



Door Opening Angle		Dimensions			
Hold Open*	Dead Stop	Butts & Offset Pivots		Center Pivots	
		A	B	A	B
85°	90°	9-3/4	15-1/8	10-1/8	15-1/2
90°	95°	8-7/8	14-1/4	9-3/8	14-3/4
95°	100°	8-1/4	13-5/8	8-5/8	14
100°	105°	7-5/8	13	8-1/8	13-1/2
105°	110°	7-1/8	12-1/2	7-5/8	13
110°	115°	6-3/4	12-1/8	7-1/8	12-1/2

★Door must be free to swing 5° beyond hold-open position.

Notes:  
 Do not scale drawing.  
 Left hand door shown.  
 Dimensions are in inches.  
 Hollow-metal doors require channel or box-type reinforcement when thru-bolt mount is specified.  
 Sex-bolts required for wood or plastic faced fire-door mounting.  
 Minimum thickness recommended for reinforcements in hollow-metal doors and frames: .1046" (2.66mm).  
 Follow Conversion Chart for metric dimensions.

**Preparation for Fasteners**

Fasteners	Application	Door or Frame	Drill-Sizes
Sex nuts and bolts	Closer Drop Plate	Hollow-Metal	9/32" (7.00 mm.) through; 3/8" (9.50 mm.) on door face opposite to closer
		Aluminum or Wood	3/8" (9.50 mm.) through
#14 x 1-1/4" (32mm) type "A" S.M. screw	Soffit plate 6190 Bracket	Wood	3/16" (4.30 mm.)
		Metal	drill: #7 (0.201" dia.) tap: 1/4" - 20
1/4" - 20 machine screw			
Through-bolts and grommet-nuts	Optional	All	9/32" (7.00 mm.) through; 3/8" (9.50 mm.) dia. x 3/8" (9.50 mm.) deep on door face opposite to closer

inches	mm	inches	mm	inches	mm	inches	mm
5/16	8	2-3/4	70	8-7/8	225	14-1/4	362
3/8	9.5	3-5/8	92	9-3/8	238	14-3/4	375
7/16	11	4	101.5	10-1/8	257	15-1/8	384
1/2	12.7	6-3/4	171	12	305	15-1/2	394
5/8	16	7-1/8	181	12-1/8	308		
3/4	19	7-5/8	194	12-1/2	318		
1-1/8	28.5	7-3/4	197	13	330		
2	51	8-1/8	206	13-1/2	343		
2-1/8	54	8-1/4	210	13-5/8	346		
2-5/8	67	8-5/8	219	14	356		

**Unitrol® With 6191 Reinforcing Kit**  
**Series UNI-8300, UNI-8301,**  
**UNI-8500, UNI-8501**  
**Doors 42" - 48" (1.05 - 1.20m)**

**Parallel Arm Installation Template**  
**Stop Only or Hold Open Unitrol®**  
**Backcheck or Delayed Action Door Closer**  
**With or Without 8148 Drop Plate**

**ASSA ABLOY**  
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TEMPLATE NUMBER	DATE
<b>7380-1359</b>	<b>09-08</b>