



## 88 SERIES CONCEALED OVERHEAD DOOR CLOSER 88-VO INSTALLATION INSTRUCTIONS

DETERMINE HOW DOOR IS HUNG AND DEGREE OF CLOSER BACKSTOP AND USE APPLICABLE CHART

### HEADER PREPARATION:

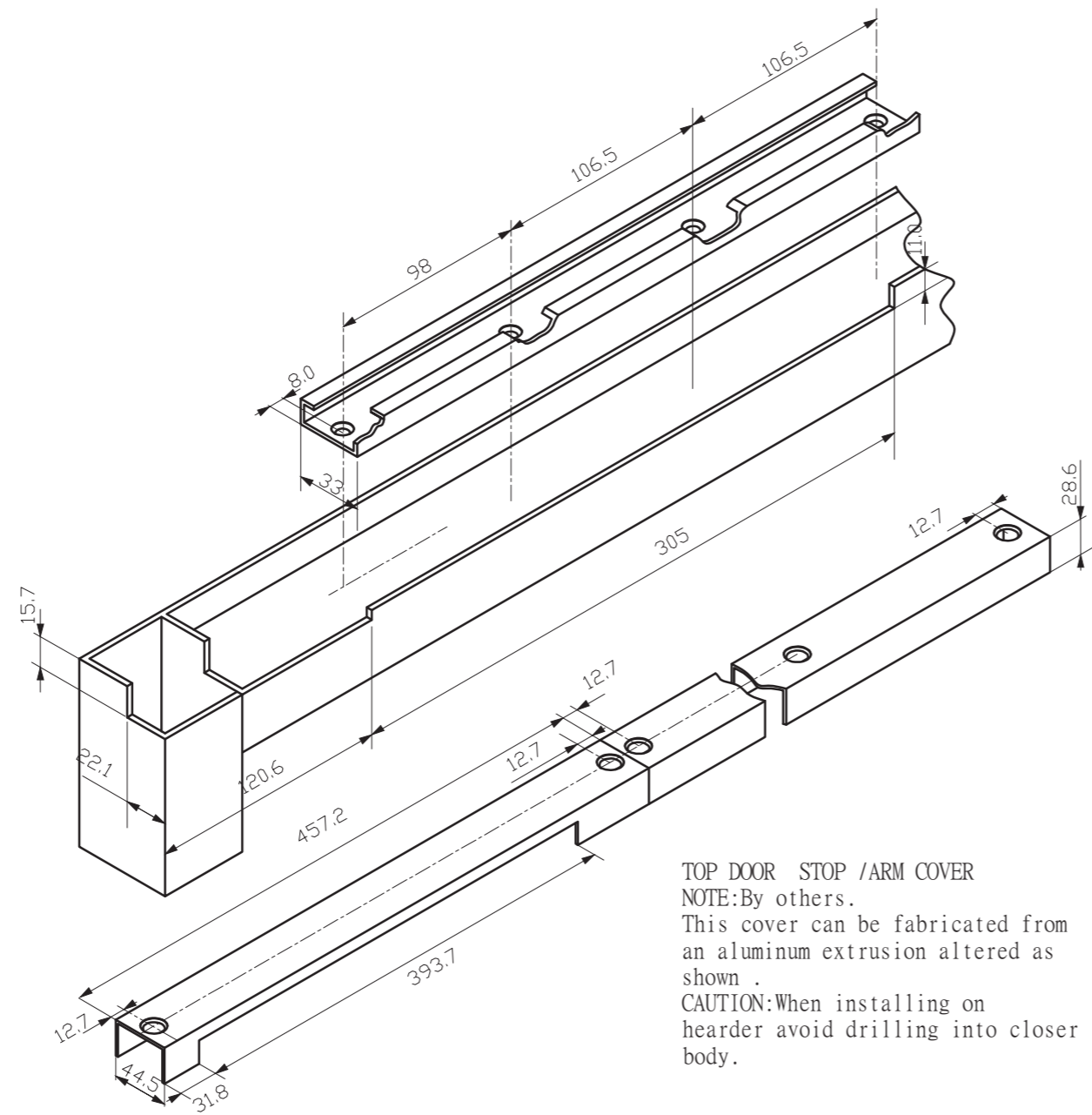
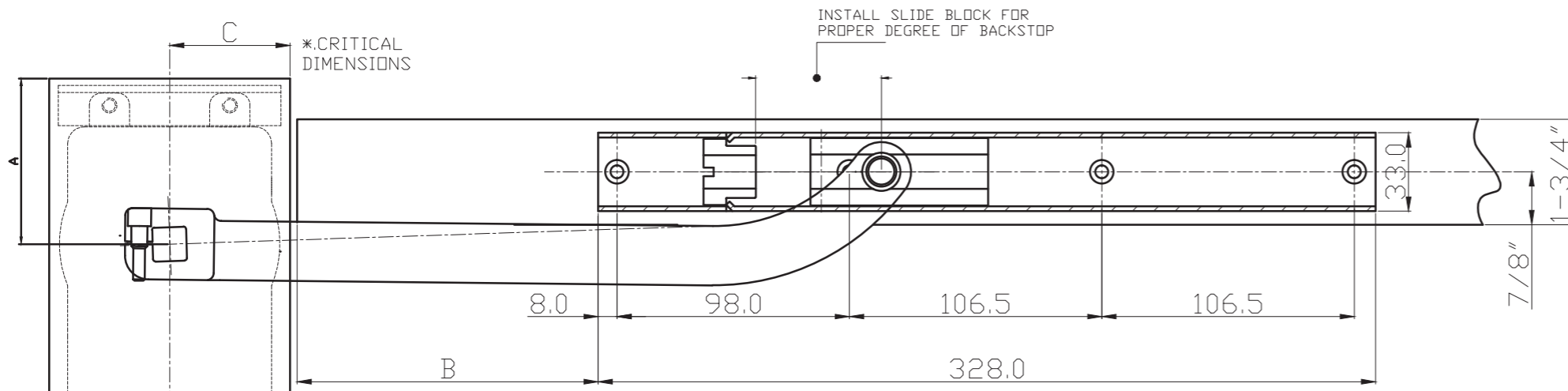
1. DIMENSION "A", face of jamb to center line of spindle must be maintained.
2. DIMENSION "C", hinges side of header to center line of spindle must be maintained regardless of header width.
3. All spacers and / or anchors other than standard "F" clip package by others.

### DOOR PREPARATION:

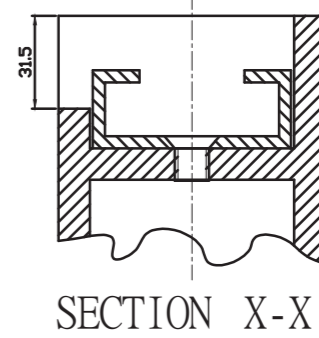
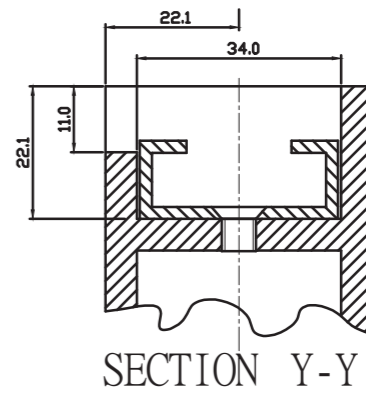
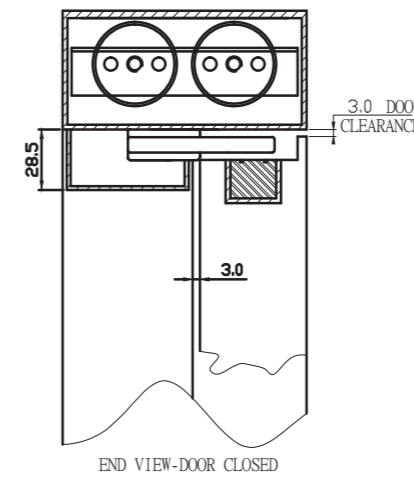
1. Rout inside face of top rail and heel of door stile as shown for arm.
2. Spacers as required to be furnished by door manufacturer.
3. Offset pivots or butts by others.

### INSTALLATION:

1. Install closer in prepared header.
2. Install slide channel in top rail.
3. Insert slide in slide channel with end marked 90° toward hinge edge of door if 90° backstop closer is used or with end marked 105° toward hinge edge of door if 105° backstop closer is used.
4. Place arm on spindle and tighten 1/4-20 socket head screw securely. Rotate arm from center as if door were open, place hole in arm over pin in the slide and secure with the "C" clip.



TOP DOOR STOP / ARM COVER  
NOTE: By others.  
This cover can be fabricated from an aluminum extrusion altered as shown.  
CAUTION: When installing on header avoid drilling into closer body.



3/4" OFFSET PIVOTED DOOR FLUSH DOOR MINIMUM 4" HEADER				
Backstop	A	B	C	
105°	95.3	134.2	50.8	
90°	76.2	127.4	50.8	

5/8" OFFSET PIVOTED DOOR 1/8" RECESSED DOOR MINIMUM 4" HEADER				
Backstop	A	B	C	
105°	95.3	137.2	50.8	
90°	76.2	139.7	50.8	

BUTT HINGED DOOR FLUSH DOOR MINIMUM 4" HEADER				
Backstop	A	B	C	
105°	70	124.5	50.8	
90°	70	127	50.8	

BUTT HINGE DOOR 1/8" RECESSED DOOR MINIMUM 4" HEADER				
Backstop	A	B	C	
105°	95.3	134.2	50.8	
90°	76.2	127.4	50.8	