



## Think Through

# CONCEALED DOOR CLOSERS

Concealed overhead door closers provide a very subtle closing function for doors with invisible hardware. When the door is closed they are fully concealed and are not visible from either side of the door.



All self-closing devices are as per EN 1154 standard.

**EN 1154** - A consistent standard designed for life safety all types of “Controlled Door Closing Devices” are covered under consistent European Standard, EN 1154. It conveys details on product types and classifies products by use, test cycles, and door mass, corrosion resistance and product performance requirements using a six digit classification code.

EN Closer power settings as per EN 1154. The door closer power ratings are identified according to the maximum door leaf weight and width as under –

EN Size	Max Door weight(kg)	Max. door width (mm)
1	20	750
2	40	850
3	60	950
4	80	1100
5	100	1250
6	120	1400
7	160	1600

*The efficiency of the door closer = opening force / closing force \* 100*

- **Application** –

Latched door – To close door in controlled manner into a position.

Unlatched door – To close the door in controlled manner to its dead center position and maintain its condition during fire exposure.

Concealed door closers will suffer less damage and provides more integrity with self-adhesive intumescent pockets.

- **Types** – Rack & Pinion | Asymmetric rack & Pinion for slide channel | Cam action
- **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. | Max. Opening angle 120degree.
- **Uses of door closers** - Security | Privacy | Acoustic | Fire\* | Energy saving | Hygiene

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