



◆ No. 88 drop plate mounting holes only

**Notes:**

- Do not scale drawing.
- All dimensions shown in inches (mm.).
- Left hand door shown.
- Caution: Hollow metal doors require channel or box type reinforcement.

Preparation for Fasteners			
Fasteners	Application	Door or Frame	Drill Sizes
Sex-nuts and bolts	Closer Drop plate	Hollow Metal	9/32" (7.00mm.) through 3/8" (9.50mm.) door face opposite to closer
		Aluminum or Wood	3/8" (9.50mm.) through
#14 x 1-1/4" (32mm.) type "A" S.M. screws	Soffit plate 6190 Bracket	Wood	3/16" (4.30mm.)
1/4-20 machine screw		Metal	drill: #7 (.201") tap: 1/4-20
Through bolts and grommet nuts	Optional	All	9/32" (7.00mm.) through 3/8" (9.50mm.) dia. x 3/8" (10mm.) deep, door face opposite to closer

Door Opening Angle		Dimensions*							
Hold Open**	Dead Stop	Butts and Offset Pivots				Center Pivots			
		Dimension A		Dimension B		Dimension A		Dimension B	
		Inches	mm.	Inches	mm.	Inches	mm.	Inches	mm.
85°	90°	11 <sup>5</sup> / <sub>8</sub>	295	10 <sup>3</sup> / <sub>8</sub>	263	12 <sup>3</sup> / <sub>8</sub>	314	11 <sup>1</sup> / <sub>8</sub>	282
90°	95°	11	279	9 <sup>3</sup> / <sub>4</sub>	247	11 <sup>3</sup> / <sub>4</sub>	298	10 <sup>1</sup> / <sub>2</sub>	266
95°	100°	10 <sup>1</sup> / <sub>2</sub>	266	9 <sup>3</sup> / <sub>8</sub>	238	11 <sup>1</sup> / <sub>4</sub>	286	10	254
100°	105°	10	254	8 <sup>3</sup> / <sub>4</sub>	222	10 <sup>3</sup> / <sub>4</sub>	273	9 <sup>1</sup> / <sub>2</sub>	241
105°	110°	9 <sup>1</sup> / <sub>2</sub>	241	8 <sup>1</sup> / <sub>4</sub>	209	10 <sup>1</sup> / <sub>4</sub>	260	9	229
110°	115°	9 <sup>1</sup> / <sub>8</sub>	231	7 <sup>7</sup> / <sub>8</sub>	200	9 <sup>7</sup> / <sub>8</sub>	251	8 <sup>5</sup> / <sub>8</sub>	219

\* "A" and "B" dimensions measured from centerline of hinge or pivot.  
 \*\* Door must be free to swing up to 5° beyond hold open position.

**Unitrol Standard Application**  
**Series 78-B/F**  
**Doors 28" - 32" (0.70 - 0.80m) Wide**

**Parallel Arm Installation Template**  
**Stop Only or Hold-Open Unitrol Door Closer**  
**With or Without No. 88 Drop Plate**



TEMPLATE NUMBER	REV	DATE
<b>7349-1351</b>	<b>3</b>	<b>12/21</b>