

Type D - Standard Duty Mechanical Door Controls

REL.410 Series Standard Duty - Concealed Overhead Door Holders/Stops

The **REL.410** series offers the industry's widest variety of functions, base materials and finishes to fit all standard (medium) to light duty applications. The perfect combination of form and function, **REL.410** series holders and stops offer effective door control and a low-profile design. Each model is constructed so that the channel is concealed in the top rail of the door with the jamb bracket morticed into the frame. When the door is closed the entire holder is concealed.



REL.410

These versatile models can be used with almost all Relcross surface overhead door closers. Templates provide variable mounting positions allowing hold open and stop positions between 85° and 100°. **REL.410** series holders and stops accommodate doors hung with conventional full mortice hinges, offset and centre hung pivot sets (consult sales office for more details).

Three distinct versions offer solutions as follows:

■ REL.410H Series Hold Open Model – Standard Duty

Holding the door open at a pre-determined position for long or short periods. The hold open function is an automatic mechanism that 'kicks-in' when the door is opened to a preset angle. Tension is adjusted using an Allen key.

■ REL.410S Series Stop Only Model – Standard Duty

Providing an effective 'out of the way' auxiliary stop when the hold open function is not a requirement.

■ REL.410F Series Friction Hold Open Model – Standard Duty

Used in situations where multiple hold open points are desirable. Friction tension is adjusted using an Allen key.

Each model is available in five sizes as shown in the **table on page 34**.

Dead Stop Templating - REL.410 & REL.450 Series

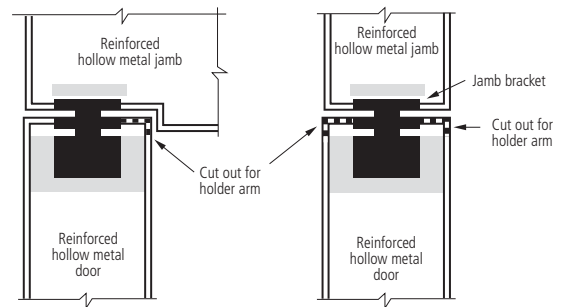
For situations where a wall or a similar obstruction is in place at an opening angle of 110° or less (e.g. doors opening back-to-back), **dead stop** templating should be used. This includes all hold open, stop only and friction models. The **dead stop** position is reached when the shock-absorbing spring is fully compressed, allowing an initial degree of opening of 5° to 7° less than the dead stop opening.

For example: If the holder is templated for 100° dead stop, the door will hold open somewhere between 93° and 95°, and open no further than 100°.

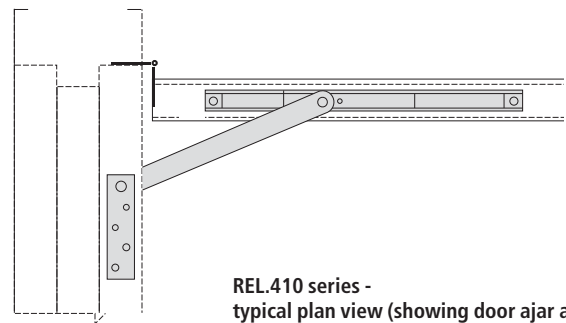
Concealed Installation

Concealed overhead door holder and stop installation requires that the 'jamb bracket' is installed flush with the underside of the head frame. The arm and channel must be installed in the door's top rail with the arm flush with top of the door. A cut-out must be made for the arm on the stop side of single acting doors. Double action or 'swing-through' doors require a cut-out for the arm on both sides of the door - see the illustrations below.

Typical layout for single and double action doors



Accurate template drawings for each holder give complete reinforcement and morticing specifications. They are readily available from the sales office.



REL.410 series -
typical plan view (showing door ajar at 90°)

Materials and Finishes

All models are available in 300 series Stainless Steel, Brass and Steel substrates. Stock finishes include **US32D** satin stainless steel and **SP28** powder coated silver.

How to Specify or Order

| | |
|--|--------------------------------|
| Example | 41 — 3 — F — SP28 — SOC |
| REL.410 Series | ↑ |
| Size (from table on page 34) | ↑ |
| Function (hold open, stop or friction) | ↑ |
| Finish (SP28 = powder coated silver) | ↑ |
| SOC (Hex-pin security screws) | ↑ |