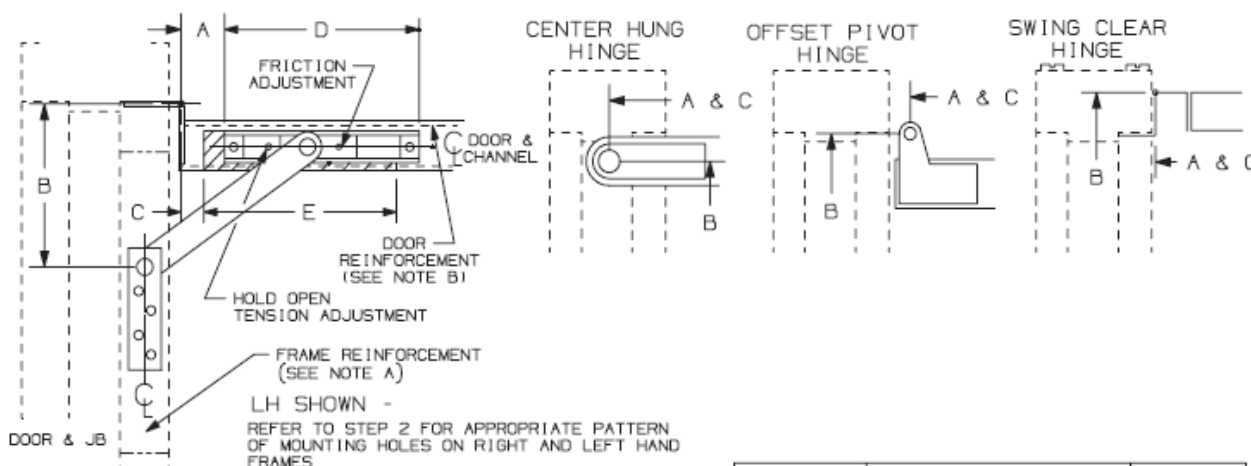




OVERHEAD HOLDERS OR STOPS MUST BE INSTALLED BEFORE CLOSERS

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", "C", "D", AND "E" DIMENSIONS FROM CHART ON PAGE 3. FOR DEAD STOP ADD 9/16" (14) TO THE "A" DIMENSION FROM THE CHART. SEE NOTE D FOR INFORMATION ABOUT DEAD STOP.



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 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® OR NFPA101®. 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.

100 ADJUSTMENTS:

HOLD-OPEN TENSION ADJUSTMENT (HOLD-OPEN UNIT ONLY) - USING A 1/8" BALL END ALLEN WRENCH, TURN SCREW SHOWN IN BOTTOM OF CHANNEL CLOCKWISE TO INCREASE HOLD-OPEN TENSION AND COUNTERCLOCKWISE TO DECREASE HOLD-OPEN TENSION.

FRICTION TENSION ADJUSTMENT (FRICTION UNIT ONLY) - USING A 1/8" ALLEN WRENCH, HOLD SCREW SHOWN IN PLACE WHILE USING A 7/16" WRENCH TO TURN JAMB NUT COUNTERCLOCKWISE UNTIL LOOSE. TURN SCREW CLOCKWISE TO INCREASE FRICTION TENSION AND TURN COUNTERCLOCKWISE TO DECREASE THE FRICTION TENSION. WHILE HOLDING THE SCREW IN PLACE, TURN THE JAMB NUT CLOCKWISE UNTIL TIGHT.

DIMENSIONS IN () ARE IN MILLIMETERS

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

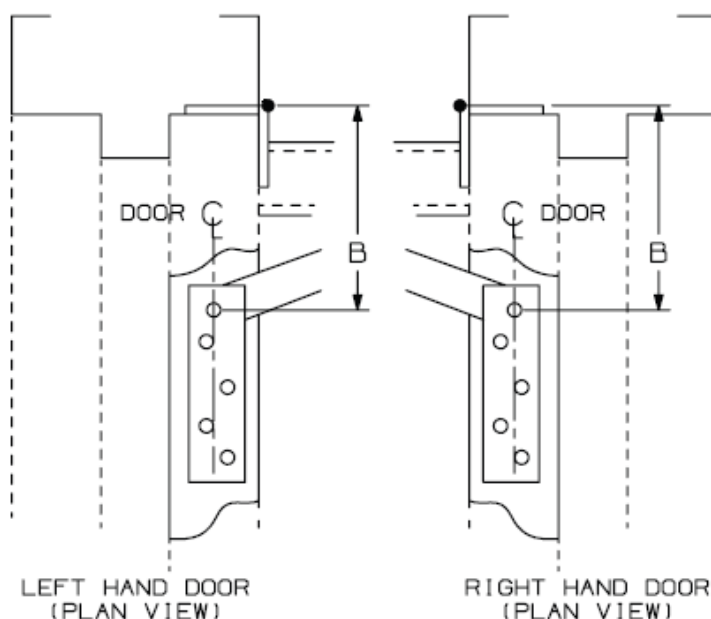
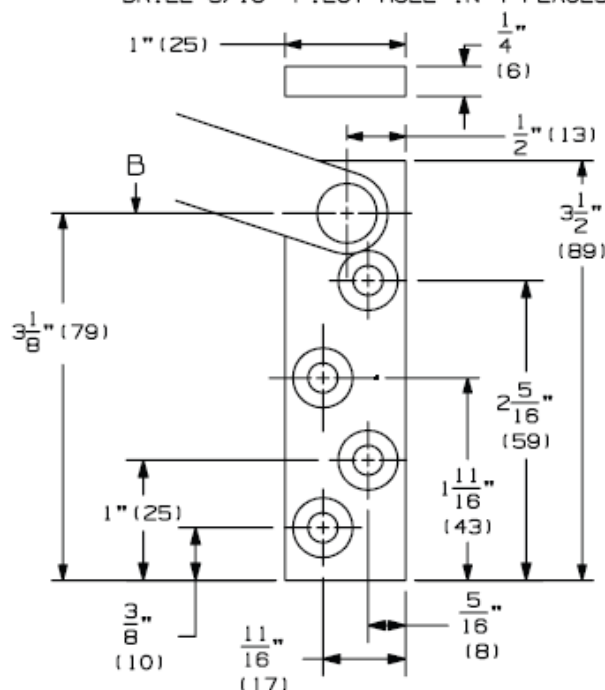
SCREW DETAILS			
	QTY	WOOD	METAL
DOOR	2	#18 x 3" PPHWS	5/16"-18 x 1 1/2" PPHMS
JAMB	4	#14 x 1 1/2" FPHSMS	1/4"-20 x 3/4" FPHMS



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HARDWARE**

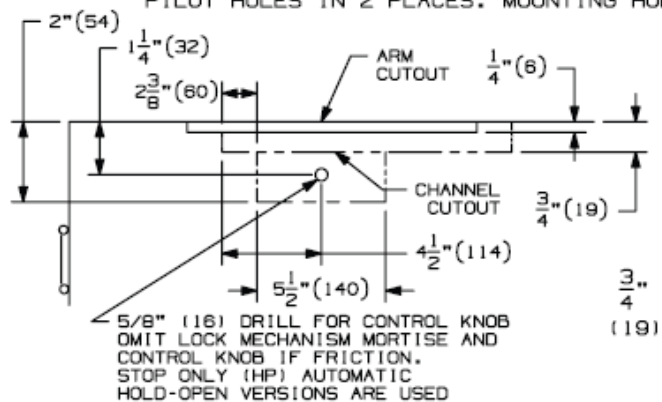
www.tmhardware.com

2. A. LOCATE "B" DIMENSION ON THE FRAME. NOTE THAT THE "B" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.
- B. MORTISE FOR THE JAMB BRACKET AS SHOWN. REFER TO LEFT AND RIGHT HAND PLAN VIEWS FOR APPROPRIATE HOLE PATTERN.
- C. FOR METAL FRAMES, USE A #7 DRILL AND A 1/4"-20 TAP IN 4 PLACES. FOR WOOD FRAMES, DRILL 3/16" PILOT HOLE IN 4 PLACES.

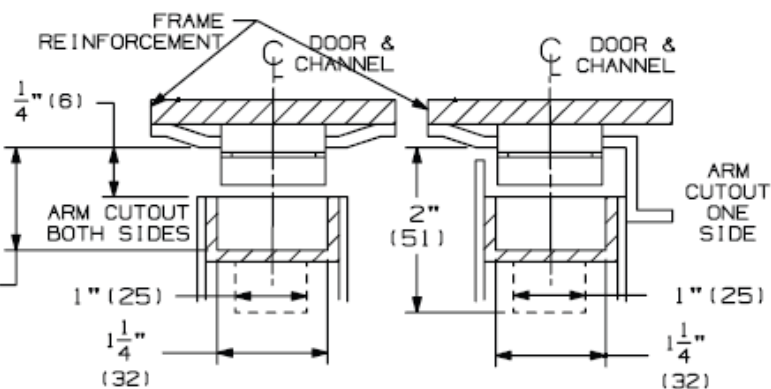


REFER TO ILLUSTRATION BELOW AND ON SHT 1 FOR THE FOLLOWING NOTES:

3. A. LOCATE "A" AND "D" DIMENSIONS ON THE CENTERLINE OF THE DOOR. NOTE THAT THE "A" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.
- B. MORTISE FOR THE CHANNEL AS SHOWN IF REQUIRED. FOR 100H HOLD-OPEN VERSION, MORTISE FOR HOLD-OPEN LOCK MECHANISM AND DRILL 5/8" (16) DIAMETER HOLE FOR CONTROL KNOB AS SHOWN. (WHEN HP HOLD-OPEN, F FRICTION OR S STOP UNIT IS SUPPLIED, ADDITIONAL MORTISE FOR HOLD-OPEN MECHANISM AND CONTROL KNOB ARE NOT REQUIRED.)
- C. LOCATE "C" AND "E" DIMENSIONS ON THE TOP OF THE DOOR. NOTE THAT THE "C" DIMENSION IS MEASURED FROM THE CENTERLINE OF THE HINGE AS SHOWN.
- D. MORTISE FOR ARM CUTOUT AS SHOWN.
- E. FOR METAL DOORS, USE A F DRILL AND 5/16-18 TAP IN 2 PLACES. FOR WOOD DOORS, DRILL 1/4" PILOT HOLES IN 2 PLACES. MOUNTING HOLES SHOULD BE PREPARED IN THE FIELD.



FRONT ELEVATION



CROSS SECTION IN CLOSED POSITION

4. A. INSTALL THE CHANNEL IN THE DOOR WITH THE SHOCK SPRING TOWARDS THE HINGE EDGE OF DOOR.
- B. INSTALL JAMB BRACKET IN FRAME.
- C. FOR 100H HOLD-OPEN VERSION ONLY, EPOXY (NOT PROVIDED) EYELET IN 5/8" (16) HOLE.
- D. FOR 100H HOLD-OPEN VERSION ONLY, PLACE SERRATED KNOB AND KNOB SPACER OVER CAP SCREW AS SHOWN. THREAD ASSEMBLY THROUGH 5/8" (16) HOLE IN DOOR ONTO LOCK.

DIMENSIONS IN () ARE IN MILLIMETERS

MOUNTING GROUPS 1, 2 & 3
100 SERIES CONCEALED OVERHEAD STOP & HOLDER

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

D1M.	DOOR OPENING	85 HO			90 HO			95 HO			100 HO			105 HO			110 HO							
		A	B	C	E	A	B	C	E	A	B	C	E	A	B	C	E	A	B	C	E	D	I	
101	IN. 18-23 1/2	2 5/16	3 7/16	0	1 1/4	2 1/16	3 3/16	0	1 1/4	1 7/8	3	0	13 3/4	-	-	-	-	-	-	-	-	14 3/8	10	
102	IN. 23 1/16-27 1/2	59	87	0	356	52	81	0	349	48	76	0	349	-	-	-	-	-	-	-	-	365	254	
	IN. 23 1/16-27 1/2	4 1/4	4 1/2	2	15 1/2	3 15/16	4 1/8	1 3/4	15 1/2	3 11/16	3 15/16	1 1/2	15 1/2	3 7/16	3 11/16	1 1/4	15 1/2	3 1/4	3 1/2	1	15 1/2	12		
103	IN. 27 1/16-33 1/2	106	114	51	394	100	105	44	394	94	100	38	394	67	94	32	394	83	99	25	394	365		
	IN. 27 1/16-33 1/2	7 15/16	5 5/8	4 1/4	17 7/8	7 9/16	5 1/4	3 7/8	17 7/8	7 1/4	4 15/16	3 9/16	17 7/8	6 15/16	4 5/8	3 1/8	18*	6 11/16	4 7/16	2 15/16	17 7/8	18*	16 3/4	15 3/4
104	IN. 33 1/16-39 1/2	202	143	108	454	182	133	98	454	184	125	90	454	176	117	78	457	170	113	75	454	425	400	
	IN. 33 1/16-39 1/2	12 1/8	6 5/8	5 1/4	22	11 11/16	6 1/8	4 3/4	22 1/8	11 5/16	5 13/16	4 7/16	22	11	5 7/16	3 15/16	22 1/4	10 3/4	5 1/8	3 5/8	22 1/4	17 3/4	20	
105	IN. 39 1/16-45 1/2	306	188	133	559	287	196	121	562	287	148	113	559	279	138	100	565	273	130	92	565	451	508	
	IN. 39 1/16-45 1/2	8 7/16	7 1/16	7 7/8	28 1/8	17 7/16	7 7/8	6 1/2	28 1/8	17 7/16	6 1/16	6 1/16	28 1/8	16 9/16	7	5 1/2	28 1/4	16 3/16	6 9/16	5 1/16	28 1/4	19 3/4	26	
106	IN. 45 1/16-51 1/2	457	214	179	714	443	200	185	714	432	189	154	714	421	178	140	718	411	167	128	718	502	600	
	IN. 45 1/16-51 1/2	24	9 11/16	8 5/16	34 1/8	23 3/8	9	7 5/8	34 1/8	22 3/4	8 1/2	7 1/8	34 1/8	22 5/8	7 15/16	6 7/16	34 1/4	21 7/8	7 9/16	6 1/16	34 1/4	21 1/4	32	
107	IN. 51 1/16-57 1/2	584	246	211	867	584	229	184	867	576	215	181	864	567	202	164	865	556	182	154	870	533	613	
	IN. 51 1/16-57 1/2	2 9/16	3 11/16	0	14 1/2	2 5/16	3 7/16	0	14	2 1/16	3 3/16	0	14	1 15/16	3	0	13 3/4	-	-	-	-	14 3/8	10	
108	IN. 57 1/16-63 1/2	65	94	0	368	59	87	0	356	52	81	0	356	49	76	0	349	-	-	-	-	365	254	
	IN. 57 1/16-63 1/2	4 1/8	4 5/8	2	15 3/4	4 7/8	4 3/8	1 3/4	15 3/4	3 7/8	4 1/8	1 1/2	15 3/4	3 11/16	3 15/16	1 1/4	15 3/4	3 1/2	3 11/16	1	15 3/4	15 1/2	12	
109	IN. 63 1/16-69 1/2	113	117	51	400	105	111	44	400	98	103	36	400	94	100	32	400	89	94	25	400	394	305	
	IN. 63 1/16-69 1/2	8 1/8	5 13/16	4 7/16	17 7/8	7 3/4	5 7/16	4 1/16	17 7/8	7 1/16	5 1/8	3 3/4	17 7/8	7 1/8	4 13/16	3 5/16	18*	6 15/16	4 9/16	3 1/16	18*	16 3/4	15 3/4	
110	IN. 69 1/16-75 1/2	187	130	113	454	187	130	103	454	189	130	95	454	161	122	94	457	176	116	76	457	425	400	
	IN. 69 1/16-75 1/2	18 1/4	8 11/16	7 5/16	28 1/8	17 5/8	8 1/8	6 3/4	28	17 1/8	7 5/8	6 1/4	28	16 3/4	7 3/16	5 11/16	28 1/4	16 3/16	6 3/4	5 1/4	28 1/4	19 3/4	26	
111	IN. 75 1/16-81 1/2	259	173	138	559	302	180	125	562	282	192	152	559	204	144	106	562	278	137	98	562	451	508	
	IN. 75 1/16-81 1/2	6 13/16	6 13/16	5 7/16	22 1/8	11 7/8	6 5/16	4 15/16	22 1/8	11 1/2	6	4 5/8	22	11 3/16	5 11/16	4 3/16	22 1/8	10 7/8	5 3/8	3 7/8	22 1/8	17 3/4	20	
112	IN. 81 1/16-87 1/2	313	173	138	559	302	180	125	562	282	192	152	559	204	144	106	562	278	137	98	562	451	508	
	IN. 81 1/16-87 1/2	18 1/4	8 11/16	7 5/16	28 1/8	17 5/8	8 1/8	6 3/4	28	17 1/8	7 5/8	6 1/4	28	16 3/4	7 3/16	5 11/16	28 1/4	16 3/16	6 3/4	5 1/4	28 1/4	19 3/4	26	
113	IN. 87 1/16-93 1/2	364	221	188	714	448	206	171	711	425	194	159	711	425	183	144	718	416	171	133	718	502	600	
	IN. 87 1/16-93 1/2	24 1/4	9 13/16	8 7/16	34 1/4	23 1/2	9 1/4	7 7/8	34 1/4	23	8 9/16	7 3/16	34 1/4	22 1/2	8 1/8	6 5/8	34 1/4	22 1/4	17 1/16	7 11/16	6 3/16	34 1/4	21 1/4	32
114	IN. 93 1/16-99 1/2	424	249	214	870	587	235	200	864	584	217	183	870	572	206	168	870	560	185	157	870	533	613	
	IN. 93 1/16-99 1/2	6 7/8	5 13/16	4 7/16	17 7/8	7 3/4	5 7/16	4 1/16	17 7/8	7 1/16	5 1/8	3 3/4	17 7/8	7 1/8	4 13/16	3 5/16	18*	6 15/16	4 9/16	3 1/16	18*	16 3/4	15 3/4	
115	IN. 99 1/16-105 1/2	481	264	211	926	644	254	204	926	604	234	183	926	584	244	178	926	562	192	154	926	533	613	
	IN. 99 1/16-105 1/2	24 1/4	9 13/16	8 7/16	34 1/4	23 1/2	9 1/4	7 7/8	34 1/4	23	8 9/16	7 3/16	34 1/4	22 1/2	8 1/8	6 5/8	34 1/4	22 1/4	17 1/16	7 11/16	6 3/16	34 1/4	21 1/4	32
116	IN. 105 1/16-111 1/2	537	289	224	1000	702	274	214	1000	660	254	193	1000	620	264	188	1000	580	206	168	1000	533	613	
	IN. 105 1/16-111 1/2	8 7/8	6 5/8	5 1/4	17 3/4	8 1/2	6 1/8	4 3/4	17 7/8	8 1/8	5 7/8	4 1/2	17 3/4	7 3/16	5 1/2	4	18	7 9/16	5 1/4	3 3/4	18	16 3/4	15 3/4	
117	IN. 111 1/16-117 1/2	593	306	239	1056	758	294	224	1056	684	274	203	1056	644	284	198	1056	592	216	178	1056	533	613	
	IN. 111 1/16-117 1/2	24 1/4	9 13/16	8 7/16	34 1/4	23 1/2	9 1/4	7 7/8	34 1/4	23	8 9/16	7 3/16	34 1/4	22 1/2	8 1/8	6 5/8	34 1/4	22 1/4	17 1/16	7 11/16	6 3/16	34 1/4	21 1/4	32
118	IN. 117 1/16-123 1/2	650	331	254	1112	814	314	234	1112	742	304	213	1112	692	294	182	1112	604	228	184	1112	533	613	
	IN. 117 1/16-123 1/2	8 7/8	6 5/8	5 1/4	17 3/4	8 1/2	6 1/8	4 3/4	17 7/8	8 1/8	5 7/8	4 1/2	17 3/4	7 3/16	5 1/2	4	18	7 9/16	5 1/4	3 3/4	18	16 3/4	15 3/4	
119	IN. 123 1/16-129 1/2	707	351	274	1168	860	334	254	1168	792	324	223	1168	752	304	192	1168	620	230	186	1168	533	613	
	IN. 123 1/16-129 1/2	24 1/4	9 13/16	8 7/16	34 1/4	23 1/2	9 1/4	7 7/8	34 1/4	23	8 9/16	7 3/16	34 1/4	22 1/2	8 1/8	6 5/8	34 1/4	22 1/4	17 1/16	7 11/16	6 3/16	34 1/4	21 1/4	32
120	IN. 129 1/16-135 1/2	764	371	294	1224	916	354	274	1224	842	344	243	1224	802	314	192	1224	644	242	188	1224	533	613	
	IN. 129 1/16-135 1/2	8 7/8	6 5/8	5 1/4	17 3/4	8 1/2	6 1/8	4 3/4	17 7/8	8 1/8	5 7/8	4 1/2	17 3/4	7 3/16	5 1/2	4	18	7 9/16	5 1/4	3 3/4	18	16 3/4	15 3/4	
121	IN. 135 1/16-141 1/2	821	391	314	1280	972	374	294	1280	892	364	263	1280	852	324	192	1280	660	252	190	1280	533	613	
	IN. 135 1/16-141 1/2	24 1/4	9 13/16	8 7/16	34 1/4	23 1/2	9 1/4	7 7/8	34 1/4	23	8 9/16	7 3/16	34 1/4	22 1/2	8 1/8	6 5/8	34 1/4	22 1/4	17 1/16	7 11/16	6 3/16	34 1/4	21 1/4	32
122	IN. 141 1/16-147 1/2	878	411	334	1336	1028	414	314	1336	942	384	283	1336	902	334	192	1336	704	262	192	1336	533	613	
	IN. 141 1/16-147 1/2	8 7/8	6 5/8	5 1/4	17 3/4	8 1/2	6 1/8	4 3/4	17 7/8	8 1/8	5 7/8	4 1/2	17 3/4	7 3/16	5 1/2	4	18	7 9/16	5 1/4	3 3/4	18	16 3/4	15 3/4	
123	IN. 147 1/16-153 1/2	935	441	354	1392	1084	434	334	1392	1002	404	303	1392	952	354	192	1392	744	272	194	1392	533	613	
	IN. 147 1/16-153 1/2	24 1/4	9 13/16	8 7/16	34 1/4	23 1/2	9 1/4																	