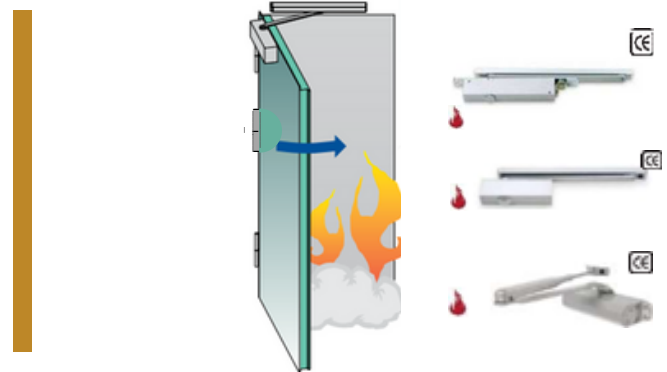


# Think Through

## FIRE RATED DOOR CLOSERS

It is essential for fire doors to close in the event of fire. The fire door must close and latch automatically in order to limit the spread of fire into other parts of the building..



All fire rated self-closing devices are as per EN 1154 standard and CE marked.

**EN 1154** - As per EN 1154, certain recommendations are made for closing devices used on fire door assemblies. These include:

- Closers size must be above EN 3 for use on fire doors.
- Door closers shall not include a hold-open device unless it is an electrically powered device connected to the building fire alarm system.
- For concealed fire rated door closers recommended to use Intumescent self-adhesive pocket kit as per BS 476 part -20
- Face fixed overhead door closer better be having melting point more than 800°

For the fire rated door closers considered for busy traffic areas, use of free swing or electromagnetic hold open device (point magnets) are recommended. The Electro-mechanical Function for door closer is explained as under –

The EM door closers becomes self closing upon release of hold open device in case of fire or emergency uses. It is used to avoid breach of fire safety norms by keeping fire doors open.

Two Functions - 1. Hold Open 2. Swing free

1. Hold Open - blocks the self-closing function of the door closer and it is used in heavy traffic or equipment movement areas.
2. Swing Free - door closer's self closing function is electro-mechanically disconnected. It works without spring pressure and door can be moved back & forth easily by elderly or specially challenged people. (not recommended for corridors)

*Adjustable spring strength door closer are apt for fire doors for on-site adjustments.*

- **Application** – Fire rated Doors on egress route | Exit doors integrated with access control and fire detection systems | Fire rated hold open doors | OT doors etc.
- **Types** – Face Mounted | Concealed | Electromechanical | Electrohydraulic | Automatic door closer \*
- **Installation** - The common way of installation is where the closer body is installed into the door leaf with a slide channel in the frame above. However, it is, possible to reverse this so that the body is in the frame above with the slide channel in the door. With this type, it is important that the frame section is deep enough to accommodate the closer body. | Door thickness – 40/45 mm. EM & automatic door closer rely on power supply. It can be integrated with smoke and/or fire detectors.
- **Uses of door closers** - Security | Privacy | Acoustic | Fire | Energy saving | Hygiene

*\* Read more detail on Automatic door closers in next Think Through Article.*

