

# Single Acting—Offset Pivoted with Hydraulic Back Check for Heavy Duty Interior and Exterior Doors



## **DOR-O-MATIC** 2500 SERIES

Federal Specification FF-H-121c Type 3520A Mod. II, III

UL Listed Models 2510, 2530 without hold open for B, C, D, E label doors



**Top Pivot** No. 280AC is standard, Pivot Nos. 28, 38 and 48 are available. All are corrosion resistant and hold the door in perfect alignment.  $\frac{3}{4}$ " offset standard,  $1\frac{1}{2}$ " offset available on request.

**Intermediate Pivot** No. 019AC assures perfect door alignment—recommended for use on high frequency doors over 7' 6" high, furnished only when ordered.  $\frac{3}{4}$ " offset is standard,  $1\frac{1}{2}$ " offset available on request.

**Bottom Arm** No. 220A has a height adjustment which compensates for door sag and/or misalignment.  $\frac{3}{4}$ " offset is standard,  $1\frac{1}{2}$ " offset available on request.

**Closer Spindle** If clearance between finished floor line and bottom of door (with threshold) is more than  $\frac{1}{16}$ " indicate amount of clearance needed and specify longer spindle.

**Cement Case** No. 766A is designed to hold Hydra-Cushion firmly in position. When used with Type 43 threshold set flush with finish floor. Use Type 43 x 8360.

Finishes available in all standard finishes (see page 5).

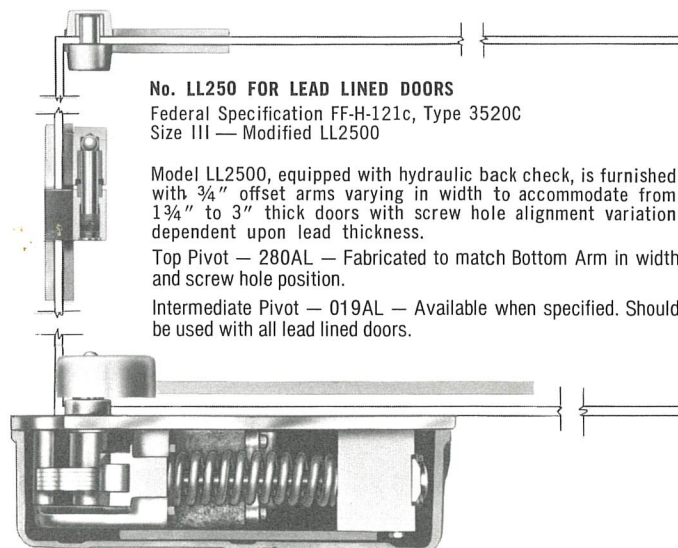
Hydra-Cushion concealed-in-floor door control gives maximum protection to doors and frames, even where abuse is routine.

Doors are gently stopped by hydraulic cushioning. Amount of back check may be regulated to suit door weight and width . . . positive stop and built in hold open make over head holders unnecessary.

Closing force is provided by compression springs. Cushioning (or back check) is achieved by regulating hydraulic fluid flow from back check cylinder with adjustable valve screw. Moving parts are under constant lubrication. Integral leveling screws permit leveling door control in cement case.

**SELECT-O-MATIC AUTOMATIC HOLD OPEN** is exclusive with Dor-O-Matic checking floor hinges, prevents accidental hold open engagement, but allows door to be held in hold open position without any manual change or adjustment. No tools are necessary. To engage hold open option simply apply pressure to door in open position, overcoming effect of back check and door will go into hold open. When door is closed it will return to normal operation without any adjustment. Extended port caps available where closing adjustment thru the threshold is required.

Door closer is designed to allow door to swing 5° beyond center insuring positive latching and contact between door and stop.



### No. LL250 FOR LEAD LINED DOORS

Federal Specification FF-H-121c, Type 3520C  
Size III — Modified LL2500

Model LL2500, equipped with hydraulic back check, is furnished with  $\frac{3}{4}$ " offset arms varying in width to accommodate from  $1\frac{1}{4}$ " to 3" thick doors with screw hole alignment variation dependent upon lead thickness.

**Top Pivot — 280AL** — Fabricated to match Bottom Arm in width and screw hole position.

**Intermediate Pivot — 019AL** — Available when specified. Should be used with all lead lined doors.

## SELECTOR CHART **Hydra-Cushion** Single Acting\* • Offset Pivoted • 2500 Series

| DOOR<br>SIZE<br>MAX-<br>IMUM | TYPE<br>AND<br>LOCATION<br>OF<br>DOOR | Federal<br>Spec.<br>FF-H-121c<br>Type | 105°<br>Hold<br>Open<br>&<br>Stop | 105°<br>Stop | 90°<br>Hold<br>Open<br>&<br>Stop | 90°<br>Stop | 175°<br>Hold<br>Open | Shpg.<br>Wt.<br>Lbs. | THRESHOLDS †<br>Specify Finish, Hand, and Width<br>of Door Opening Jamb to Jamb |             |             |                                |              |                                |                                 | PIVOTS<br>Specify Finish<br>and Hand |     |             |
|------------------------------|---------------------------------------|---------------------------------------|-----------------------------------|--------------|----------------------------------|-------------|----------------------|----------------------|---------------------------------------------------------------------------------|-------------|-------------|--------------------------------|--------------|--------------------------------|---------------------------------|--------------------------------------|-----|-------------|
|                              |                                       |                                       |                                   |              |                                  |             |                      |                      | 4''<br>Wide                                                                     | 5''<br>Wide | 7''<br>Wide | 7''<br>Wide<br>Mitered<br>Ends | 7¾''<br>Wide | 4''<br>Wide<br>x 7''<br>Offset | 5''<br>Wide<br>x 7¾''<br>Offset | Federal Spec.<br>FF-H-121c, 3525     |     |             |
|                              |                                       |                                       |                                   |              |                                  |             |                      |                      |                                                                                 |             |             |                                |              |                                |                                 | Inter-<br>mediate                    | Top | Bot-<br>tom |
| 3'2"                         | Entrance, Vestibule                   | 3520A I Mod.                          | 2500D                             | 2510D        | 2520D                            | 2530D       |                      | 40                   |                                                                                 | 30x7250     |             | 30x8250                        | 50x4250      | 50x5250                        | 019AC                           | 280AC                                |     |             |
| 3'8"                         | Interior                              |                                       |                                   |              |                                  |             |                      |                      |                                                                                 |             |             |                                |              |                                |                                 |                                      |     |             |
| 3'8"                         | Entrance, Vestibule                   | 3520A II Mod.                         | 2500E                             | 2510E        | 2520E                            | 2530E       |                      | 40                   |                                                                                 | 30x7250     |             | 30x8250                        | 50x4250      | 50x5250                        | 019AC                           | 280AC                                |     |             |
| 4'0"                         | Interior                              |                                       |                                   |              |                                  |             |                      |                      |                                                                                 |             |             |                                |              |                                |                                 |                                      |     |             |
| 4'0"                         | Entrance, Vestibule                   | 3520A III Mod.                        | 2500F                             | 2510F        | 2520F                            | 2530F       |                      | 40                   |                                                                                 | 30x7250     |             | 30x8250                        | 50x4250      | 50x5250                        | 019AC                           | 280AC                                |     |             |
|                              | Lead Lined X-Ray<br>Doors             | 3520C III                             | LL2500                            | LL2510       | LL2520                           | LL2530      |                      |                      |                                                                                 |             |             |                                |              |                                | 019AL                           | 280AL                                |     |             |

\* Controls shipped with dress plate, bottom arm, top pivot and cement case.

† No. 2 stop strip available upon request.

Extended port caps — to order or specify use letter D suffix with standard threshold numbers.

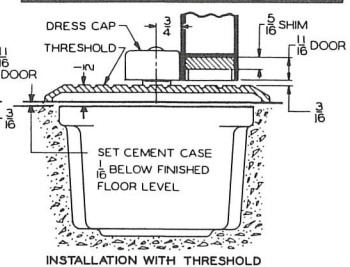
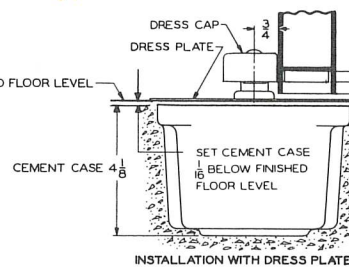
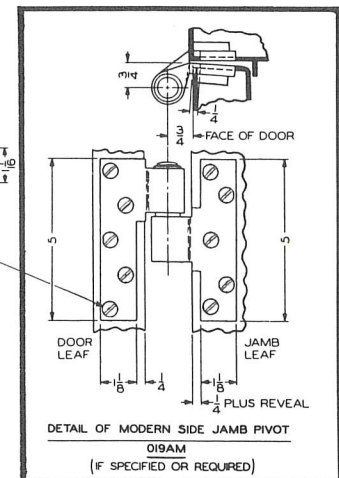
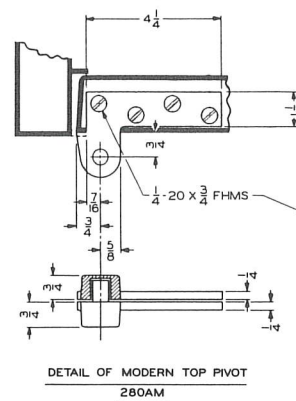
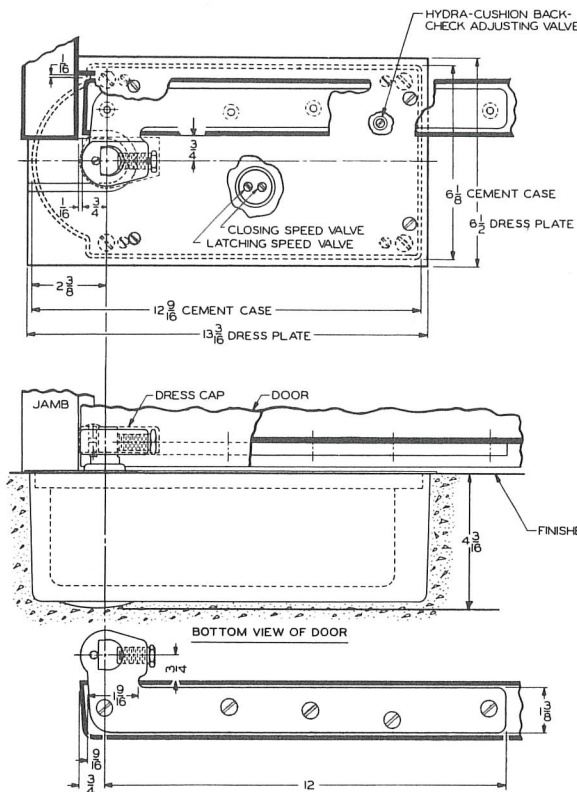
# Hydra-Cushion concealed in floor door controls .2500 SERIES

WHEN SPECIFYING OR ORDERING ALWAYS . . .

1. Specify door size and type.
2. Select correct door control by model number for application.
3. Advise hand of single acting units.
4. Advise door and frame material so proper screws and accessories are furnished.
5. Advise door thickness.
6. Specify finish.
7. Specify intermediate pivots or surface applied pivots, handed, if other than standard pivots are required.
8. Advise if thresholds are required. (If thresholds are specified, order floor-type door controls less floor dress plates.)
9. Advise thickness of door and lead of x-ray room doors.
10. Advise if spindle longer than standard length is required.

## TYPICAL ORDER

| Quantity | Hand | Dor-O-Matic Model No. | Finish | Special Instructions on other than Standard Units      | Door Size                   | Door  |      | Jamb  |      |
|----------|------|-----------------------|--------|--------------------------------------------------------|-----------------------------|-------|------|-------|------|
|          |      |                       |        |                                                        |                             | Metal | Wood | Metal | Wood |
| 10       | RH   | 2510                  | US10   | less dress plates, less top pivot X Extended Port Caps | 3'6"x7'0"x2"                |       | W    | M     |      |
| 8        | LH   | 2520F                 | US10   | spindle clearance $\frac{7}{8}$ "                      | 4'0"x8'0"x1 $\frac{3}{4}$ " | M     |      | M     |      |



**Caution:** Request latest template for each installation; templates are revised from time-to-time when necessary.  
For threshold application with hollow metal doors  $\frac{5}{16}$ " shim to be supplied by door manufacturer.

## SUGGESTED SPECIFICATION – Hydra-Cushion 2500 SERIES

Floor-type door controls shall be Dor-O-Matic Hydra-Cushion as manufactured by Dor-O-Matic division of Republic Industries, Inc. They shall be Federal Specification 3520A modified to conform to manufacturer's recommendation for door size and location and installed in strict accordance with manufacturer's recommendations. They shall have an adjustable hydraulic back check to cushion door at end of its opening cycle, two adjustments to individually control the initial

closing and latching speed, compression-type springs, and integral leveling screws to level the door control in the cement case. They shall have a built-in hold open (optional) at 90° or 105° (specify) and positive back stop at 90° or 105° (specify). They shall be installed in strict accordance with manufacturer's recommendations.

Closers used on B, C, D, E label doors must be U.L. listed, with no hold open.