



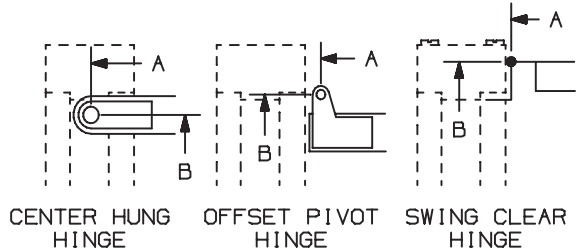
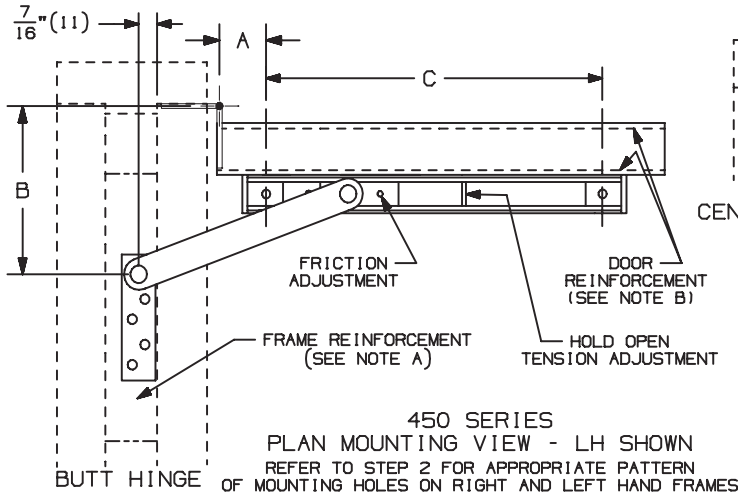
INST.450

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 THE CHART BELOW. MOST 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" & "B" DIMENSIONS FROM CHARTS ON PAGES 3, 4, & 5. FOR DEAD STOP ADD 9/16"(14) TO THE "A" DIMENSION FROM THE CHART. SEE NOTE D FOR INFORMATION ABOUT DEAD STOP.



DOOR THICKNESS	HINGE TYPE & STYLE	MOUNTING GROUP
1 3/8" (35)	3" WIDE BUTT	4
	3 1/2" BUTT	3
	3/4" OFFSET PIVOT	3
	SOSS 216	4
1 3/4" (44)	4" WIDE BUTT	2
	4 1/2" WIDE BUTT	2
	5" WIDE BUTT	1
	3/4" OFFSET PIVOT	2
	4" SWINGCLEAR	1
	4 1/2" SWINGCLEAR	1
	5" SWINGCLEAR	1
2" (51)	SOSS 220	2
	CENTERHUNG PIVOT	5
	4 1/2" WIDE BUTT	2
	5" WIDE BUTT	1
	3/4" OFFSET PIVOT	1
	4 1/2" SWINGCLEAR	1
	5" SWINGCLEAR	1
2 1/4" (57)	SOSS 220	2
	CENTERHUNG PIVOT	5
	4 1/2" WIDE BUTT	2
	5" WIDE BUTT	1
	4 1/2" SWINGCLEAR	1
	SOSS 220	1
	CENTERHUNG PIVOT	5

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). CONTACT GLYNN-JOHNSON OR YOUR LOCAL REPRESENTATIVE FOR ASSISTANCE.
- D. DEAD STOP (DS) TEMPLATING MAY BE USED ON HOLD OPEN, FRICTION AND STOP ONLY MODELS, BUT SHOULD NOT BE USED ON "SE" 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.

450 ADJUSTMENTS:

HOLD-OPEN TENSION ADJUSTMENT (HOLD-OPEN UNIT ONLY)- USING A 5/32" BALL-END ALLEN WRENCH, TURN SCREW INSIDE "LONG" END OF CAM CLOCKWISE TO DECREASE HOLD-OPEN TENSION AND COUNTERCLOCKWISE TO INCREASE HOLD-OPEN TENSION. TENSION SET TO MINIMUM AT FACTORY.

FRICTION TENSION ADJUSTMENT (FRICTION UNIT ONLY)-

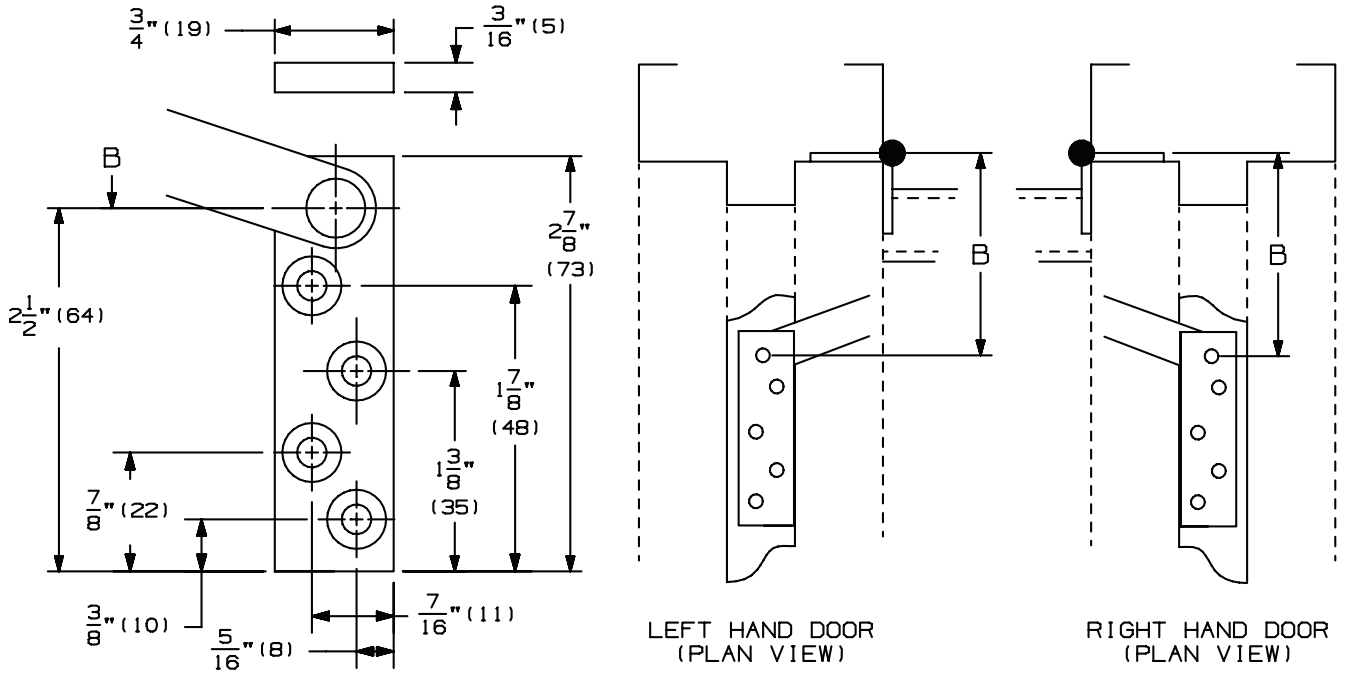
USING A 3/32" ALLEN WRENCH, TURN SCREW SHOWN CLOCKWISE TO INCREASE FRICTION TENSION AND TURN COUNTERCLOCKWISE TO DECREASE THE FRICTION TENSION.

DIMENSIONS IN () ARE IN MILLIMETERS

SCREW DETAILS			
	QTY	WOOD	METAL
JAMB	4	#10 x 1 1/2" FPHSMS	10-32 x 1/2" FPHMS
DOOR	2	10-24 x 1 9/16" SEX BOLTS	10-24 x 1 9/16" SEX BOLTS
	2	10-24 x 1 1/2" PPHMS	10-24 x 1 1/2" PPHMS

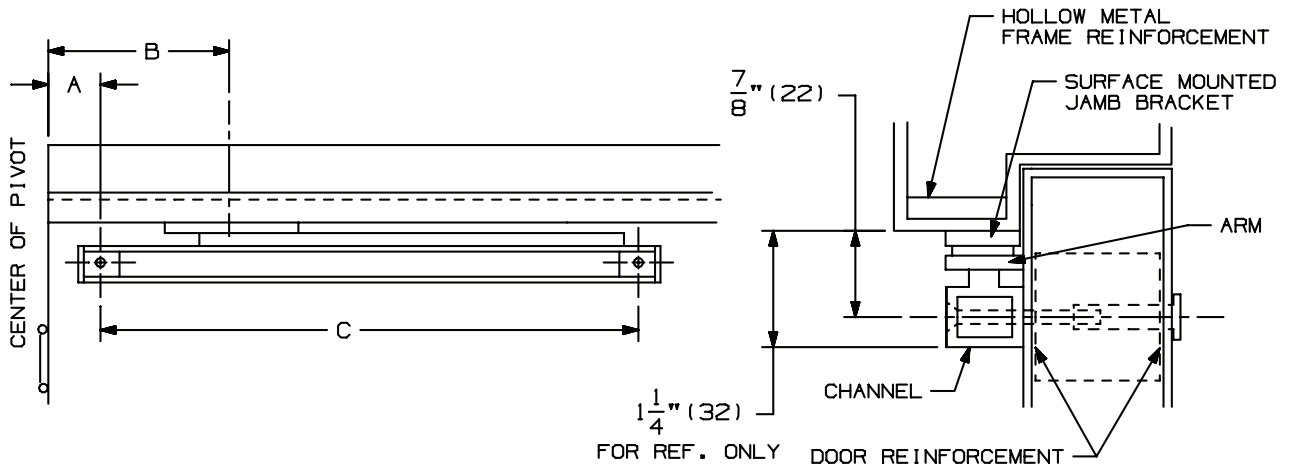
2. A. LOCATE "B" DIMENSION ON THE FRAME. NOTE THAT THE "B" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.

C. FOR METAL FRAMES, USE A #21 DRILL AND 10-32 TAP IN 4 PLACES. FOR WOOD FRAMES, DRILL 1/8" PILOT HOLE IN 4 PLACES. REFER TO LEFT AND RIGHT PLAN VIEWS FOR APPROPRIATE HOLE PATTERN.



3. A. LOCATE "A" AND "C" DIMENSIONS ON THE DOOR. NOTE THAT THE "A" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.

B. DRILL THE 1/4" (6) DIAMETER THROUGH HOLES DOWN 7/8" (22) DOWN FROM STOP IN TWO PLACES. ON THE PULL SIDE OF THE DOOR, DRILL 13/32" (10) DIAMETER HOLE, 1 5/8" (41) DEEP FOR SEX BOLT. MOUNTING HOLES SHOULD BE PREPARED IN THE FIELD.



4. A. INSTALL JAMB BRACKET ON THE STOP.

B. INSTALL THE CHANNEL ON THE DOOR WITH THE SHOCK SPRING TOWARDS THE HINGE EDGE OF THE DOOR.

NOTE: DIMENSIONS IN () ARE MILLIMETERS.

MOUNTING GROUPS 1, 2, 3, & 4

450 SERIES SURFACE OVERHEAD STOP & HOLDER

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

FOR DEAD STOP ADD 9/16" (14) TO THE "A" DIMENSION * NOT TO BE USED WITH SWINGCLEAR HINGES
 FOR SE STOPS USE HOLD-OPEN MOUNTING DIMENSION
 HO=HOLD-OPEN FOR HOLDERS, OPENING FOR STOPS
 I=ARM LENGTH FROM PIVOT CENTERLINE TO PIVOT CENTERLINE
 (FOR REFERENCE ONLY)

	DEGREE	85 HO		90 HO		95 HO		100 HO		105 HO		110 HO		C	I		
		DIM.	DOOR OPENING	A	B	A	B	A	B	A	B	A	B				
MOUNTING GROUP #1	451	IN.	18-23	-	-	-	-	-	-	-	-	-	-	14 3/4	8 1/4		
		mm	457-584	-	-	-	-	-	-	-	-	-	-	375	210		
	452	IN.	23 1/16-27*	2 15/16	4 15/16	2 9/16*	4 9/16*	-	-	-	-	-	-	16 3/8	10		
		mm	585-686	75	125	65	116	-	-	-	-	-	-	416	254		
	453	IN.	27 1/16-33	6 7/8	6 1/16	6 7/16	5 11/16	6 1/8	5 5/16	5 13/16	5	-	-	-	17 5/8	14	
		mm	687-838	175	154	164	144	156	135	148	127	-	-	-	448	356	
454	IN.	33 1/16-39	10 3/4	7 5/8	10 1/4	7 3/16	9 13/16	6 3/4	9 7/16	6 3/8	9 1/8	6	8 13/16	5 13/16	19 3/8	18	
	mm	839-991	273	194	260	183	249	171	240	162	232	152	224	148	492	457	
455	IN.	39 1/16-45	14 5/16	9	13 3/4	8 7/16	13 1/4	8	12 7/8	7 1/2	12 1/2	7 1/8	12 3/16	6 13/16	20 7/8	21 3/4	
	mm	992-1143	364	229	349	214	337	203	327	191	318	181	310	173	530	552	
MOUNTING GROUP #2	451	IN.	18-23*	1 1/2*	3 5/8*	-	-	-	-	-	-	-	-	14 3/4	8 1/4		
		mm	457-584*	38	92	-	-	-	-	-	-	-	-	-	375	210	
	452	IN.	23 1/16-27	3 1/8	5 1/8	2 13/16*	4 3/4*	2 1/2*	4 1/2*	-	-	-	-	-	16 3/8	10	
		mm	585-686	79	130	71	121	64	114	-	-	-	-	-	416	254	
	453	IN.	27 1/16-33	7 1/16	6 5/16	6 11/16	5 13/16	6 5/16	5 1/2	6	5 3/16	5 3/4	4 15/16	-	17 5/8	14	
		mm	687-838	179	160	170	148	160	140	152	132	146	125	-	448	356	
454	IN.	33 1/16-39	10 7/8	7 7/8	10 7/16	7 3/8	10	6 15/16	9 5/8	6 9/16	9 5/16	6 3/16	9 1/16	5 15/16	19 3/8	18	
	mm	839-991	276	200	265	187	254	176	244	167	237	157	230	151	492	457	
455	IN.	39 1/16-45	14 9/16	9 3/16	13 15/16	8 11/16	13 1/2	8 1/16	13	7 11/16	12 11/16	7 5/16	12 5/16	7 1/16	20 7/8	21 3/4	
	mm	992-1143	370	233	354	221	343	205	330	195	322	186	313	179	530	552	
MOUNTING GROUP #3	451	IN.	18-23*	1 13/16	3 15/16	1 9/16	3 3/8	-	-	-	-	-	-	14 3/4	8 1/4		
		mm	457-584*	46	100	40	92	-	-	-	-	-	-	-	375	210	
	452	IN.	23 1/16-27	3 5/16	5 5/16	3	5	2 3/4	4 3/4	2 1/2	4 1/2	2 1/4	4 1/4	-	16 3/8	10	
		mm	585-686	84	135	76	127	70	121	64	114	57	108	-	416	254	
	453	IN.	27 1/16-33	7 1/4	6 1/2	6 7/8	6 1/8	6 1/2	5 3/4	6 1/4	5 7/16	6	5 3/16	5 3/4	5	17 5/8	14
		mm	687-838	184	165	175	156	165	146	159	138	152	132	146	127	448	356
454	IN.	33 1/16-39	11 1/8	8 1/16	10 5/8	7 9/16	10 3/16	7 1/8	9 13/16	6 13/16	9 1/2	6 7/16	9 1/4	6 1/8	19 3/8	18	
	mm	839-991	283	205	270	192	259	181	249	173	241	164	235	156	492	457	
455	IN.	39 1/16-45	14 3/4	9 1/2	14 1/8	8 13/16	13 5/8	8 5/16	13 3/16	7 15/16	12 7/8	7 1/2	12 1/2	7 1/4	20 7/8	21 3/4	
	mm	992-1143	375	241	359	224	346	211	335	202	327	191	318	184	530	552	
MOUNTING GROUP #4	451	IN.	18-23*	2	4 1/8	1 3/4	3 7/8	1 1/2	3 5/8	-	-	-	-	14 3/4	8 1/4		
		mm	457-584*	51	105	44	98	38	92	-	-	-	-	-	375	210	
	452	IN.	23 1/16-27	3 1/2	5 1/2	3 3/16	5 1/8	2 7/8	4 7/8	2 11/16	4 5/8	2 7/16	4 7/16	2 1/4	4 1/4	16 3/8	10
		mm	585-686	89	140	81	130	73	124	68	117	62	113	57	108	416	254
	453	IN.	27 1/16-33	7 7/16	6 11/16	7	6 1/4	6 11/16	5 15/16	6 3/8	5 9/16	6 1/8	5 5/16	5 7/8	5 1/8	17 5/8	14
		mm	687-838	189	170	178	159	170	151	162	141	156	135	149	130	448	356
454	IN.	33 1/16-39	11 1/4	8 1/4	10 3/4	7 3/4	10 5/16	7 1/4	9 15/16	6 15/16	9 5/8	6 5/8	9 5/16	6 5/16	19 3/8	18	
	mm	839-991	286	210	273	197	262	184	252	176	244	168	237	160	492	457	
455	IN.	39 1/16-45	14 7/8	9 9/16	14 1/4	9	13 3/4	8 1/2	13 5/16	8	13	7 5/8	12 5/8	7 5/16	20 7/8	21 3/4	
	mm	992-1143	378	243	362	229	349	216	338	203	330	194	321	186	530	552	
MOUNTING GROUP #5	451	IN.	23 1/16-27	2 3/8	4 1/2	2 1/8	4 1/4	1 7/8	4	1 11/16	3 13/16	1 9/16	3 11/16	1 3/8	3 1/2	14 3/4	8 1/4
		mm	585-687	60	114	54	108	48	102	43	97	40	94	35	89	375	210
	452	IN.	27 1/16-33	3 3/4	5 3/4	3 1/2	5 1/2	3 1/4	5 1/4	3	5	2 3/4	4 3/4	2 5/8	4 5/8	16 3/8	10
		mm	688-838	95	146	89	140	83	133	76	127	70	121	67	117	416	254
	453	IN.	33 1/16-39	7 3/4	7	7 3/8	6 5/8	7	6 1/4	6 11/16	5 15/16	6 7/16	5 11/16	6 3/16	5 7/16	17 5/8	14
		mm	839-991	197	178	187	168	178	159	170	151	164	144	157	138	448	356
454	IN.	39 1/16-45	11 9/16	8 9/16	11	8	10 5/8	7 5/8	10 1/4	7 1/4	9 15/16	6 15/16	9 5/8	6 5/8	19 3/8	18	
	mm	992-1143	294	217	279	203	270	194	260	184	252	176	244	168	492	457	
455	IN.	45 1/16-51	15 1/4	10	14 5/8	9 3/8	14 1/8	8 7/8	13 5/8	8 3/8	13 1/4	8	12 7/8	7 5/8	20 7/8	21 3/4	
	mm	1144-1295	387	254	371	238	359	225	346	213	337	203	327	194	530	552	

"A" & "B" DIMENSION CHANGES FOR MOUNTING GROUP #5

NOTE: DIMENSIONS IN () ARE MILLIMETERS.



INST.450