



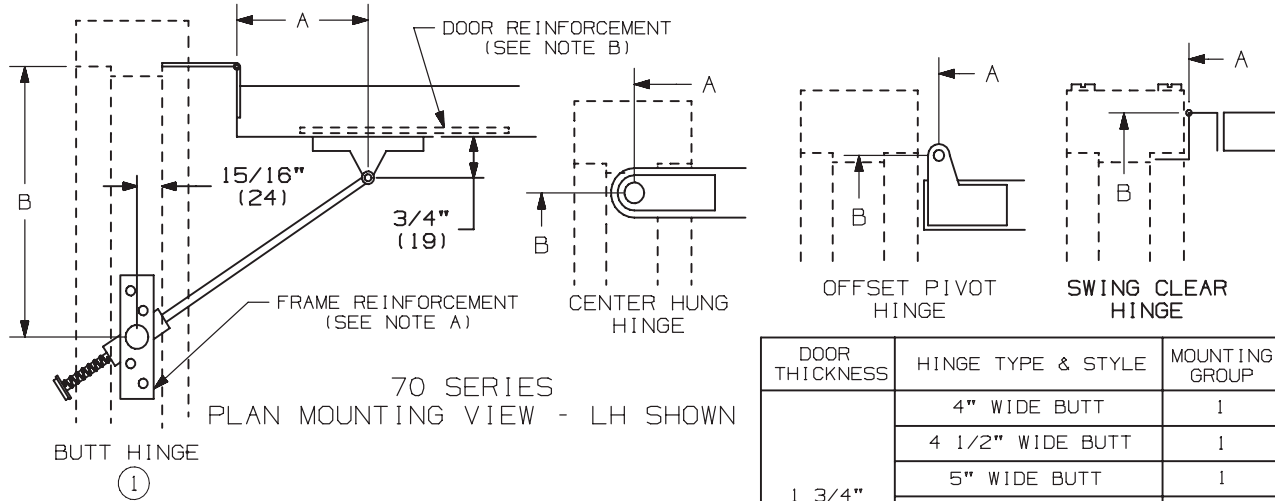
INST.70

Surface Overhead Holder

Installation Instructions

OVERHEAD HOLDERS OR STOPS MUST BE INSTALLED BEFORE CLOSERS

1. A. DETERMINE THE MOUNTING BEING USED FROM ILLUSTRATION BELOW.
- B. SELECT MOUNTING GROUP NUMBER FROM CHART BELOW. CONTINUOUS HINGES ARE GROUPED WITH 4 1/2" WIDE BUTT OR 4 1/2" SWING CLEAR HINGE.
- C. USING THE MOUNTING GROUP NUMBER AND THE OVERHEAD HOLDER OR STOP SIZE AND THE DEGREE OF OPENING DESIRED, FIND "A" AND "B" DIMENSIONS FROM CHART ON PAGE 3. FOR DEAD STOP ADD 3/8" (10) TO THE "A" AND "B" DIMENSIONS FROM THE CHART. SEE NOTE D FOR INFORMATION ABOUT DEAD STOP.



70 SERIES
PLAN MOUNTING VIEW - LH SHOWN

NOTES:

- A. HOLLOW METAL FRAMES SHOULD BE PROPERLY REINFORCED WITH A 3/16" (5) MINIMUM THICKNESS BY 12" (305) MINIMUM LENGTH PLATE.
- B. HOLLOW METAL DOORS SHOULD BE PROPERLY REINFORCED WITH A 3/16" (5) MINIMUM THICKNESS BY 2 1/2" (64) MINIMUM WIDTH PLATE.
- C. STOP ONLY UNITS ARE PERMITTED ON MANY FIRE DOOR APPLICATIONS. HOWEVER, MECHANICAL HOLD-OPEN DEVICES THAT REQUIRE MANUAL RELEASE ARE NOT PERMITTED FOR USE ON ANY FIRE DOOR AS OUTLINED ON NFPA80 (R) OR NFPA101 (R).
- D. DEAD STOP (DS) TEMPLATING MAY BE USED ON HOLD OPEN AND STOP ONLY MODELS. THE DS POSITION IS REACHED WHEN THE SHOCK SPRING IS FULLY COMPRESSED. WHEN DS TEMPLATING IS USED, THE INITIAL DEGREE OF STOP WILL BE 5° -7° LESS THAN THE DS OPENING. FOR USE ON DOORS OPENING BACK-TO-BACK, AGAINST A WALL OR OBSTRUCTION.

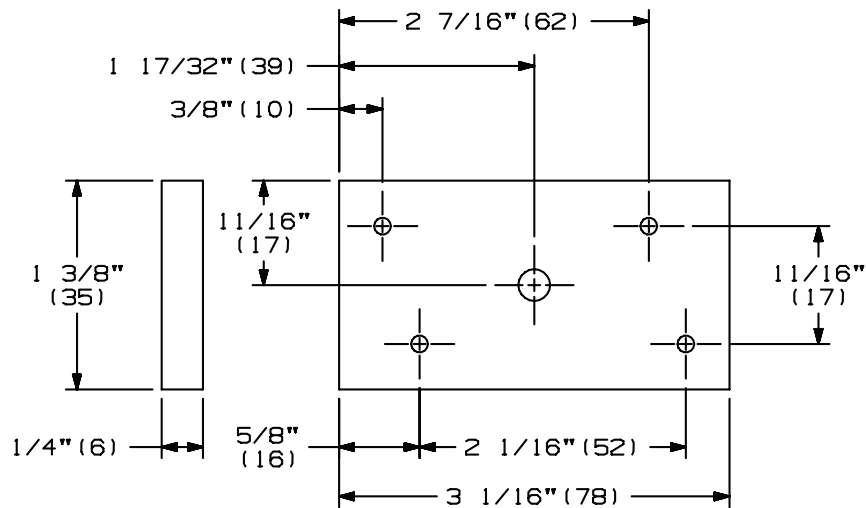
| DOOR THICKNESS | HINGE TYPE & STYLE | MOUNTING GROUP |
|----------------|--------------------|----------------|
| 1 3/4" (44mm) | 4" WIDE BUTT | 1 |
| | 4 1/2" WIDE BUTT | 1 |
| | 5" WIDE BUTT | 1 |
| | 3/4" OFFSET PIVOT | 1 |
| | 4 1/2" SWINGCLEAR | 1 |
| | 5" SWINGCLEAR | 1 |
| 2" (51mm) | CENTERHUNG PIVOT | 2 |
| | 4 1/2" WIDE BUTT | 1 |
| | 5" WIDE BUTT | 1 |
| | 3/4" OFFSET PIVOT | 1 |
| | 4 1/2" SWINGCLEAR | 1 |
| | 5" SWINGCLEAR | 1 |
| 2 1/4" (57mm) | SOSS 220 | 1 |
| | CENTERHUNG PIVOT | 2 |
| | 4 1/2" WIDE BUTT | 1 |
| | 5" WIDE BUTT | 1 |
| 2 1/4" (57mm) | SOSS 220 | 1 |
| | CENTERHUNG PIVOT | 2 |
| | 4 1/2" WIDE BUTT | 1 |

HOLD-OPEN TENSION ADJUSTMENT USING A 3/4" WRENCH, TURN NUT AT THE END OF BAR. TO INCREASE THE HOLD-OPEN TENSION, TURN NUT CLOCKWISE. TO DECREASE THE HOLD-OPEN TENSION, TURN NUT COUNTER-CLOCKWISE.

NOTE: DIMENSIONS IN () ARE MILLIMETERS.

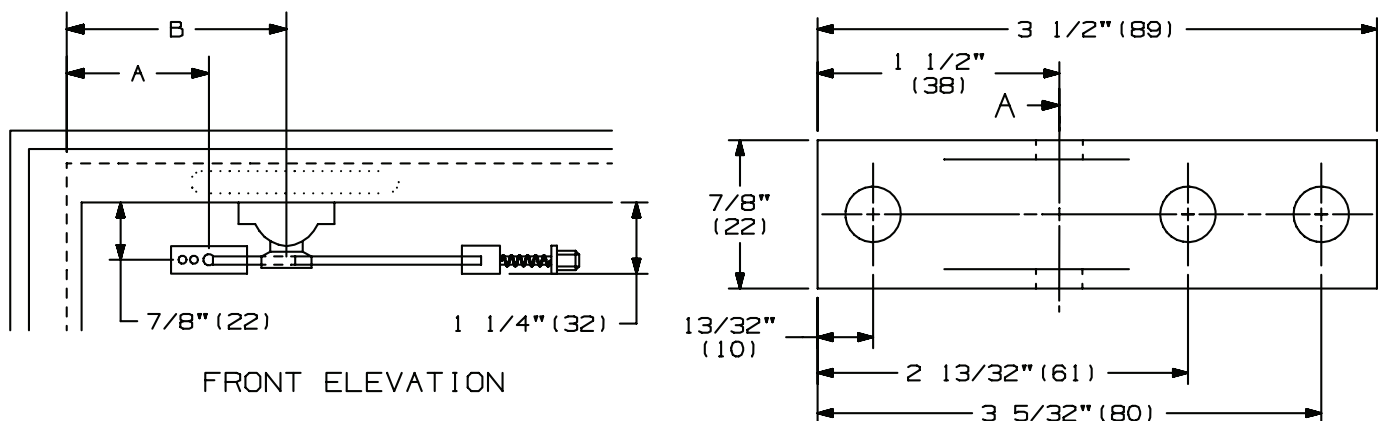
| SCREW DETAILS | | | |
|---------------|-----|----------------------------|----------------------------|
| | QTY | WOOD | METAL |
| JAMB | 4 | #14 x 1 1/2" FPHSMS | 1/4"-20 x 3/4" FPHMS |
| DOOR STD | 2 | 1/4"-20 x 1 3/4" PPHMS | 1/4"-20 x 1 3/4" PPHMS |
| | 2 | 1/4"-20 GROMMET NUTS | 1/4"-20 GROMMET NUTS |
| | 1 | #14 x 1 1/2" PPHMS | ---- |
| | 3 | ---- | 1/4"-20 x 1 3/4" PPHMS |
| DOOR SEX BOLT | 2 | ∅ 3/8" x 1 9/16" SEX BOLTS | ∅ 3/8" x 1 9/16" SEX BOLTS |
| | 2 | 1/4"-20 x 1 3/4" PPHMS | 1/4"-20 x 1 3/4" PPHMS |
| | 1 | #14 x 1 1/2" PPHMS | #14 x 1 1/2" PPHMS |

2. A. LOCATE "B" DIMENSION ON THE STOP. NOTE THAT THE "B" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.
- B. FOR METAL FRAMES, USE A #7 DRILL AND A 1/4"-20 TAP IN 4 PLACES. FOR WOOD FRAMES, DRILL A 3/16" PILOT HOLES IN 4 PLACES.



JAMB BRACKET

3. A. LOCATE "A" DIMENSION ON THE DOOR. NOTE THAT THE "A" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.
- B. CHOOSE THE TYPE OF FASTENERS BEING USED TO MOUNT THE DOOR BRACKET TO THE DOOR. MOUNTING HOLES SHOULD BE PREPARED IN THE FIELD.
 1. MACHINE SCREWS TO A REINFORCED METAL DOOR, DRILL DOWN 7/8" (22) FROM THE STOP USING #7 DRILL AND 1/4"-20 TAP IN 3 PLACES.
 2. USING GROMMET NUTS ON THE OUTSIDE TWO MOUNTING HOLES, DRILL 7/8" (22) DOWN FROM STOP 9/32" (7) DIAMETER THROUGH DOOR IN 2 PLACES. ON THE CENTER HOLE FOR METAL DOORS, USE A #7 DRILL AND 1/4"-20 TAP OF FOR WOOD DOORS, DRILL A 3/16" PILOT HOLE.
 3. OPTIONAL, USING SEX BOLTS ON THE OUTSIDE TWO MOUNTING HOLES, DRILL 7/8" (22) DOWN FROM STOP 3/8" (10) DIAMETER THROUGH DOOR IN 2 PLACES. ON THE CENTER HOLE FOR METAL DOORS, USE A #7 DRILL AND 1/4"-20 TAP OR FOR WOOD DOORS, DRILL A 3/16" PILOT HOLES. NOT PROVIDED STANDARD, BUT AVAILABLE ON REQUEST.



FRONT ELEVATION

DOOR BRACKET

4. A. INSTALL JAMB BRACKET ON THE STOP.
- B. INSTALL THE DOOR BRACKET ON THE DOOR.

NOTE: DIMENSIONS IN () ARE MILLIMETERS.

MOUNTING GROUPS 1 & 2

70 SERIES SURFACE OVERHEAD STOP & HOLDER

CAUTION: "A" & "B" DIMENSIONS ARE MEASURED FROM THE CENTERLINE OF PIVOT, NOT EDGE OF DOOR

FOR DEAD STOP ADD 3/8" (10) TO THE "A" & "B" DIMENSIONS

HO=HOLD-OPEN FOR HOLDERS, OPENING FOR STOPS

| DIM. | DEGREE | 85 HO | | 90 HO | | 95 HO | | 100 HO | | 105 HO | | 110 HO | | BAR LENGTH |
|------|----------------|-------------------|----------|----------|---------|---------|----------|-------------------|----------|---------|----------|---------|----------|------------|
| | | A | B | A | B | A | B | A | B | A | B | A | B | |
| 702 | IN. 23 1/16-27 | 5 3/8 | 10 1/16 | 5 | 9 5/8 | 4 11/16 | 9 1/4 | 4 3/8 | 8 15/16 | 4 1/8 | 8 5/8 | 3 5/8 | 8 3/8 | 14 15/16 |
| | mm 585-686 | 137 | 256 | 127 | 244 | 119 | 235 | 111 | 227 | 105 | 219 | 98 | 213 | 379 |
| 703 | IN. 27 1/16-33 | 6 3/4 | 14 3/4 | 6 1/2 | 14 1/8 | 6 1/4 | 13 1/2 | 6 | 13 | 5 3/4 | 12 9/16 | 5 9/16 | 12 1/16 | 19 1/16 |
| | mm 687-838 | 171 | 375 | 165 | 359 | 159 | 343 | 152 | 330 | 146 | 319 | 141 | 306 | 484 |
| 704 | IN. 33 1/16-39 | 9 1/4 | 17 1/4 | 8 3/4 | 16 5/8 | 8 1/4 | 16 1/8 | 7 3/4 | 15 11/16 | 7 1/4 | 15 3/8 | 6 3/4 | 15 1/8 | 22 7/16 |
| | mm 839-991 | 235 | 438 | 222 | 422 | 210 | 410 | 197 | 398 | 184 | 391 | 171 | 384 | 570 |
| 705 | IN. 39 1/16-45 | 12 | 19 9/16 | 11 15/16 | 18 1/4 | 11 7/8 | 17 | 11 13/16 | 15 13/16 | 11 5/8 | 14 15/16 | 11 1/4 | 14 3/8 | 25 13/16 |
| | mm 992-1143 | 305 | 497 | 303 | 464 | 302 | 432 | 300 | 402 | 295 | 379 | 286 | 365 | 656 |
| 706 | IN. 45 1/16-54 | 14 1/4 | 22 13/16 | 14 1/8 | 21 3/8 | 14 | 20 | 13 7/8 | 18 3/4 | 13 3/4 | 17 5/8 | 13 3/8 | 16 15/16 | 29 9/16 |
| | mm 1144-1372 | 362 | 579 | 359 | 543 | 356 | 508 | 352 | 476 | 349 | 448 | 340 | 430 | 751 |
| 702 | IN. 27 1/16-33 | 5 3/8 | 10 1/8 | 5 1/16 | 9 3/4 | 4 3/4 | 9 7/16 | 4 1/2 | 9 1/8 | 4 5/16 | 8 3/4 | 4 1/16 | 8 9/16 | 14 15/16 |
| | mm 687-838 | 137 | 257 | 129 | 248 | 121 | 240 | 114 | 232 | 110 | 222 | 103 | 217 | 379 |
| 703 | IN. 33 1/16-39 | 9 | 12 9/16 | 8 1/2 | 12 1/16 | 8 1/8 | 11 9/16 | 7 3/4 | 11 3/16 | 7 7/16 | 10 3/4 | 7 1/8 | 10 7/16 | 19 1/16 |
| | mm 839-991 | 229 | 319 | 216 | 306 | 206 | 294 | 197 | 284 | 189 | 273 | 181 | 265 | 484 |
| 704 | IN. 39 1/16-45 | 11 11/16 | 14 7/8 | 11 1/8 | 14 3/16 | 10 5/8 | 13 5/8 | 10 | 13 5/16 | 9 5/8 | 12 7/8 | 9 1/8 | 12 5/8 | 22 7/16 |
| | mm 992-1143 | 297 | 378 | 283 | 360 | 270 | 346 | 254 | 338 | 244 | 327 | 232 | 321 | 570 |
| 705 | IN. 45 1/16-51 | 14 1/16 | 17 1/2 | 13 1/2 | 16 5/8 | 12 7/8 | 16 | 12 1/4 | 15 1/2 | 11 3/4 | 15 | 11 1/4 | 14 5/8 | 25 13/16 |
| | mm 1144-1295 | 357 | 445 | 343 | 422 | 327 | 406 | 311 | 394 | 298 | 381 | 286 | 371 | 656 |
| 706 | IN. 51 1/16-57 | 16 3/4 | 20 3/8 | 15 15/16 | 19 1/2 | 15 3/16 | 18 13/16 | 14 9/16 | 18 1/8 | 14 1/16 | 17 7/16 | 13 9/16 | 16 15/16 | 29 9/16 |
| | mm 1296-1448 | 425 | 518 | 405 | 495 | 386 | 478 | 370 | 460 | 357 | 443 | 344 | 430 | 751 |
| | | MOUNTING GROUP #1 | | | | | | MOUNTING GROUP #2 | | | | | | |

NOTE: DIMENSIONS IN () ARE MILLIMETERS.



INST.70