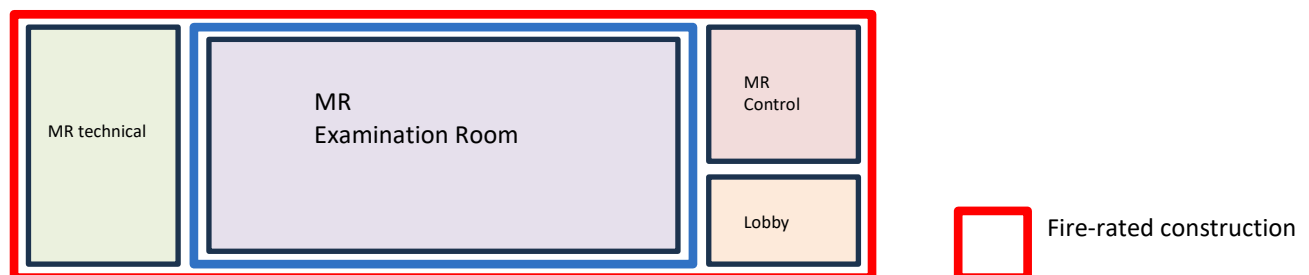
An MRI unit contains hazards which impact on the way in which a fire can be managed. In particular, the scanner's static magnetic field can pose a significant projectile hazard, which may impact on firefighting.

The MHRA guidelines recommend that adequate written procedures are issued, including those related to environmental emergencies such as fire. A site-specific risk assessment would typically inform such procedures. An example risk assessment template is provided by BIR.

Earlier this year, an update to this fire risk assessment template was published. This involved two main changes.

Removal of recommendation of firestopping of cable penetrations between the examination room and the technical room

These cables form part of the medical device and its certification. Addition of extra firestopping materials in effect represents a modification of the device outside of its certification. Due to the complexity of the interconnections between the examination room, technical room and control room, these should be within the same fire protection zone, and firestopping would be unnecessary between these rooms.



Example layout illustrating location of fire barriers enclosing the combination of MR examination room, technical room and control room.

Clarification of fire resistance of electrical connection of the emergency quench system

In 2011, a fire incident occurred resulting in damage to the electrical connections between the quench button and the magnet, resulting in failure of the quench button. The risk assessment referred to fire ratings in the BS7671 wiring regulations. However, as the quench control cables form part of the medical device, compliance with BS7671 is not applicable. The risk assessment has been modified to describe alternative fire protection methods, such as installation of the cables in a fire-retardant enclosed raceway.