

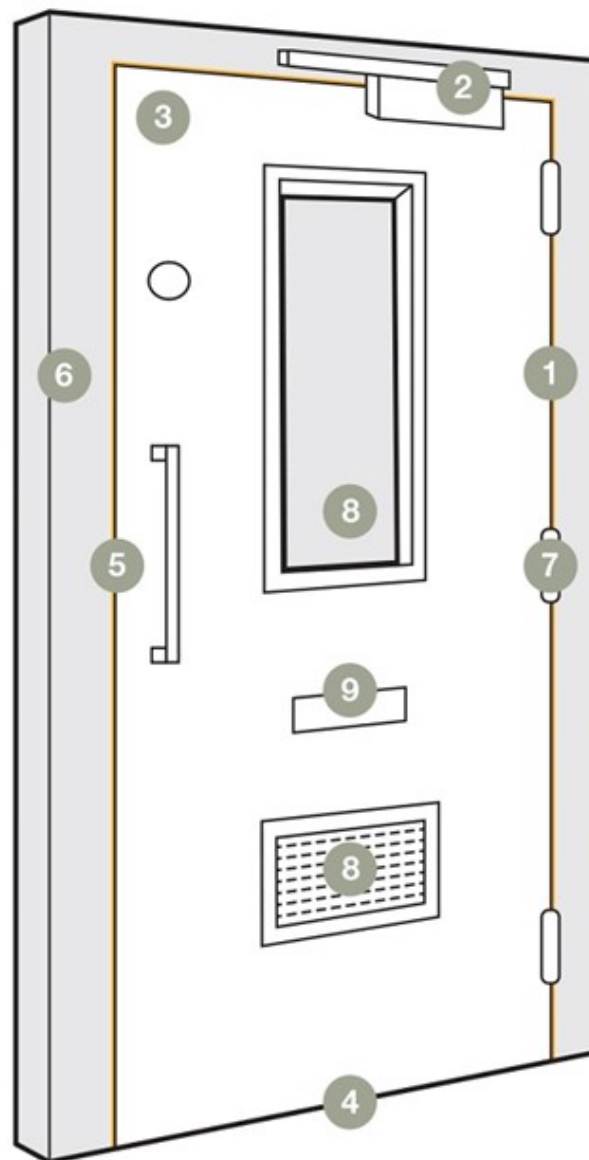
Despite having a door that has been fully assessed, certificated and holds a fire rating of FD30 or FD60. For a fire door to have its full integrity it needs to have the correct fire-rated ironmongery, seals and relevant signage. Below is a guide to the anatomy of a typical fire door and explanations into the key functions of its working components.

- 1. Intumescent seals: intumescent strips** are fixed all around the door frame and expand when exposed to heat. This provides an intumescent seal around the door, filling any gaps to help contain fire and smoke for a certain period of time.
- 2. Door closers:** a fire door should remain closed when not in use. The use of **door closers** enables a fire door to automatically close after opening. Choosing the correct closing strength, in relation to the door's weight, is a crucial factor that will ensure a smooth and easy open and close function.
- 3. Door leaf:** a **fire door leaf** refers to the actual door itself. This is the main component in a fire door set. All fire-rated doors should have an identification label which will identify the manufacturer, the fire-resistant time and ironmongery required, amongst other valuable information.

- 4. Threshold seal:** a threshold seal or plate will give you added protection from cold smoke coming through the gap underneath a door. There are several types ranging from drop down, brush strip and rubber threshold seals.
- 5. Locks and latches: fire-rated hardware** is needed to ensure the integrity of a fire door. Whether you use locks or latches for your door set, either type will make sure that the door stays shut and remains an effective barrier.

6. Frame: a **fire-rated door frame** must be compatible with your chosen fire door leaf. If the frame is not fire-rated then your leaf cannot be classed as a fire door.

7. Hinges: generally, three **hinges** are required for a fire door, and can be used with intumescent fire hinge plates for additional protection. Some fire-rated hinge sets may come with protective plates.



8. Glazed vision panel and air transfer grille: glazed fire doors with a vision panel and / or air transfer grille are usually factory fitted complete with all of the correct components: fire-rated glass, intumescent system, glazing bead system and fixings as detailed on the fire door certificate.

An air transfer grille's daily purpose is to allow a free-flowing circulation of air. In a fire, the intumescent element (in between the two grilles on either side of the door) expands - forming a solid block to inhibit smoke and fire spreading.

9. Letterplate: complete your fire door with an **intumescent letterbox**. The intumescent liner will expand when heat is detected to create a barrier that closes off the letterplate opening.