

Type C - Heavy Duty Mechanical Door Controls

An Introduction to Overhead Door Holders & Stops

We believe that the best application for a 'door holder' or 'auxiliary stop' is one that operates overhead, with an arm functioning from the header frame to the door top rail. This type of device performs best when the maximum stop or hold open angle does not exceed 110°.

Overhead holders and stops are 'out of the way' in contrast with floor or wall-mounted stops which can be a hazard to pedestrian traffic and may be vulnerable to damage, either by accident or maliciously. Auxiliary holders or stops should be used on all doors furnished with overhead door closers. Door closers are not door stops and a back-check function should not be expected to perform the function of a stop.

Definition of 'Door Opening'

The term 'door opening' is defined as the dimension of the door opening from jamb to jamb. This should not be confused with the width of the door. Refer to the chart below and you will find, for example, that a 1143mm opening requires a size 5 holder if the door is hung on butts (conventional full mortice hinges) or offset pivots.

You will note also that, regardless of the style or series of holder, we have standardized the size of holders and stops for all openings, combining the size in the model number. The third digit in all models designates the size. If any further information is required on sizing a holder or stop, please contact the sales office for assistance.

Concealed Series			Surface Series		
Size	Door Opening	410 Series	70 Series	79 Series	450 Series
1	457 - 584mm	411	-	-	451
2	585 - 686mm	412	702	792	452
3	687 - 838mm	413	703	793	453
4	839 - 991mm	414	704	794	454
5	992 - 1143mm	415	705	795	455
6	1144 - 1372mm	-	706	796	-

Selecting the Degree of Hold Open or Stop

Our overhead holders and stops are designed to function effectively from 85° to 110°. Where conditions permit, we recommend the minimum degree of hold open be set at 95° - placing any projecting door hardware (fitted to the push side face of the door) beyond the flow of traffic.

When selecting maximum opening angles for overhead holders and stops on doors opening back-to-back or against a wall, please note all our holders have shock absorbers allowing approximately 5° - 7° movement beyond the hold open or initial stop point. The concept of dead stop templating means that the degree of opening must be set at 5° - 7° less than the point of the required dead stop to accommodate the compression of the shock absorber.

Exposed Applications

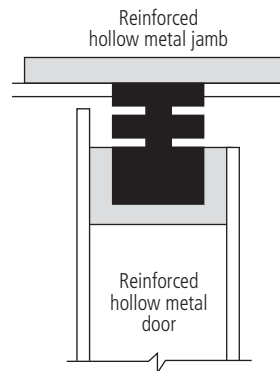
A heavy duty holder or stop should be considered (See page 35) where doors and frames are subject to heavy, frequent use or where external doors open out to exposed situations and high winds are a factor.

Environmental Considerations

Environmental factors should be considered always when specifying overhead holders and stops. Exterior (perimeter) doors or doors subject to corrosive conditions should be equipped with a stop or holder constructed primarily of stainless steel, brass or bronze materials. For interior applications, steel is acceptable, although brass and bronze substrates generally provide a more attractive architectural grade finish.

Door and Frame Reinforcement

Our overhead holders and stops are fabricated from quality brass, steel and stainless steel materials, and are designed to function even under constant heavy duty abuse. Therefore, it is essential that all doors and frames are reinforced adequately to provide proper anchorage for the overhead stop. It is important that timber doors and frames are strong enough to provide proper anchorage for the door holders. For reinforcement details, refer to individual templates for each overhead stop (contact the sales office).



Typical reinforcement points for a concealed installation on hollow metal doors and frames.

Closer Applications - Surface Overhead Door Holders/Stops

Surface mounted models require minimal door and frame preparation. They may be used in conjunction with most surface mounted Relcross door closers. In some cases, optional drop plates are required with the closer (consult sales office for more details).

Suffix .SOC - Hex-pin Socket Security Screw Package

An optional screw package with hex-pin socket screws for mounting the jamb bracket to the frame is provided instead of the standard screw package.

Available with all overhead door holders/stops.