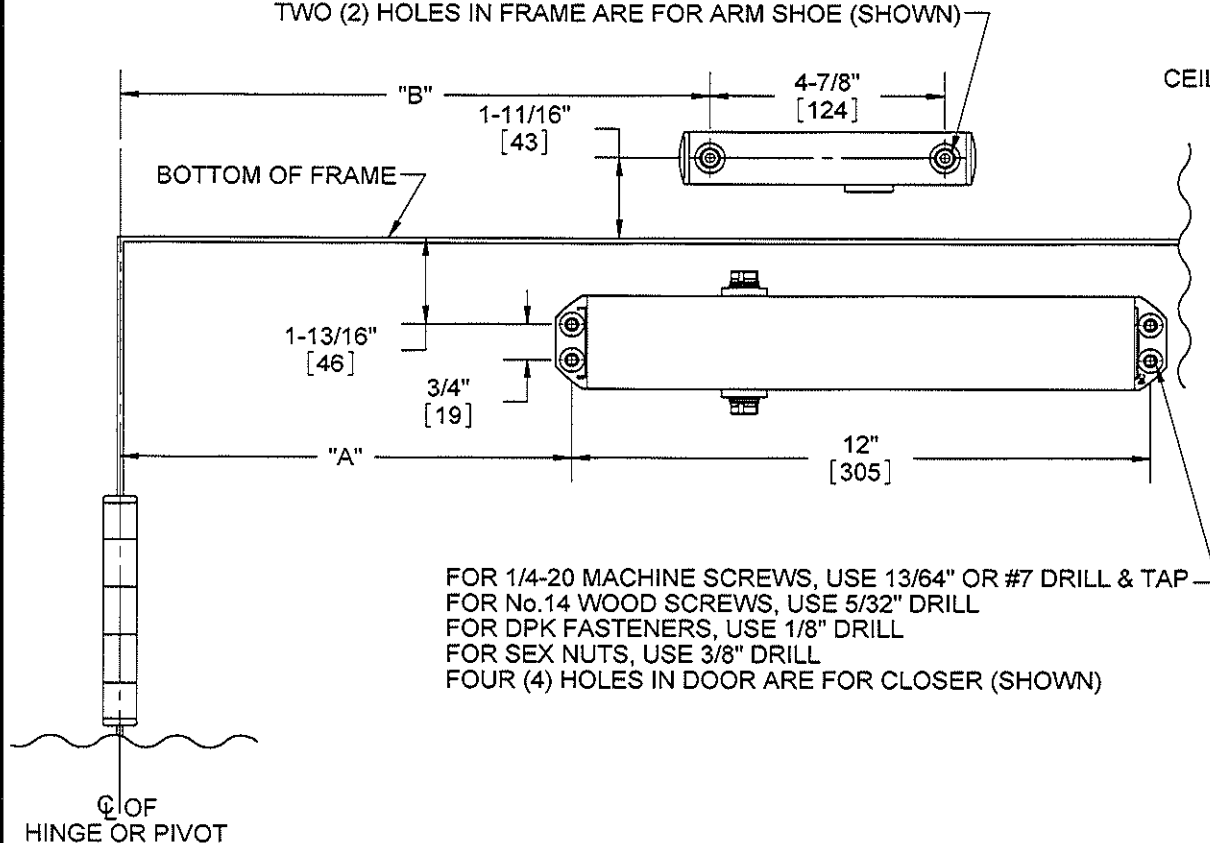


NOTES:

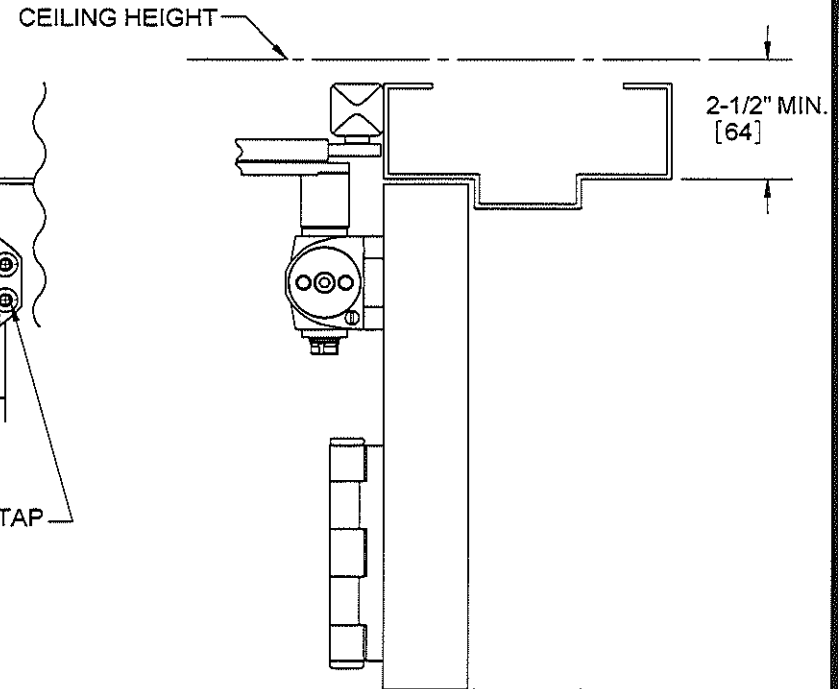
- 1) DO NOT SCALE THIS DRAWING
- 2) DIMENSIONS ARE IN INCHES / [MM]
- 3) RIGHT HAND DOOR IS SHOWN
- 4) CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACE COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.
- 5) OPTIONAL DPK FASTENERS (DPK86) FOR STEEL DOOR & FRAME ONLY.

ANGLE OF CUSHION	DIMENSION "A" (CLOSER)	DIMENSION "B" (ARM SHOE)
83° - 85°	9-3/8" [238]	12-1/4" [311]
88° - 90°	8-7/8" [225]	11-3/4" [298]
98° - 100°	7-7/8" [200]	10-3/4" [273]
108° - 110°	7-1/8" [181]	10" [254]

FOR 5/16-18 MACHINE SCREWS, USE #F (0.257") DRILL & TAP
 FOR No.20 WOOD SCREWS, USE 7/32" DRILL
 FOR DPK FASTENERS, USE 1/8" DRILL
 TWO (2) HOLES IN FRAME ARE FOR ARM SHOE (SHOWN)



FOR 1/4-20 MACHINE SCREWS, USE 13/64" OR #7 DRILL & TAP
 FOR No.14 WOOD SCREWS, USE 5/32" DRILL
 FOR DPK FASTENERS, USE 1/8" DRILL
 FOR SEX NUTS, USE 3/8" DRILL
 FOUR (4) HOLES IN DOOR ARE FOR CLOSER (SHOWN)



DOOR CLOSER MODELS: 8616 SIS
 REGULAR INSTALLATION (PULL SIDE MOUNT)
 SPRING INTEGRA CUSHION ARM



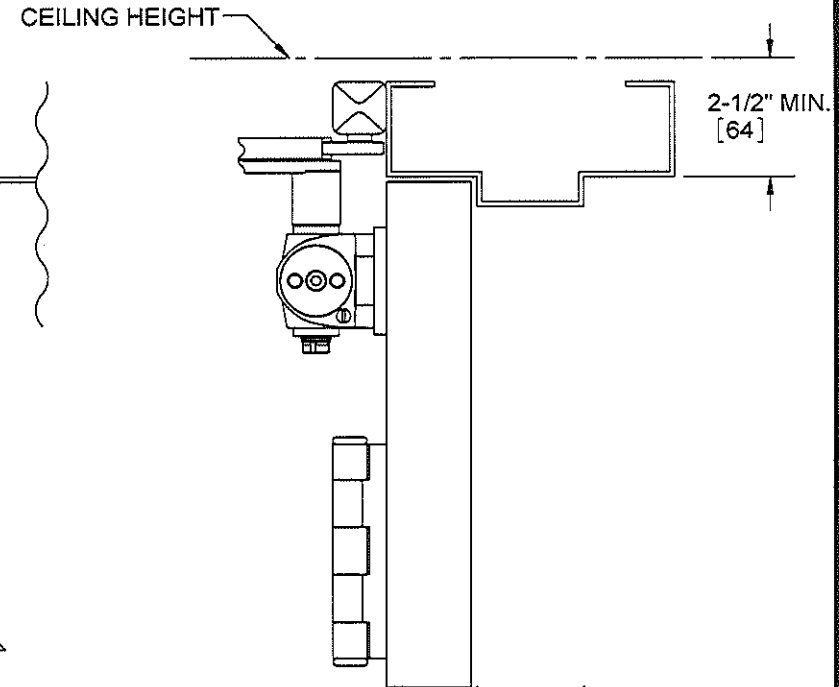
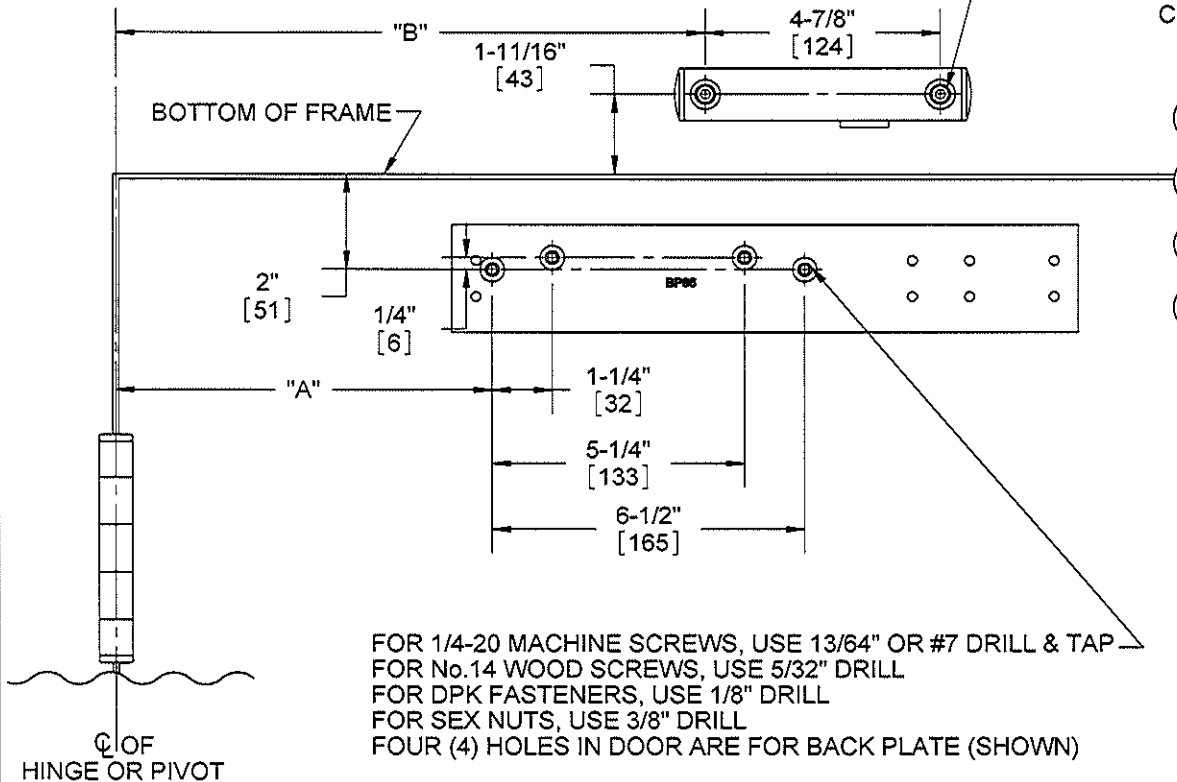
DORMA Architectural Hardware
 Reamstown, PA 17567

NOTES:

- 1) DO NOT SCALE THIS DRAWING
- 2) DIMENSIONS ARE IN INCHES / [MM]
- 3) RIGHT HAND DOOR IS SHOWN
- 4) CAUTION: SEX NUTS ARE REQUIRED FOR ATTACHMENT OF COMPONENTS TO UNREINFORCED DOORS AND TO WOOD OR PLASTIC FACE COMPOSITE TYPE FIRE DOORS, UNLESS AN ALTERNATIVE METHOD IS IDENTIFIED IN THE INDIVIDUAL DOOR MANUFACTURER'S LISTINGS.
- 5) OPTIONAL DPK FASTENERS (DPK86) FOR STEEL DOOR & FRAME ONLY.

FOR 5/16-18 MACHINE SCREWS, USE #F (0.257") DRILL & TAP
 FOR No.20 WOOD SCREWS, USE 7/32" DRILL
 FOR DPK FASTENERS, USE 1/8" DRILL
 TWO (2) HOLES IN FRAME ARE FOR ARM SHOE (SHOWN)

ANGLE OF CUSHION	DIMENSION "A" (BACK PLATE)	DIMENSION "B" (ARM SHOE)
83° - 85°	9-3/4" [248]	12-1/4" [311]
88° - 90°	9-1/4" [235]	11-3/4" [298]
98° - 100°	8-1/4" [210]	10-3/4" [273]
108° - 110°	7-1/2" [191]	10" [254]



DOOR CLOSER MODELS: 8616 SIS
 REGULAR INSTALLATION (PULL SIDE MOUNT)
 WITH BACK PLATES BP86 & BP86FC
 SPRING INTEGRA CUSHION ARM



DORMA Architectural Hardware
 Rearstown, PA 17567