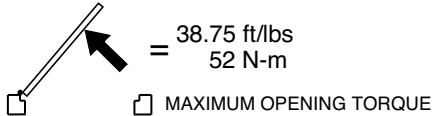
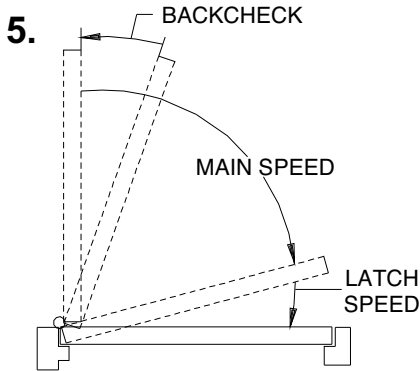
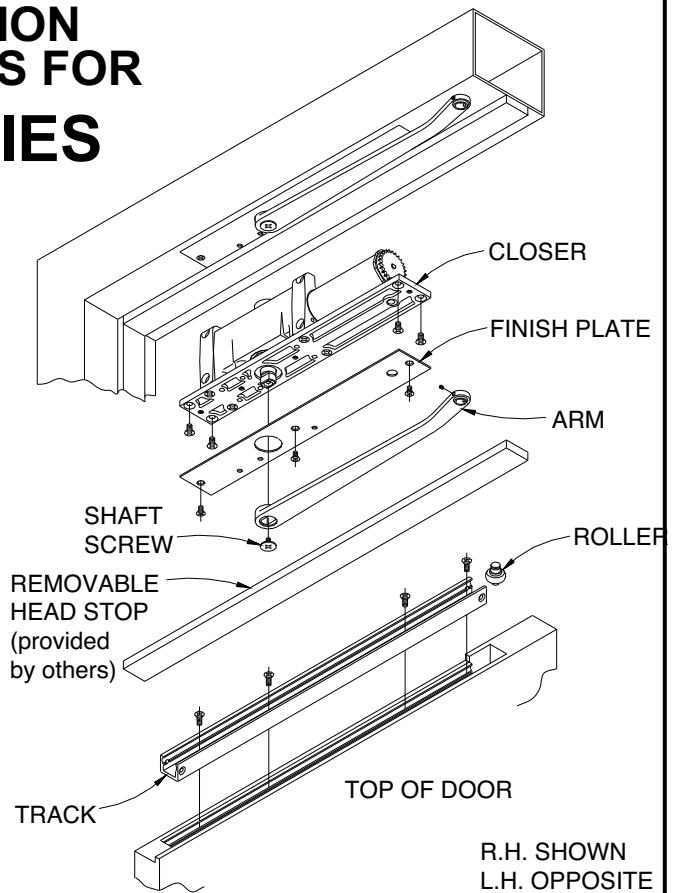


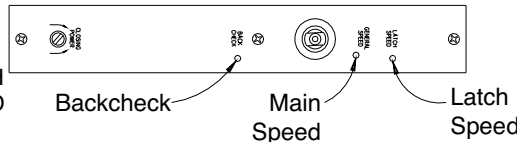
INSTALLATION INSTRUCTIONS FOR 2010 SERIES



1. Make sure hand of closer and door correspond. Hand of closer is stamped on finish plate. Hand of closer can not be reversed.
2. If door and frame are not prepared for closer and track, prepare to dimensions shown on other side.
3. Install closer in prepared frame with proper screws. Replace finish plate (or frame plate provided by frame manufacturer) and be sure plate is flush with soffit. Place arm on closer shaft and secure with shaft screw. Insert track roller in track. Install track level in door.
4. Hang door on butts. Be sure there is no bind or friction. Open door 45° and pull arm away from stop. Using allen wrench furnished, back out arm set screw to clear arm roller stud. **DO NOT DRIVE ARM DOWN OVER ROLLER STUD.** Lift end of arm up and over roller and gently fit roller stud into arm. Tighten self locking set screw.



CAUTION
IMPROPER INSTALLATION OR REGULATION MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE. FOLLOW ALL INSTRUCTIONS CAREFULLY. FOR QUESTIONS, CALL LCN AT 800 - 526 - 2400

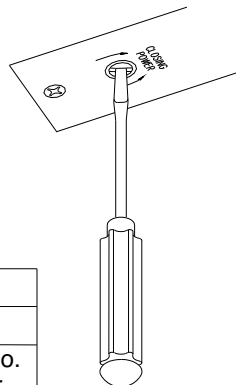


! - DO NOT USE ABRUPT BACKCHECK - NOR EXPECT DOOR CLOSER TO ACT AS A DOOR STOP

! IMPORTANT

Closer has been regulated prior to shipment. Adjust regulation only if necessary. Use 3/32" allen wrench provided and see illustration. Use socket key furnished to adjust speed. To slow main speed of door, turn regulating screw nearest shaft clockwise. To slow latch speed of door, turn regulating screw nearest hinge clockwise. **BACKCHECK** To increase backcheck intensity, turn regulating screw nearest latch clockwise.

6. Adjust CLOSING POWER only if more power is needed. Closer is shipped with minimum closing power preset. To increase CLOSING POWER turn spring adjusting screw clockwise. Maximum adjustment is 18 turns.



7. HOLD OPEN ADJUSTMENT:

Change the hold open position by removing screws (1) and then (3). Locate to required position as shown. (See illustration for hold-open spring clip position.) Install screw (3) securely. Tip cam (2) into track and locate as shown. Install long green screw (1) securely. Push door into hold open position. For **INCREASED HOLDING POWER**, loosen long green screw (1), slide cam (2) TOWARD LATCH, retighten long green screw (1) securely. For **DECREASED HOLDING POWER**, loosen long green screw (1), slide cam (2) TOWARD HINGE edge of door, retighten long green screw (1) securely.

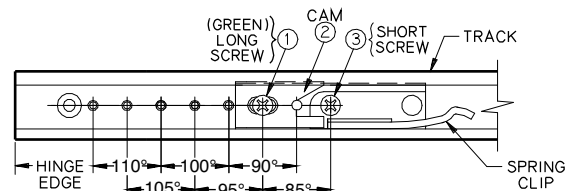
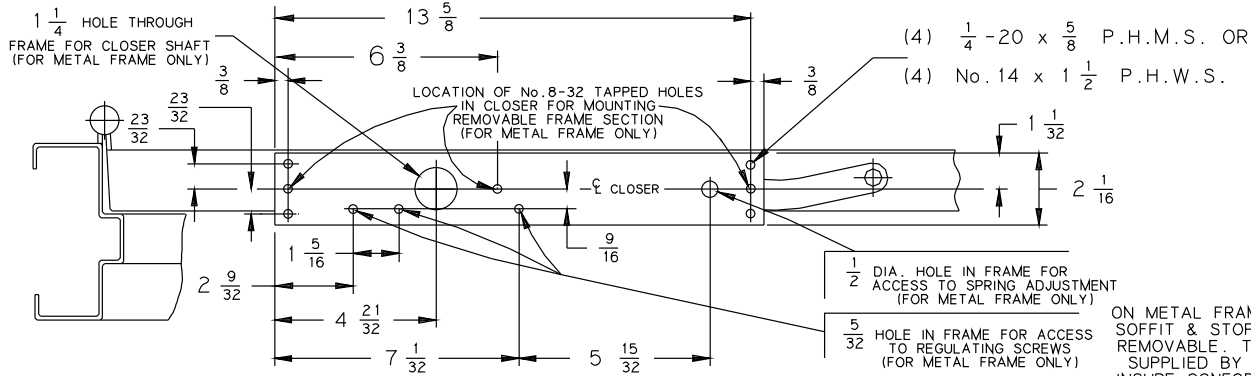


TABLE OF SIZES

MAXIMUM DOOR WIDTH		Catalog No. of closer
EXTERIOR DOORS	INTERIOR DOORS	
—		2011
30"(765mm)	38"(965mm)	2013
36"(915mm)	48"(1220mm)	2014
42"(1065mm)	54"(1370mm)	2015
48"(1220mm)	60"(1525mm)	2016

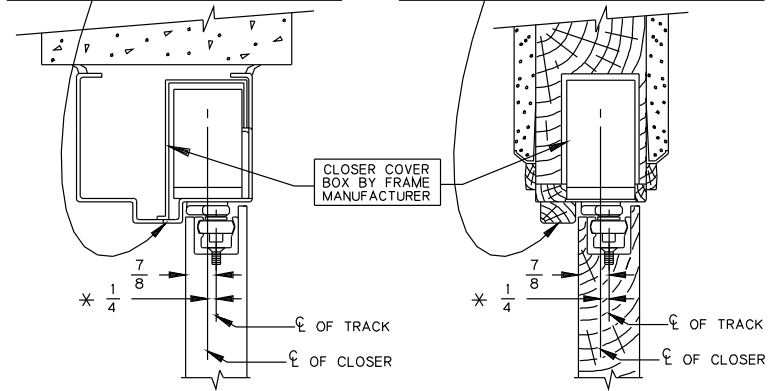
2011 } NON HOLD OPEN (90°-180°)
 2013 } H 90 (85°-110°)
 2014 }
 2015 } MAX. OPENING 180°
 2016 }

AUXILIARY STOP RECOMMENDED



ON METAL FRAMING, THE SECTION OF SOFFIT & STOP AT CLOSER MUST BE REMOVABLE. THIS SECTION MUST BE SUPPLIED BY THE FRAME MFR. TO INSURE CONFORMITY WITH REMAINDER OF THE FRAME. CONTOUR OF FRAME MAY VARY FROM THAT SHOWN.

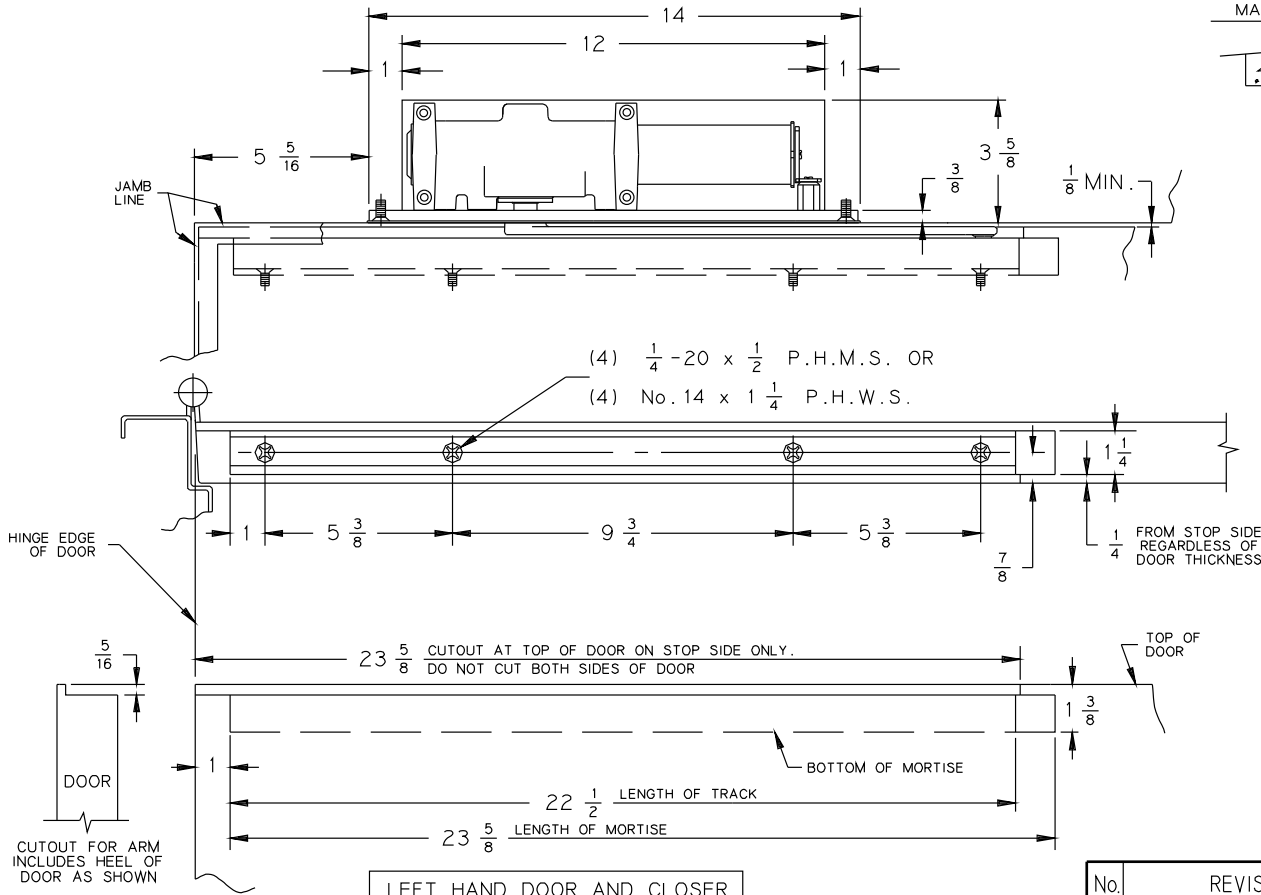
ON WOOD FRAMING A METAL FINISH PLATE IS SUPPLIED BY LCN CLOSERS TO COVER ENTIRE CLOSER. IF APPLIED STOP IS USED THE ENTIRE HEAD STOP SHOULD BE SCREWED IN PLACE SO IT WILL BE REMOVABLE. THIS MAKES CUTTING OF STOP OVER CLOSER UNNECESSARY.



*: 1/4 DIMENSION MAY BE INCREASED TO 7/8 TO ACCOMMODATE VARYING WALL THICKNESSES. SUBMIT DETAILS TO LCN FOR SPECIAL INSTRUCTIONS.

NOTES:

1. FOR 180° OPENINGS, MAX. ALLOWABLE BUTT SIZE IS 5" x 5".
2. MIN. STOP THICKNESS 1/2"
3. 1/8" DOOR TO SOFFIT CLEARANCE REQUIRED.
4. REINFORCING PER ANSI/SDI-100 RECOMMENDED FOR HOLLOW METAL DOORS & FRAMES.
5. WITH 2" HEADER ON HOLLOW METAL FRAMES, THE HEADFRAME MUST BE MORTISED.



LEFT HAND DOOR AND CLOSER SHOWN, RIGHT HAND OPPOSITE

inch	1/8	5/32	1/4	5/16	3/8	1/2	9/16	5/8	23/32	7/8	1	1 1/32	1 1/4	1 5/16	1 3/8	1 1/2
mm	3	4	6	8	10	13	14	16	18	22	25	26	32	33	35	38
inch	2	2 1/16	2 3/32	2 3/16	3 5/8	4 21/32	5 5/16	5 3/8	7 1/32	7 1/4	9 3/4	12	13 1/4	14	22 1/2	23 5/8
mm	51	52	58	66	92	118	135	137	179	184	248	305	337	356	572	600

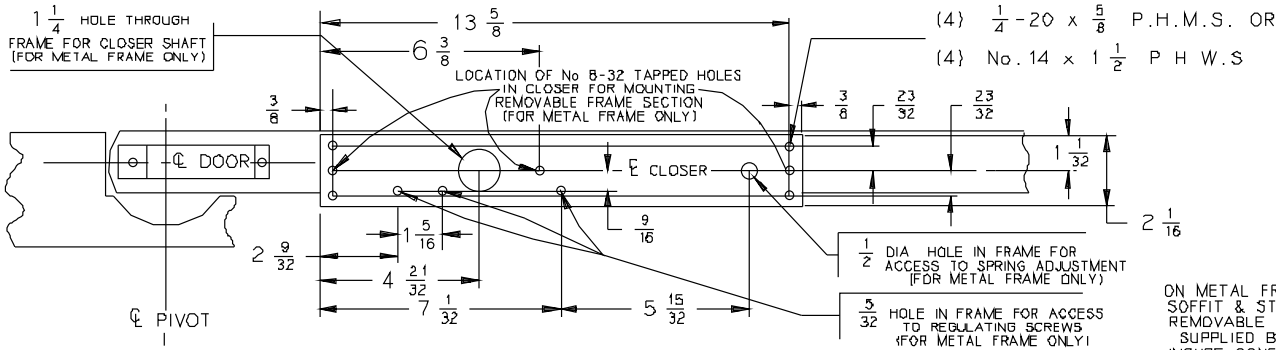
No.	REVISION	BY	DATE
8	TRACK MOUNTING HOLES RELOCATED	DRM	6/90
9	4 IN. HEADER WAS 2 IN.	CTB	11/90
10	REVISED SIZE CHARTS	CTB	6/92
11	SIZE 1 UPDATE / CAD CONVERSION	CTB	1/94
12	REMOVED MOUNTING BRACKETS	AMM	11/97



DRW BY CTB 1/94
DO NOT SCALE

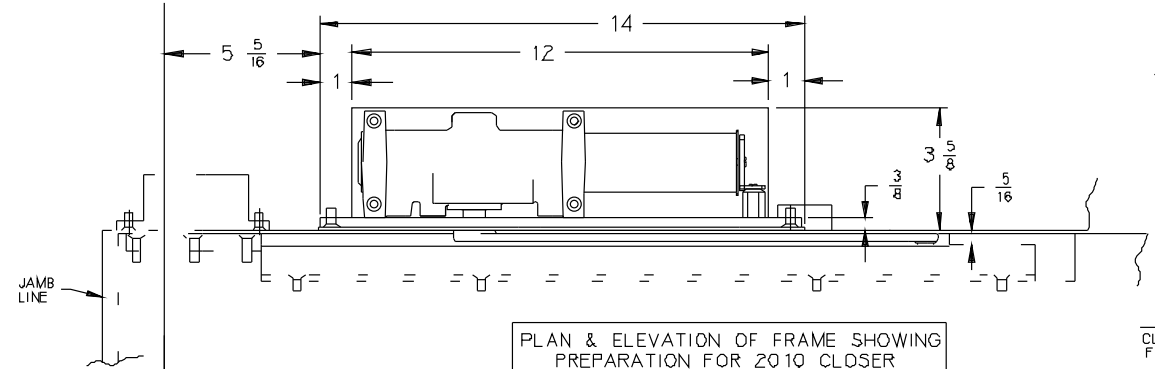
OVERHEAD CONCEALED CLOSER WITH CONCEALED ARM & TRACK

2010



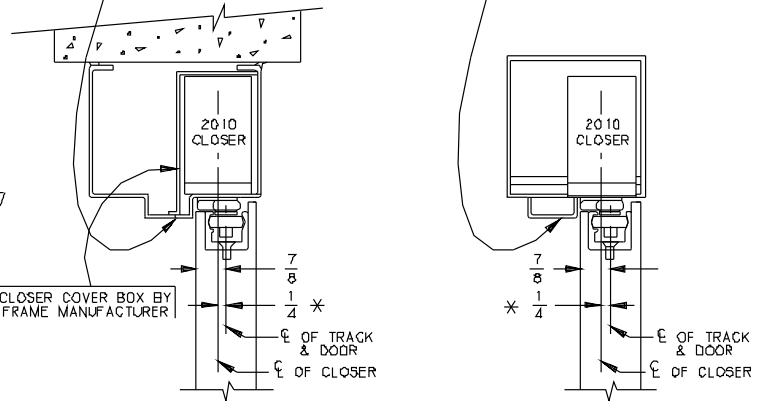
2011 CP } NON HOLD OPEN (UP TO 120°)
 2013 CP } H 90 - (75° TO 95°)
 2015 CP } MAX. OPENING 120°
 2016 CP }

AUXILIARY STOP RECOMMENDED
 LEFT HAND DOOR AND CLOSER SHOWN. RIGHT HAND OPPOSITE 6/96

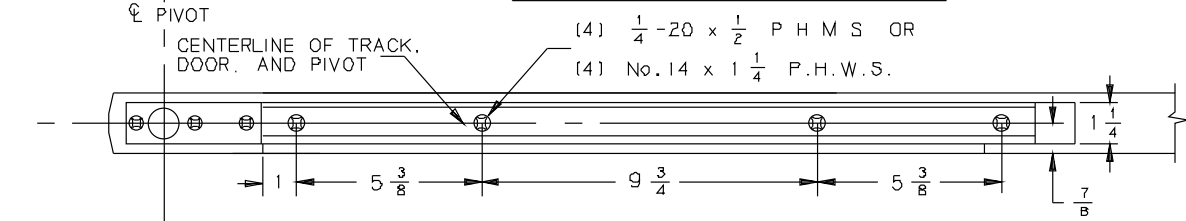


ON METAL FRAMING, THE SECTION OF SOFFIT & STOP AT CLOSER MUST BE REMOVABLE. THIS SECTION MUST BE SUPPLIED BY THE FRAME MFR. TO INSURE CONFORMITY WITH REMAINDER OF THE FRAME, CONTOUR OF FRAME MAY VARY FROM THAT SHOWN

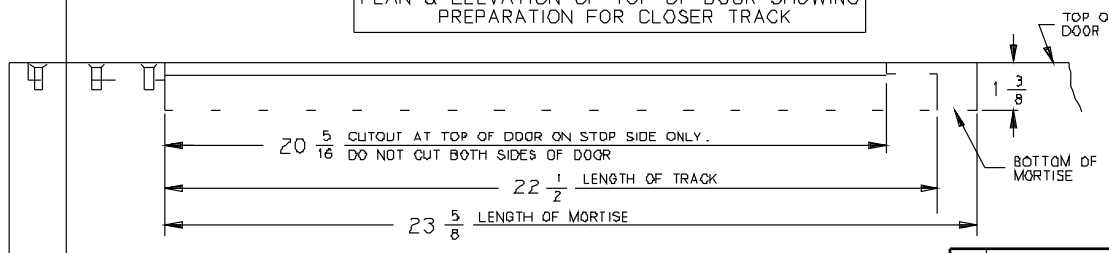
ON TUBE FRAMING A METAL FINISH PLATE IS SUPPLIED BY LCN CLOSERS TO COVER ENTIRE CLOSER. IF APPLIED STOP IS USED THE ENTIRE HEAD STOP SHOULD BE SCREWED IN PLACE SO IT WILL BE REMOVABLE. THIS MAKES CUTTING OF STOP OVER CLOSER UNNECESSARY.



* 1/4 DIMENSION MAY BE INCREASED TO ACCOMMODATE VARYING WALL THICKNESSES. SUBMIT DETAILS TO LCN FOR SPECIAL INSTRUCTIONS.



PLAN & ELEVATION OF TOP OF DOOR SHOWING PREPARATION FOR CLOSER TRACK



- NOTES -
- 1 - MINIMUM STOP THICKNESS 1/2"
 - 2 - 1/8" DOOR TO SOFFIT CLEARANCE REQUIRED
 - 3 - REINFORCING PER ANSI/SDI-100 RECOMMENDED FOR HOLLOW METAL DOOR AND FRAMES
 - 4 - THIS PRODUCT REQUIRES A 4" MINIMUM FRAME HEADER CONSULT FACTORY IF HEAD JAMB IS LESS THAN 4"

inch	1/8	3/16	1/4
mm	3	4	6

inch	5/16	3/8	1/2	5/8	3/4	7/8	1	1 1/16	1 1/8	1 1/4	1 5/16	1 3/8	1 1/2	1 5/8	1 3/4	2 1/16	2 3/16
mm	8	10	13	14	16	18	22	26	32	33	35	38	41	44	52	58	
inch	2 5/8	3 3/8	4 1/4	4 5/8	5 1/4	5 7/8	5 3/4	5 15/16	7 1/4	7 1/2	9 1/4	12	13 1/2	14	20 1/8	22 1/2	23 3/8
mm	66	92	117	118	133	135	137	139	179	184	248	305	337	356	516	572	600

No	REVISION	BY	DATE
1	CAD CONVERSION	CTB	6/93
2	TEMPLATE UPDATE	JEJ	6/96
3	TEMPLATE UPDATE	AMM	2/98
4	REMOVED PIVOT INFO.	AMM	5/01

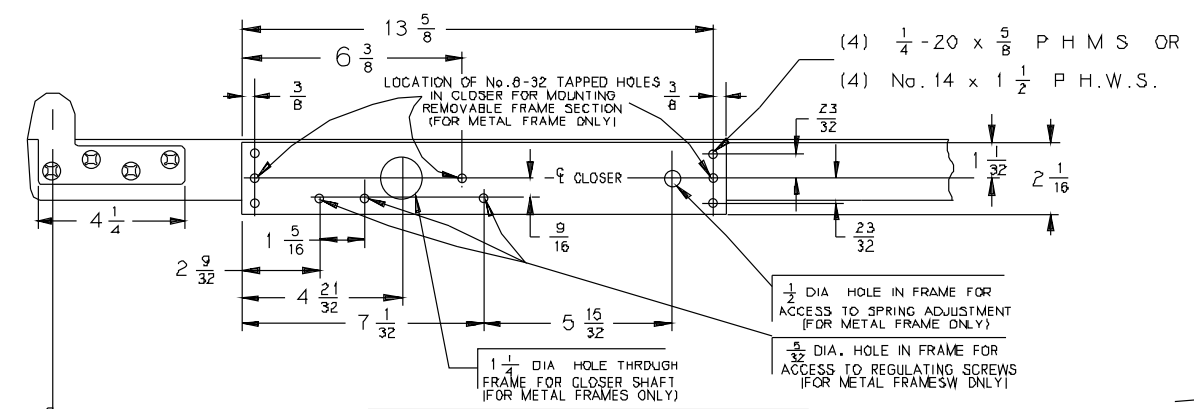
IR LCN APP BY JEJ 6/96 DO NOT SCALE

OVERHEAD CONCEALED CLOSER, ARM & TRACK WITH CENTER PIVOTS

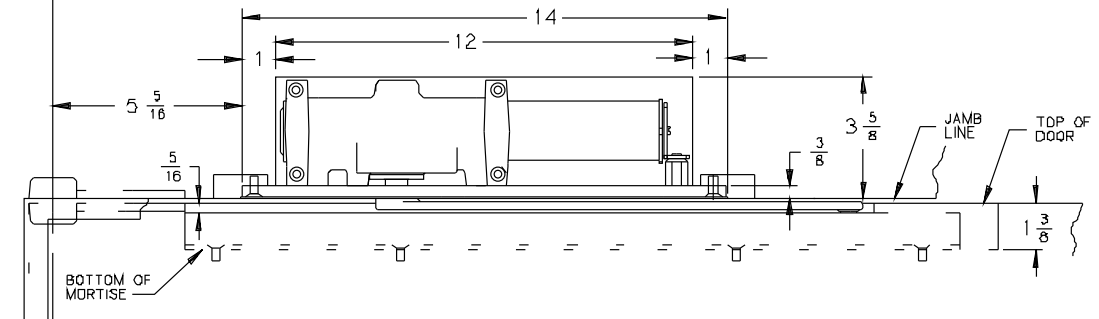
2010-CP

2011 OP } NON HOLD OPEN (up to 110°)
 2013 OP } H-90 (75° to 90°)
 2014 OP }
 2015 OP } MAX. OPENING 110°
 2016 OP }

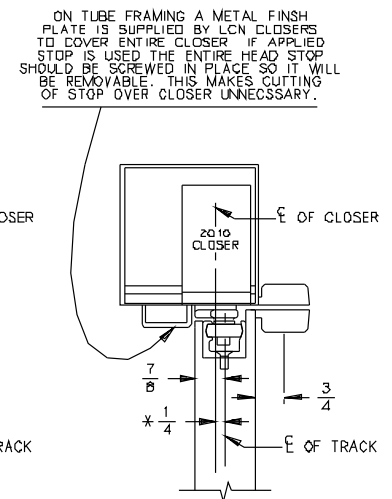
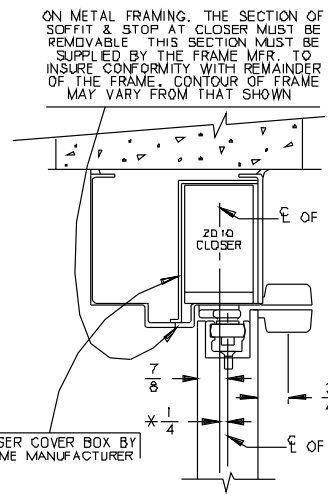
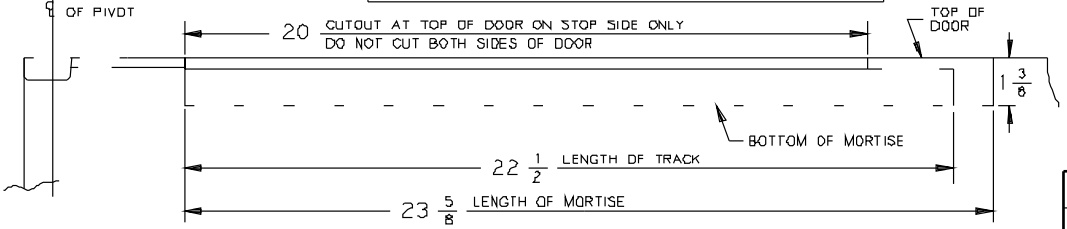
AUXILIARY STOP RECOMMENDED
 LEFT HAND DOOR AND CLOSER SHOWN. RIGHT HAND OPPOSITE 6/96



PLAN & ELEVATION OF FRAME SHOWING PREPARATION FOR 2010 CLOSER



PLAN & ELEVATION OF TOP OF DOOR SHOWING PREPARATION FOR CLOSER TRACK



ON METAL FRAMING, THE SECTION OF SOFFIT & STOP AT CLOSER MUST BE REMOVABLE. THIS SECTION MUST BE SUPPLIED BY THE FRAME MFR. TO INSURE CONFORMITY WITH REMAINDER OF THE FRAME. CONTOUR OF FRAME MAY VARY FROM THAT SHOWN

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*: 1/4 DIMENSION MAY BE INCREASED TO ACCOMMODATE VARYING WALL THICKNESSES. SUBMIT DETAILS TO LCN FOR SPECIAL INSTRUCTIONS.

- NOTES -
- 1 - 1/8" DOOR TO STOP CLEARANCE REQUIRED.
 - 2 - REINFORCING PER ANSI/SDI-100 RECOMMENDED FOR HOLLOW METAL DOOR AND FRAMES.
 - 3 - MINIMUM STOP THICKNESS 1/2".
 - 4 - THIS PRODUCT REQUIRES A 4" MINIMUM FRAME HEADER CONSULT FACTORY IF HEAD JAMB IS LESS THAN 4"

inch	1/16	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	11/16	3/4	7/8	1	1 1/16	1 1/8	1 1/4	1 5/8	1 3/4	2 1/16	2 3/8
mm	2	6	8	10	14	16	18	19	22	25	26	27	32	33	35	52	58	60	57	52	58
inch	2 1/16	3 5/8	4 1/4	4 9/16	4 21/32	5 5/16	5 3/8	5 15/16	7 1/4	7 1/2	9 1/4	12	13 1/4	14	20	22 1/2	23 5/8				
mm	66	92	108	116	118	135	137	139	179	184	248	305	337	356	508	572	600				

No.	REVISION	BY	DATE
1	CAD CONVERSION	CTB	6/93
2	TEMPLATE UPDATES	JEJ	6/96
3	TEMPLATE UPDATES	AMM	2/98
4	TEMPLATE UPDATES	AMM	9/99
5	REMOVE RIVOT INFO.	AMM	5/01



APP BY JEJ 6/96
DO NOT SCALE

OVERHEAD CONCEALED CLOSER WITH CONCEALED ARM & OFFSET PIVOTS

2010-OP