

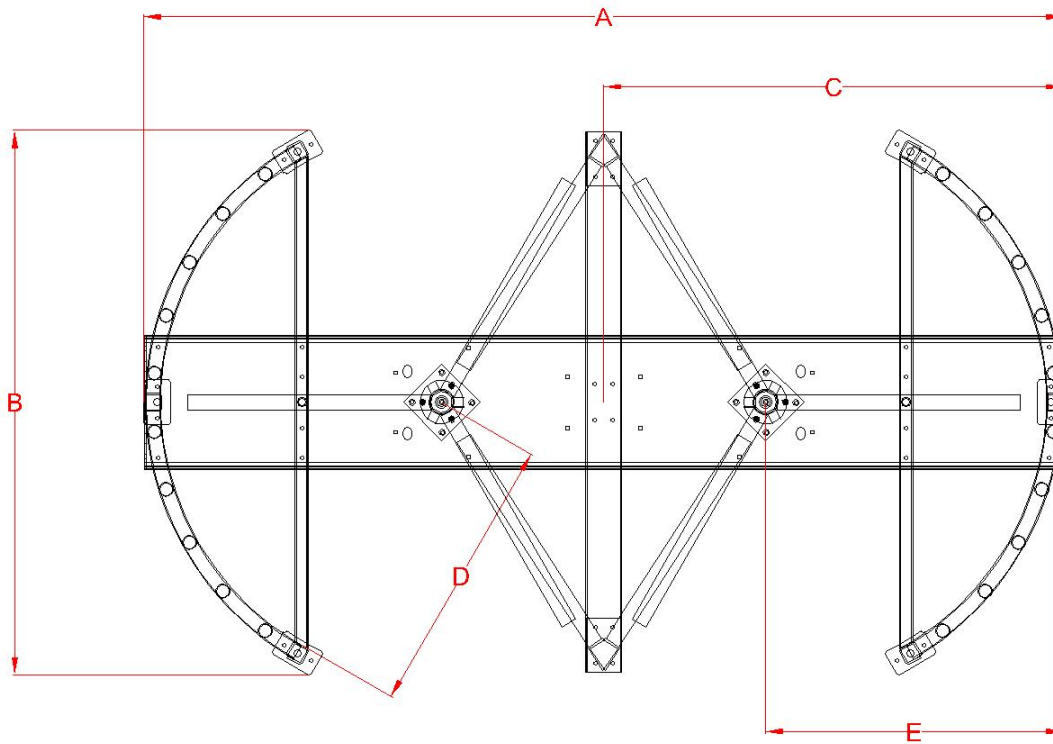
AG-SERIES TANDEM TURNSTILE

INSTALLATION MANUAL



TANDEM FULL HEIGHT TURNSTILE GENERAL DIMENSIONS

MODEL	(A)	(B)	(C)	(D)	(E)
AG-30- TT-SS-2E	102 1/4"	60 9/16"	51 1/8"	31 1/8"	33 1/8"



□

UNPACKAGING

VERIFY YOU HAVE ALL PARTS AND HARDWARE LISTED BELOW

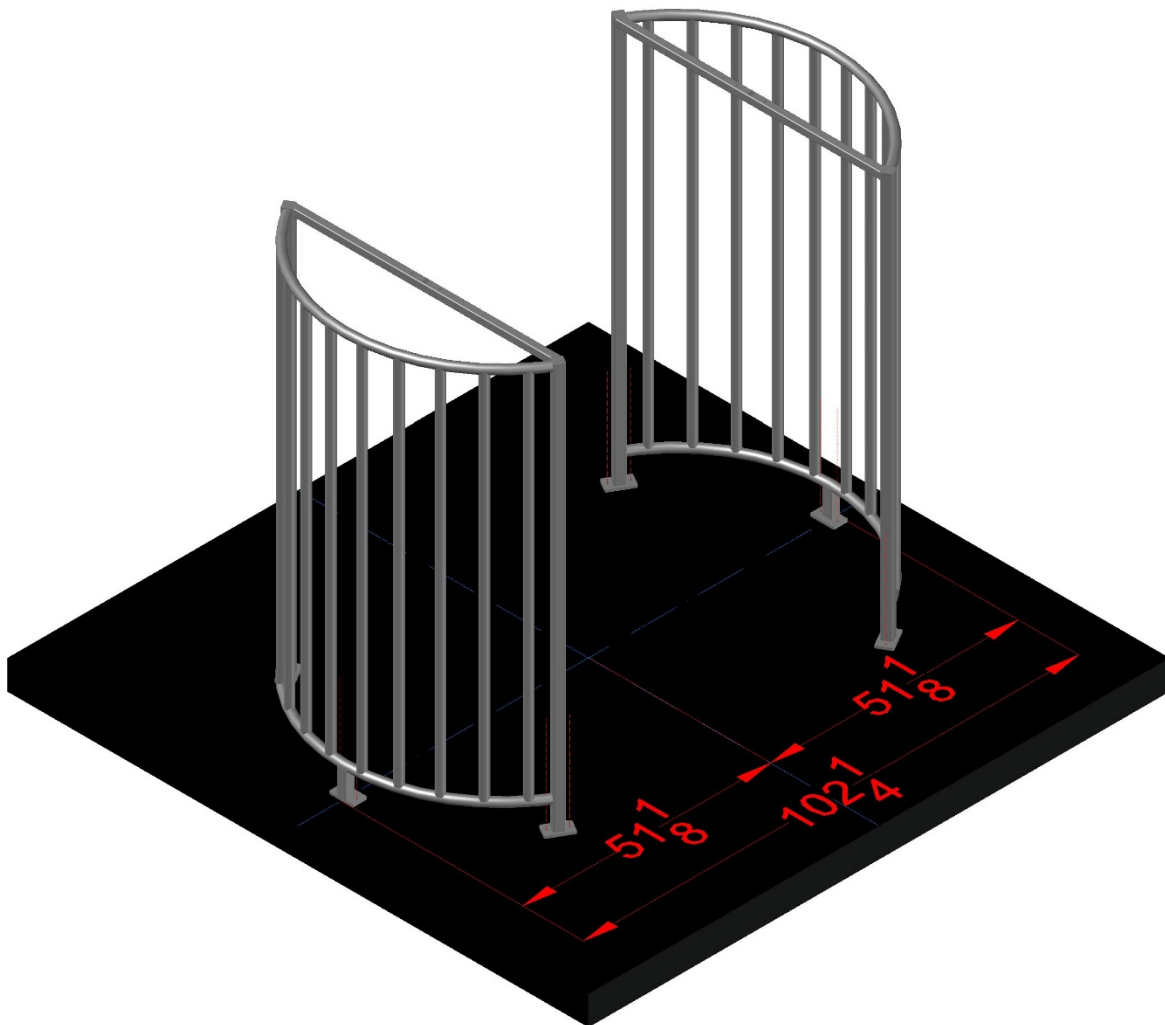
- 1.1-TURNSTILE HEADER WITH 2 -LOCKING MECHANISMS AND LID
- 2.2 - ROTORS
- 3.2 -BOTTOM BEARING ASSEMBLIES
- 4.2 -CAGES
- 5.2 -COMBS
- 6.1 -CROSSMEMBER
- 7.INCLUDED INSTALLATION HARDWARE BOX

TANDEM FULL HEIGHT TURNSTILE NOMENCLATURE

AG	30	TT	SS	2E
SERIES	PASSAGE WIDTH IN INCHES 30	TT- FOR TANDEM TURNSTILE	SS- STAINLESS STEEL	2E- 2 WAY ELECTRONIC PASSAGE CONTROL

INSTALLATION

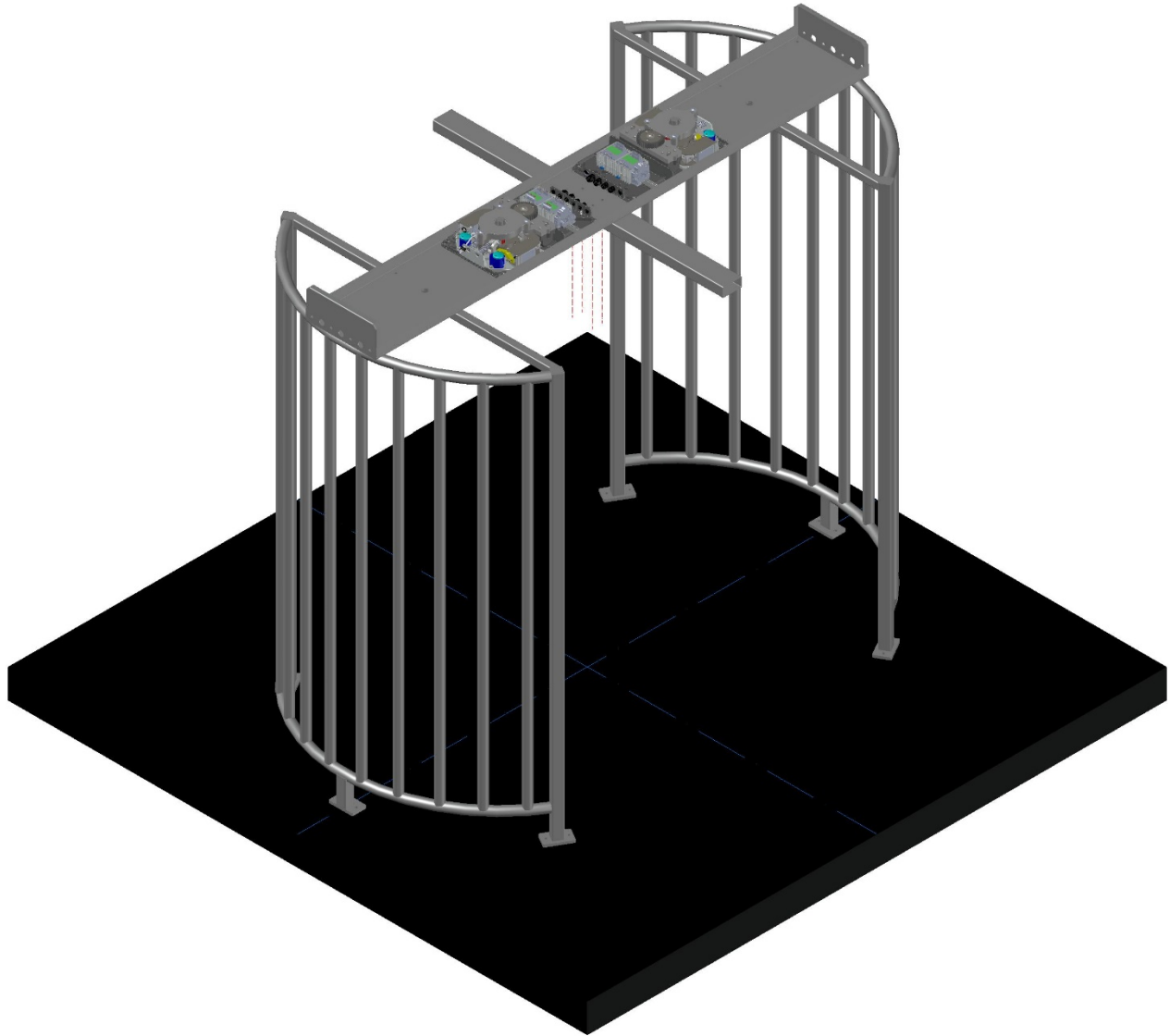
1. STARTING WITH A LEVEL CONCRETE SLAB OR EQUIVALENT, BEGIN THE LAYOUT PROCESS BY SNAPPING A CENTER LINE AND A CROSS LINE FOR THE TURNSTILE ENTRANCE. STAND UP THE CAGES ON THE CENTER LINE AND MEASURE THE APPROPRIATE DISTANCE FOR THE MODEL OF TURNSTILE. (SEE GENERAL DIMENSIONS CHART FOR MEASUREMENTS)



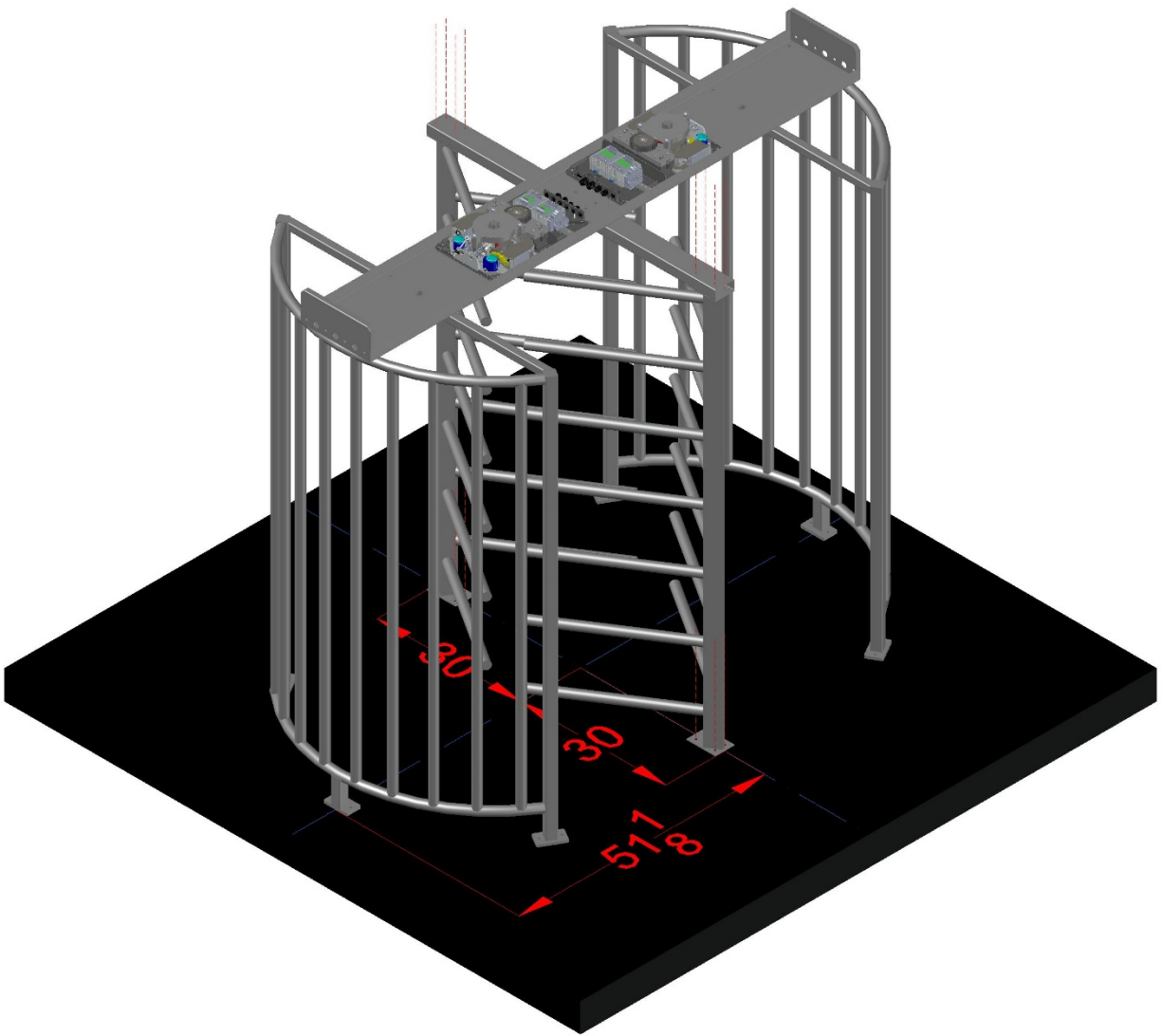
2. LOOSELY BOLT THE HEADER TO CAGES AND SQUARE THEM UP BY MEASURING TO THE CENTER POINT. REFER TO THE GENERAL DIMENSIONS TO SEE WHAT THIS MEASUREMENT WOULD BE FOR EACH MODEL OF TURNSTILE. ONCE SQUARE, MARK THE HOLES ON THE CAGE FEET AND ANCHOR USING PROVIDED ANCHORS.



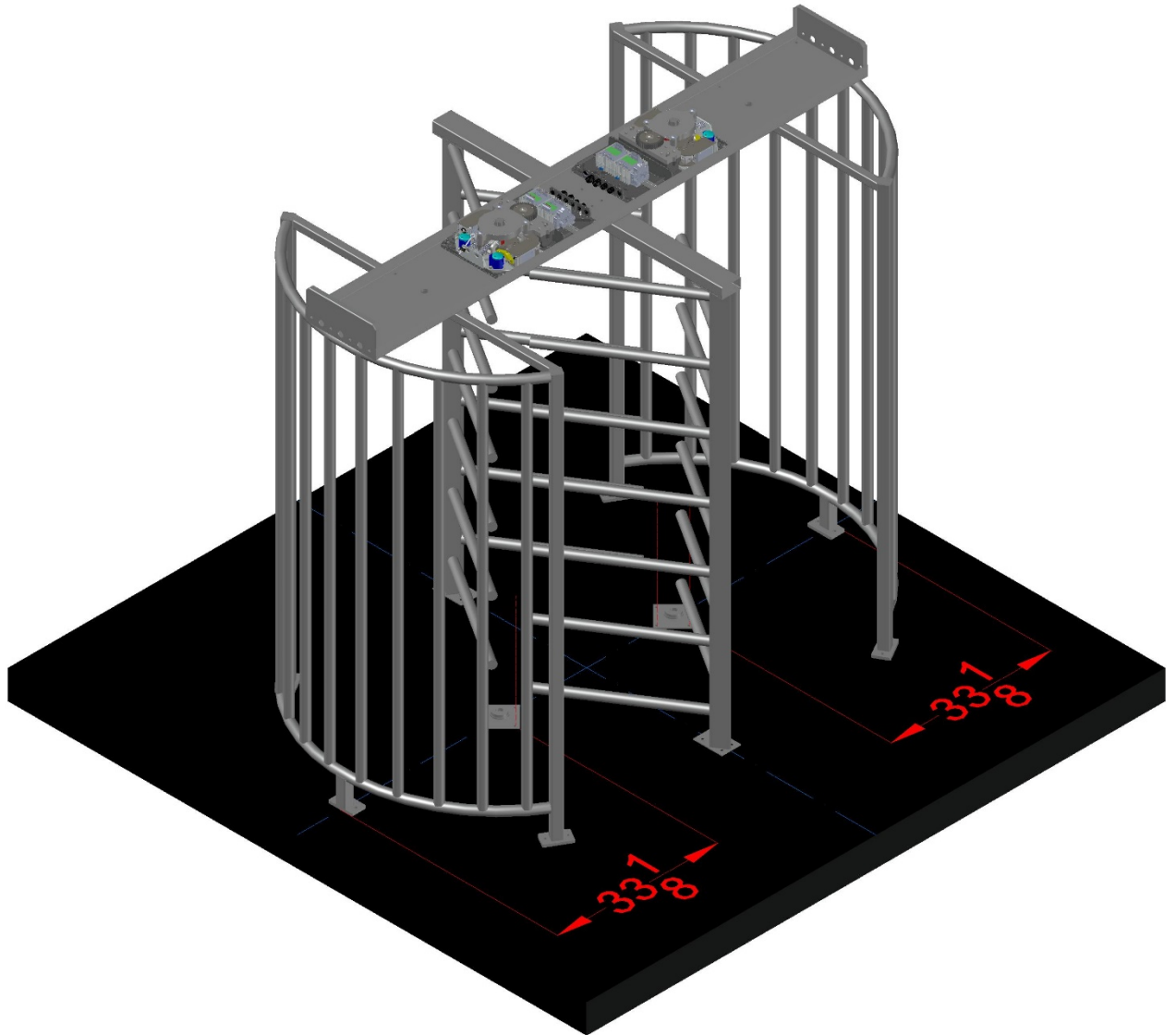
3. ATTACH THE COMB CROSSMEMBER WITH PROVIDED BOLTS.



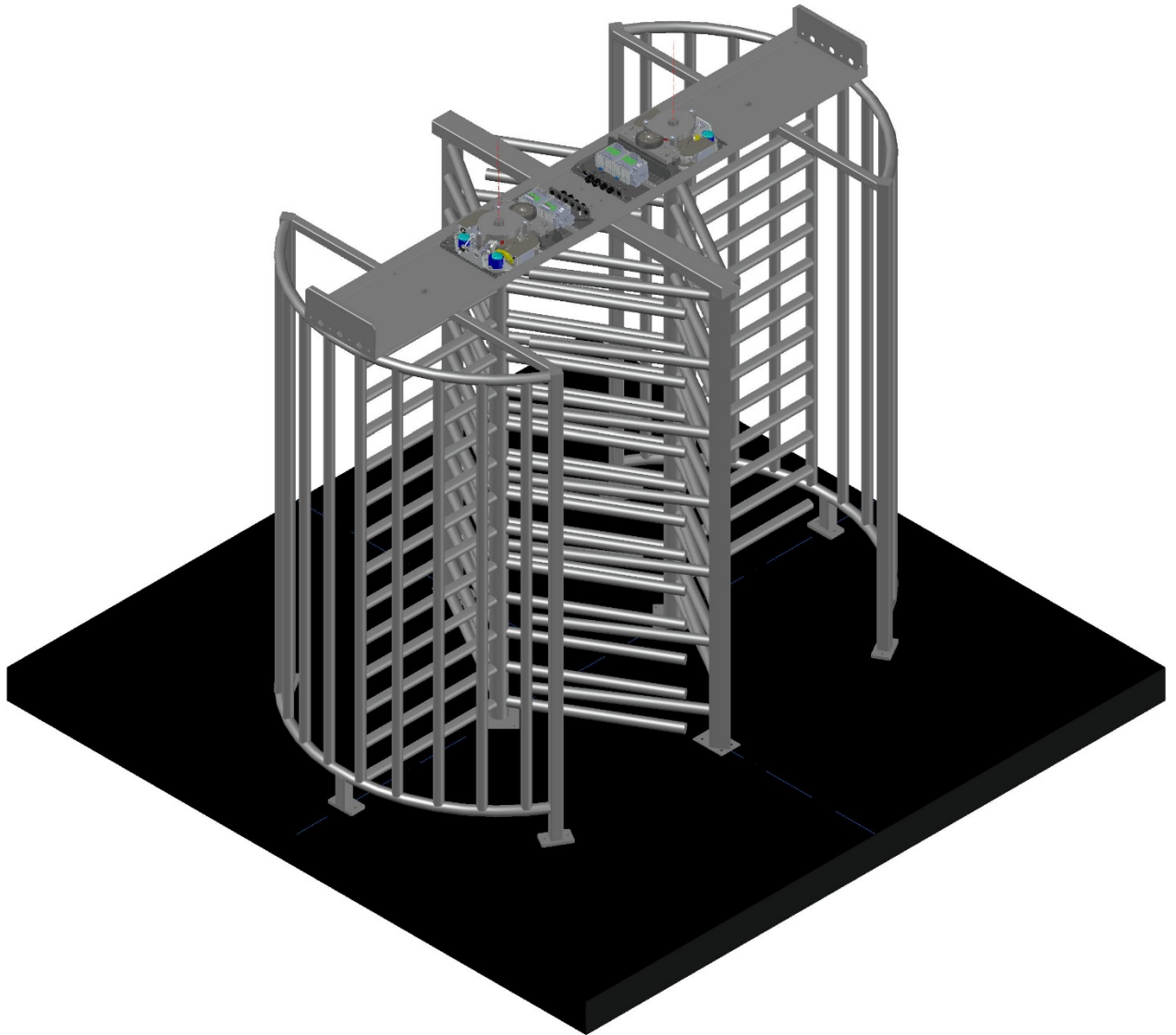
4. THE COMBS WILL BE LABELED TOP AND BOTTOM ON THE ANCHOR AND BOLT PLATES. ATTACH THE COMBS TO THE CROSSMEMBER WITH PROVIDED BOLTS LOOSELY. ALIGN AND ANCHOR THE BOTTOM OF THE COMBS REFERRING TO THE GENERAL DIMENSIONS FOR THE MODEL OF TANDEM TURNSTILE.



5. INSTALL THE BOTTOM BEARING PLATES WITH THE SUPPLIED ANCHORS REFERRING TO THE GENERAL DIMENSIONS FOR THE MODEL OF TANDEM TURNSTILE.

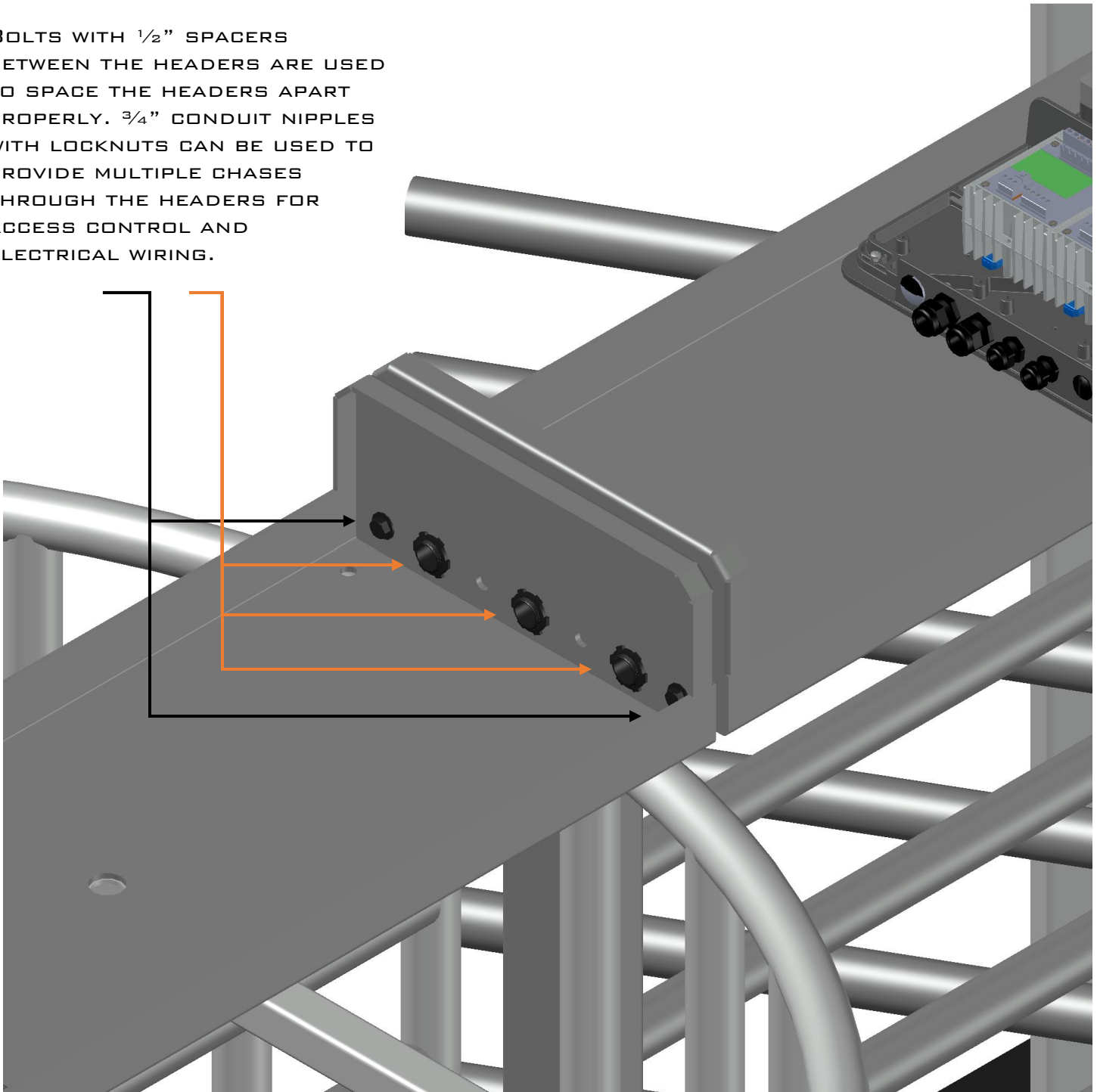


6. THE ROTORS ARE NOT THE SAME ON A TANDEM TURNSTILE. INSTALL THE ROTORS SO THAT THE ARMS FIT IN BETWEEN THE COMB ARMS. ONCE PLACED ON THE BOTTOM BEARING ASSEMBLY TIP THE ROTOR INTO PLACE AND INSTALL THE SPLINE SHAFT. BELOW IS CORRECT ALIGNMENT OF THE ROTORS WHILE LOCKED.

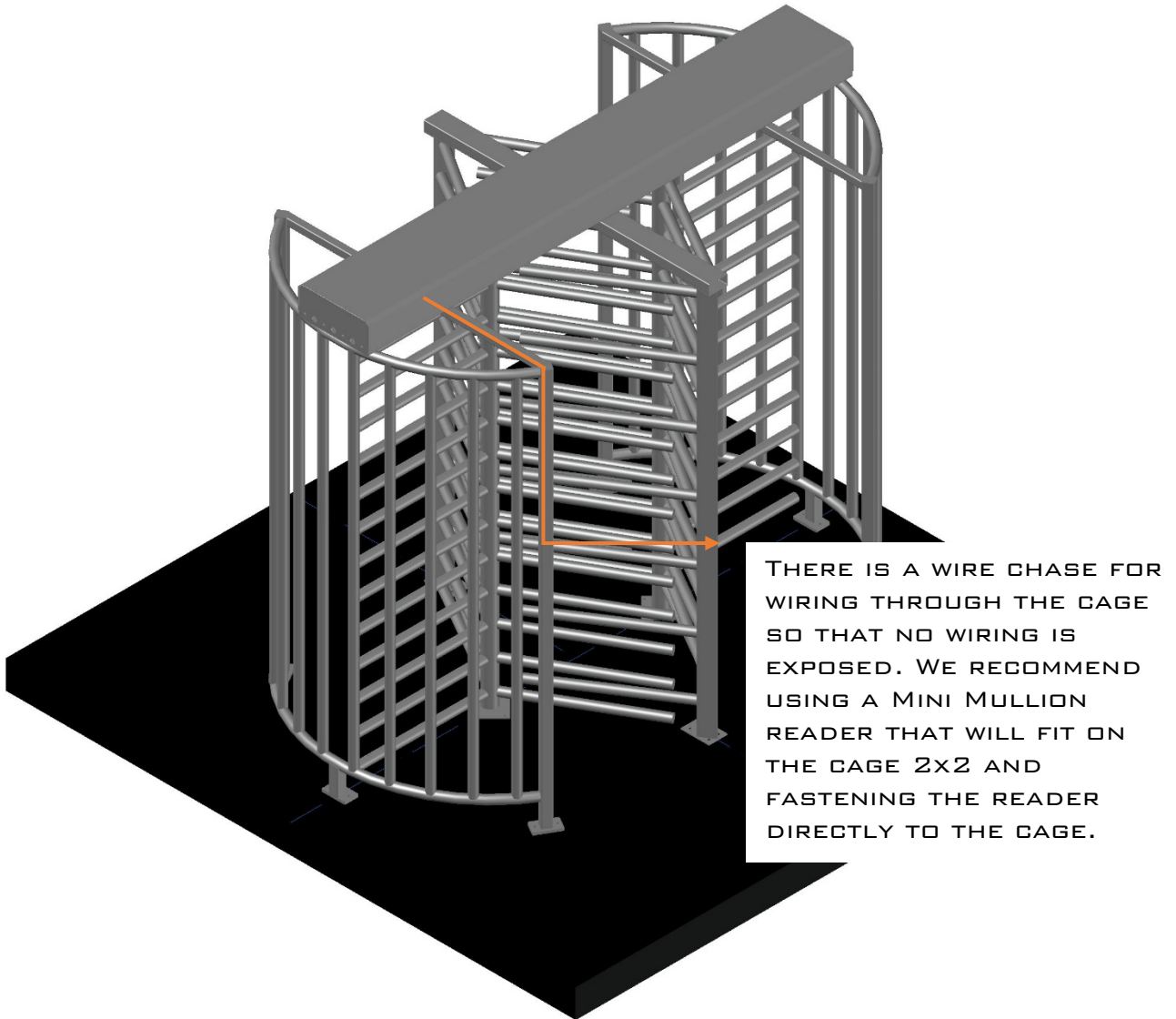


7. IF YOU HAVE ADDITIONAL TURNSTILES OR ADA GATES THAT GO IN THE ENTRANCE ARRAY, USE THE BOLTS IN THE HARDWARE BOX TO BOLT THEM TOGETHER WITH THE 1/2" SPACERS BETWEEN THE HEADERS.

BOLTS WITH 1/2" SPACERS BETWEEN THE HEADERS ARE USED TO SPACE THE HEADERS APART PROPERLY. 3/4" CONDUIT NIPPLES WITH LOCKNUTS CAN BE USED TO PROVIDE MULTIPLE CHASES THROUGH THE HEADERS FOR ACCESS CONTROL AND ELECTRICAL WIRING.



8. INSTALL THE LID. CONSULT WITH ELECTRICIANS AND ACCESS CONTROL CONTRACTORS TO APPLY POWER AND CONTROL THE TURNSTILE WITH ACCESS CONTROL SYSTEM.



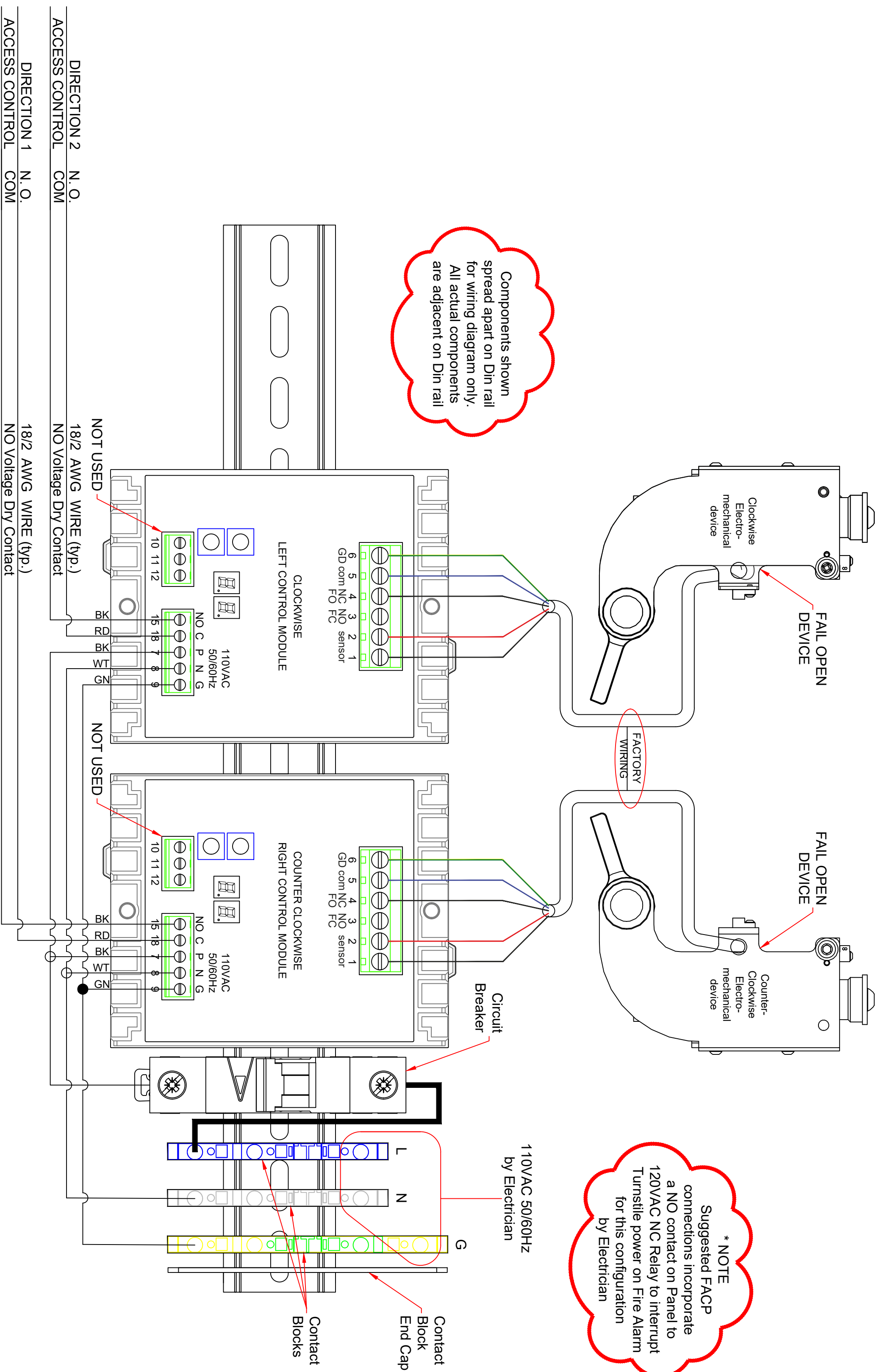
ELECTRICAL REQUIREMENTS

INPUT VOLTAGE	120V (240V SPECIAL ORDER)
FREQUENCY	50/60 HZ
AMPERAGE DRAW	.5 - 1 AMPS (UNLESS ENCLOSURE HEATER IS ADDED = +5 AMPS)
OPERATING TEMPERATURE	-40 °F - 120 °F

ACCESS CONTROL REQUIREMENTS

INPUT TRIGGER	NORMALLY OPEN DRY CONTACT / NO VOLTAGE
MINIMUM TRIGGER PULSE	1 SECOND
RECOMMENDED WIRE SIZE	18G 18/4
FIRE RELEASE	FIRE RELAY REMOVES POWER FROM TURNSTILE IN CASE OF EMERGENCY (TURNSTILE MUST BE CONFIGURED WITH FAIL OPEN SOLENOIDS TO ACHIEVE THIS)

* DIMENSIONS MAY VARY IN ACTUAL INSTALLATION - FABRICATION CHANGES RESERVED - SIMILAR EQUIPMENT MAY BE SUBSTITUTED *



FIRST DRAWN	BY
01-01-20	JJM JR
REVISED	BY

COPYRIGHT © TURNSTILES.US
 Copyright © Turnstiles.us All rights reserved. Reproduction or translation of this work without the express written permission of TURNSTILES.US is unlawful and is an infringement of intellectual property belonging to TURNSTILES.US. All drawings and/or designs are restricted for use exclusively with a purchase, installation, and/or support from Turnstiles.us. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, Request for additional information should be addressed to the Legal Department, Turnstiles.us.

TURNSTILES.us
 www.TURNSTILES.us
 Call 303 670 1099 * Text 303 918 9787
 patrick.mcallister@turnstiles.us

WIRING DIAGRAM	
AG Series Full Height Turnstile Wiring Schematic (No Counter)	
DWG	AG SERIES
WIRING DIAGRAM	
DATE	01-01-20
SHEET - 1 OF 1	

4

3

2

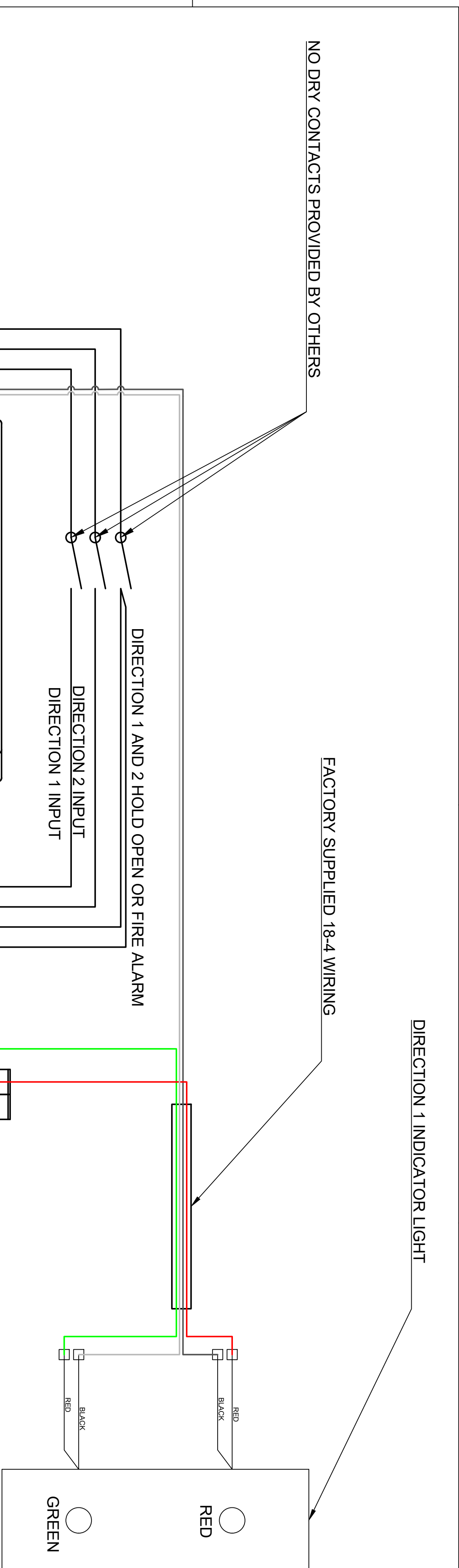
1

D

NO DRY CONTACTS PROVIDED BY OTHERS

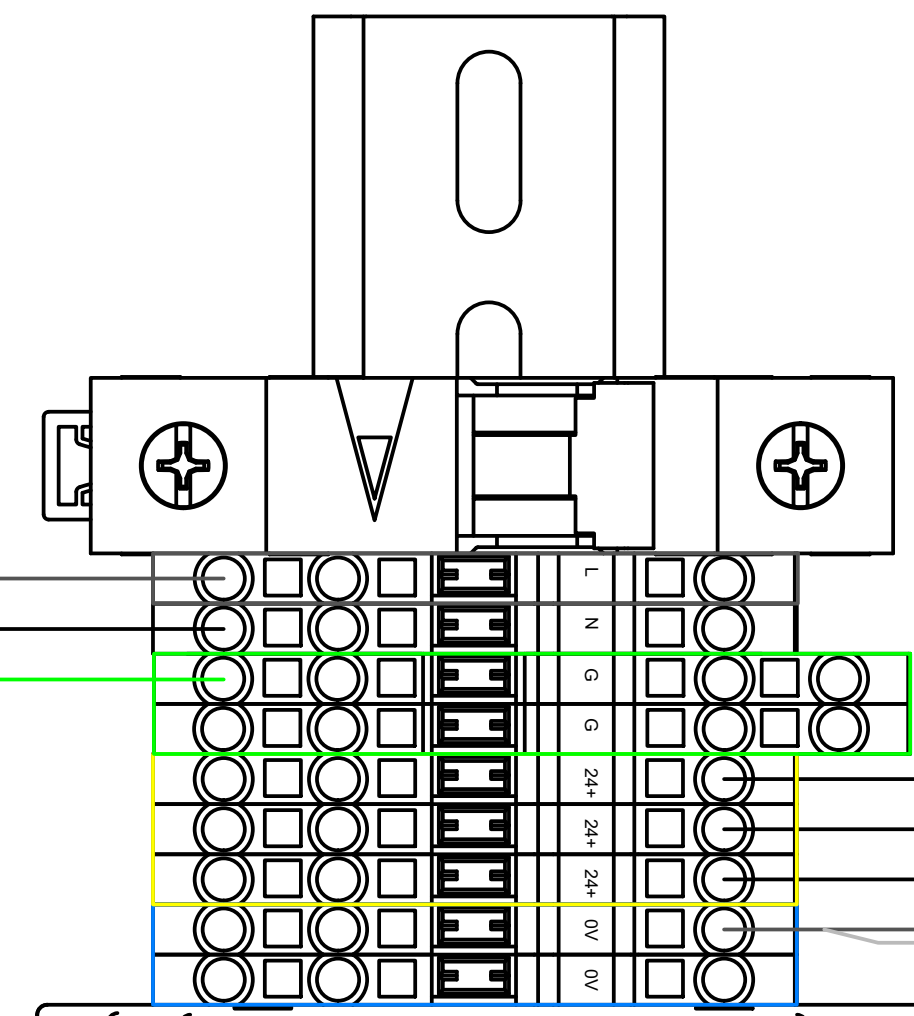
FACTORY SUPPLIED 18-4 WIRING

DIRECTION 1 INDICATOR LIGHT



C

B



110V
2A
16A WITH COLD WEATHER PACKAGE

A

* This document is protected by the Copyright Laws of the United States Copyrights Office.
 * This document is not to be distributed without the written permission of Outlaw Industries "LLC".
 * This design is subject to change at anytime without notice.
 * Field measurement may vary



PROJECT
LOGIC CONTROLLER WIRING

TITLE
LOGIC CONTROLLER FOR FULL HEIGHT TURNSTILES RELAY VERSION

APPROVED	SIZE	CODE	DWG NO	REV
CHECKED	C			
DRAWN	Jesse Moses	5/25/2021	SCALE 1:1	WEIGHT
				SHEET 1/1

4

3

2

1

B

C

D

A

AG-SERIES TURNSTILE MAINTENANCE

Annual Recommended Inspection and Maintenance

- Remove the lid from the header.
- Clean out the header of any dust and debris.
- Take out center shaft by lifting it out of the top of the locking mechanism (you may need a pair of channel locks to grip the shaft).
- Add grease when reinserting the shaft, for ease of future maintenance.
- Lift the center rotor off of the bearing, inspect bearing, re-grease with red grease or replace if necessary. Make sure that the rotor is oriented properly with the arms facing the middle / center of the cage. If replacement is necessary the bottom bearing part number is AGRB10.
- Test electrical function by triggering turnstile to unlock in each direction.
- Shut off the equipment breaker in the header of the turnstile, make sure that fail-open and fail-close are functioning properly.
- If your turnstile is equipped with lights, verify that all directional lights are working properly, replace bulbs or module as necessary.

WARRANTY AND DISCLAIMER

WARRANTY

THANK YOU FOR YOUR INTEREST IN OUR PRODUCTS AND SERVICES.
THIS LIMITED WARRANTY APPLIES TO PHYSICAL GOODS, AND ONLY FOR
PHYSICAL GOODS, PURCHASED FROM OUTLAW INDUSTRIES.

WHAT DOES THIS LIMITED WARRANTY COVER?

THIS LIMITED WARRANTY COVERS ANY DEFECTS IN MATERIAL OR WORKMANSHIP
UNDER NORMAL USE DURING THE WARRANTY PERIOD.

DURING THE WARRANTY PERIOD, MANUFACTURER WILL REPAIR OR REPLACE, AT
NO CHARGE, PRODUCTS OR PARTS OF A PRODUCT THAT PROVES DEFECTIVE
BECAUSE OF IMPROPER MATERIAL OR WORKMANSHIP, UNDER NORMAL USE AND
MAINTENANCE.

WHAT WILL WE DO TO CORRECT PROBLEMS?

OUTLAW INDUSTRIES WILL REPAIR THE PRODUCT AT NO CHARGE, USING NEW OR
REFURBISHED REPLACEMENT PARTS.

HOW LONG DOES THE COVERAGE LAST?

THE WARRANTY PERIOD FOR PHYSICAL GOODS PURCHASED FROM OUTLAW
INDUSTRIES IS 18 MONTHS FROM THE DATE OF SHIPMENT TO THE END USER.

WHAT DOES THIS LIMITED WARRANTY NOT COVER?

THIS LIMITED WARRANTY DOES NOT COVER ANY PROBLEM THAT IS CAUSED BY:

- CONDITIONS, MALFUNCTIONS OR DAMAGE NOT RESULTING FROM DEFECTS IN
MATERIAL OR WORKMANSHIP
- SHIPPING COST FOR REPAIR, OR DAMAGE FROM SHIPPING

WHAT DO YOU HAVE TO DO?

TO OBTAIN WARRANTY SERVICE, CONTACT US TO DETERMINE THE PROBLEM AND THE
MOST APPROPRIATE SOLUTION FOR YOU. IF DEFECTS ARE CONSIDERED PRODUCT MUST BE
SHIPPED BY CUSTOMER TO THE MANUFACTURER, IF DEFECTS ARE COVERED UNDER
WARRANTY PRODUCT WILL BE REPAIRED AND SHIPPED BACK TO CUSTOMER.

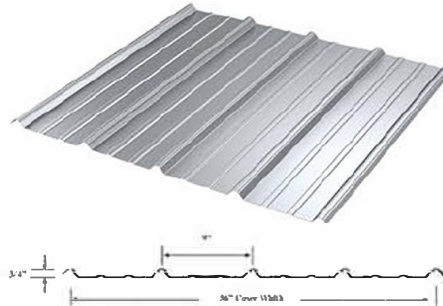
MAX RIB ROOFING PANEL

Applications

Residential, Commercial, Roof, Wall

Description

Max-Rib is a low profile (3/4") panel that is equally well suited for residential roofing and post frame applications.



SPECIFICATIONS

Minimum Slope	1:12 w/ sealant - 3:12 w/o sealant
Decking Requirements	Open - Solid
Minimum / Maximum Lengths	9' to 50' *
Coating (Color)	Galvalume 30 Yr. SMP
Gauge	26 ga
Texas Department of Insurance	RC157
Impact Rating	UL2218 Class 4
Fire Rating	UL263
Uplift Information	UL 580 Class 90



HYDRAULIC 180° GATE CLOSER AND HINGE IN ONE

Item No. MAMMOTH180

Elegant and powerful self-closing hinge for 180° gate situations. Mammoth is perfectly suited for gates up to 150 kg and 1500 mm wide. It is equipped with a double bearing for exceptional functionality. The Active Thermal System guarantees a constant closing speed, unaffected by weather conditions. The Dino hinge is included.

Specifications

- Self-closing hinge with patented hydraulic damping
- Aesthetic design
- Powder coated aluminium housing
- Closing speed unaffected by temperature changes
- Easy to open: Max. 16 Nm
- Vandal-proof
- For left and right opening gates
- Easy mounting with Quick-Fix
- 2-dimensionally adjustable (2 x 20 mm)



Color

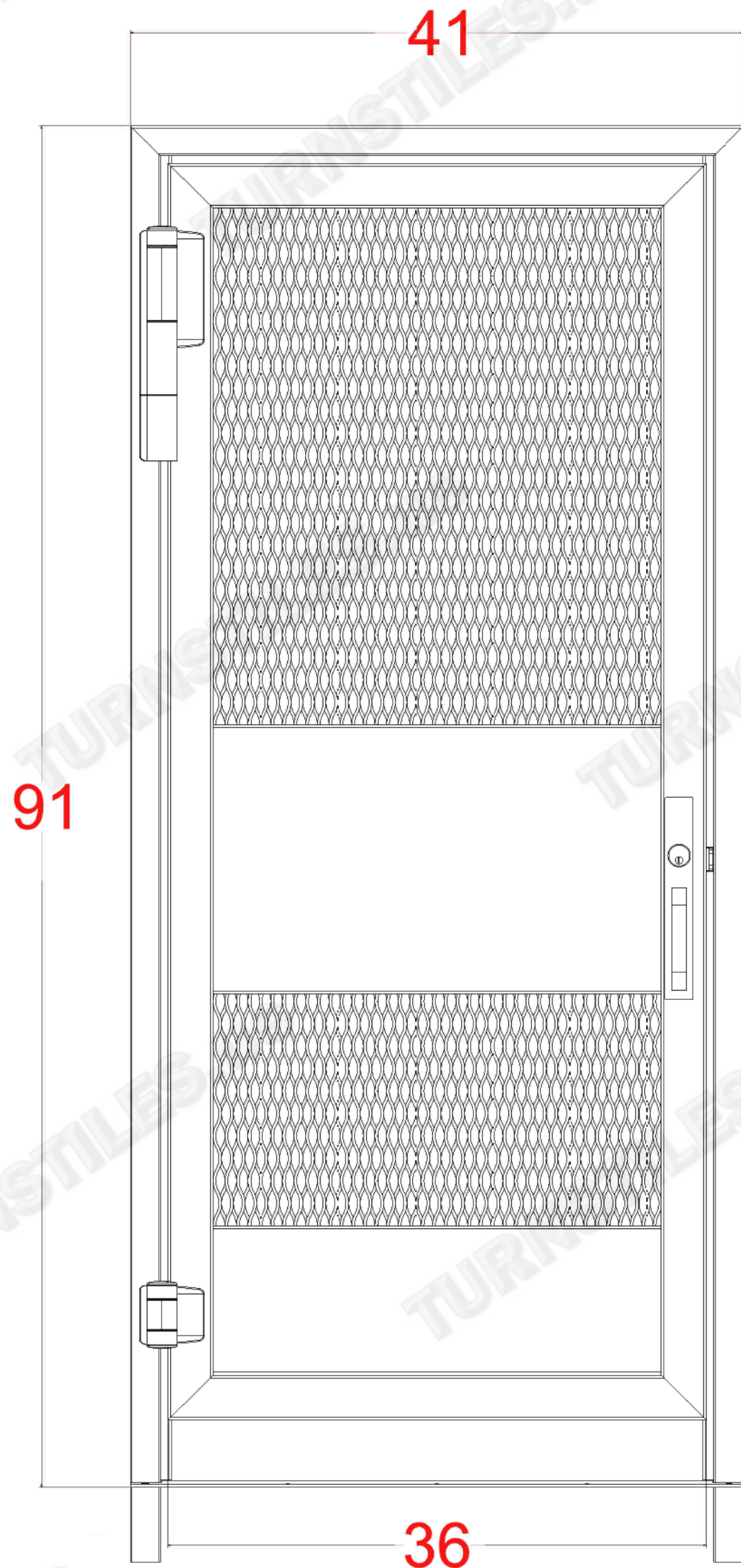


SILVER

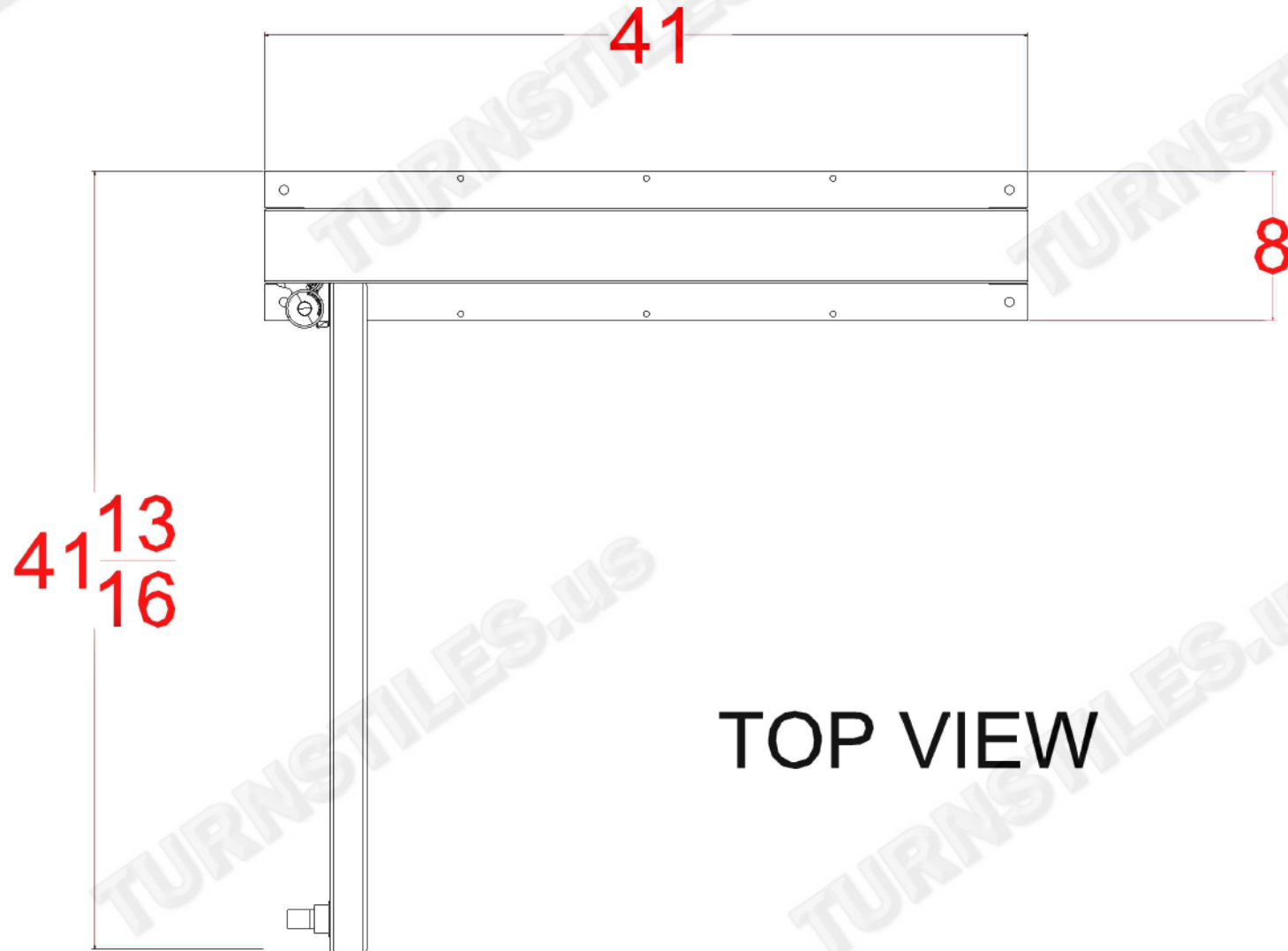
Features



* DIMENSIONS MAY VARY IN ACTUAL INSTALLATION - FABRICATION CHANGES RESERVED - SIMILAR EQUIPMENT MAY BE SUBSTITUTED *



FRONT VIEW



TOP VIEW

POST LAYOUT

FIRST DRAWN	BY
01-20-21	JJM JR
REVISED	BY

COPYRIGHT © TURNSTILES.US
 Copyright © Turnstiles.us All rights reserved. Reproduction or translation of this work without the express written permission of TURNSTILES.US is unlawful and is an infringement of intellectual property belonging to TURNSTILES.US.
 All drawings and/or designs are restricted for use exclusively with a purchase, installation, and/or support from Turnstiles.us. Any other use of these materials is a violation of copyright law. Request for additional information should be addressed to the Legal Department, Turnstiles.us.

TURNSTILES.US
 www.TURNSTILES.us
 Call 303 670 1099 * Text 303 918 9787
 patrick.mcallister@turnstiles.us

Equipment Detail and Dimensions	
AG36-ADA Gate Detail and Dimensions	
DWG	AG36-ADA Gate Equipment Detail and Dimensions
DATE	01-05-23
SHEET - 1 OF 1	

AUTHORIZED SIGNATURE: _____ DATE: ___ / ___ / ___



Door Hardware

V40 Rim Exit Device

The V40 Series **rim exit device** is secure and durable **panic hardware** at an economical price. It is designed for use on all types of single and double doors with mullions. The patented mounting plate and strike locator system ensures the easiest and most accurate installation of panic hardware available.



V40
(628 Finish)

ANSI 156.3 - 2008
Grade 1
Type 1

Standard V40 Rim Device accommodates wide stile doors, 4" or greater stile, and flush doors. For Narrow Stile doors, 2" to 2 1/2" stiles, specify V40xNS model which provides a 2" longer device and a lower profile strike.

Benefits

- Priced to be the best value for durable and attractive loss prevention panic hardware
- Patented mounting plate and strike locator replaces paper templates
- Minimal door prep saves time and money
- Fast and easy installation saves time and money
- Fits almost any door in any décor
- Outside trims are easily changed or rekeyed without removing device from door
- Angled end cap deflects damage away from device

Features

- Covers a 161 door prep
- Stainless steel, 3/4" deadlocking Pullman-type latch bolt
- Non-handed
- Field sizeable
- 1/8 turn hex key dogging
- Heavy-duty ribbed aluminum rail extrusion
- High impact ABS and anodized surfaces
- Withstands over 1400 pounds of static pull force for greater security
- Modular design accepts a variety of outside trims and functions
- Standard and narrow stile pull trims

Mechanical

- HD - Hex Dogging (Std.)
- 36 - Fits 36" Door Width (Std.)
- 628 Base Rail Extrusion (Std.)

Outdoor Electric Strike



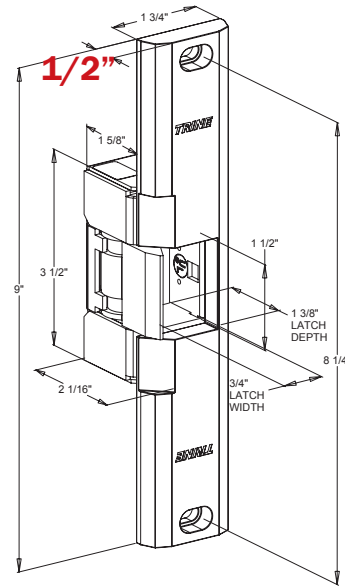
EN850
GREAT FOR OUTDOOR GATES

For new or replacement installations in wood or metal single door jambs. Use with surface mounted rim exit devices with up to 1" throw. **1/2" thick face plate.**

(Not UL 10C Listed)

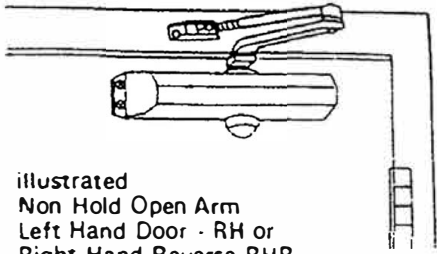
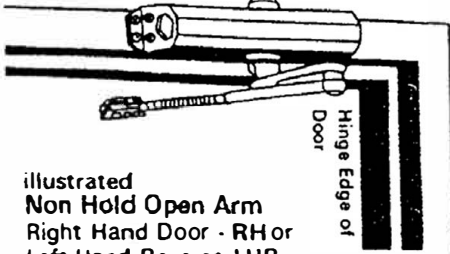
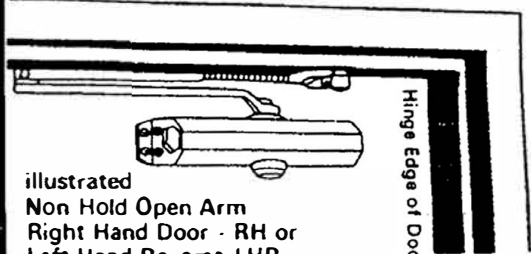
Works with Rim Panic Exit Devices.

Finish: 850-32D
(Satin Stainless Steel – BHMA630)



Door Closer Application & Adjustment

CRL PR80 SERIES

<p>Regular Arm Installation Closer installs on PULL/HINGE side of door.</p>  <p>illustrated Non Hold Open Arm Left Hand Door - RH or Right Hand Reverse-RHR See Page 2</p>	<p>Top Jamb Installation Closer installs on frame on PUSH/STOP side of door.</p>  <p>illustrated Non Hold Open Arm Right Hand Door - RH or Left Hand Reverse-LHR See Page 3</p>	<p>Parallel Arm Installation Closer installs on PUSH/STOP side of door.</p>  <p>illustrated Non Hold Open Arm Right Hand Door - RH or Left Hand Reverse-LHR See Page 4</p>
---	---	--

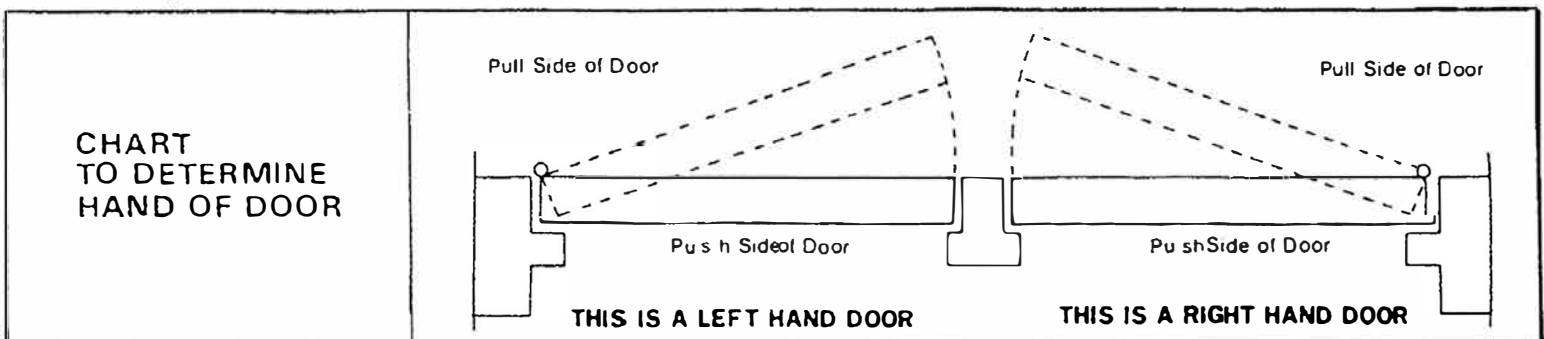
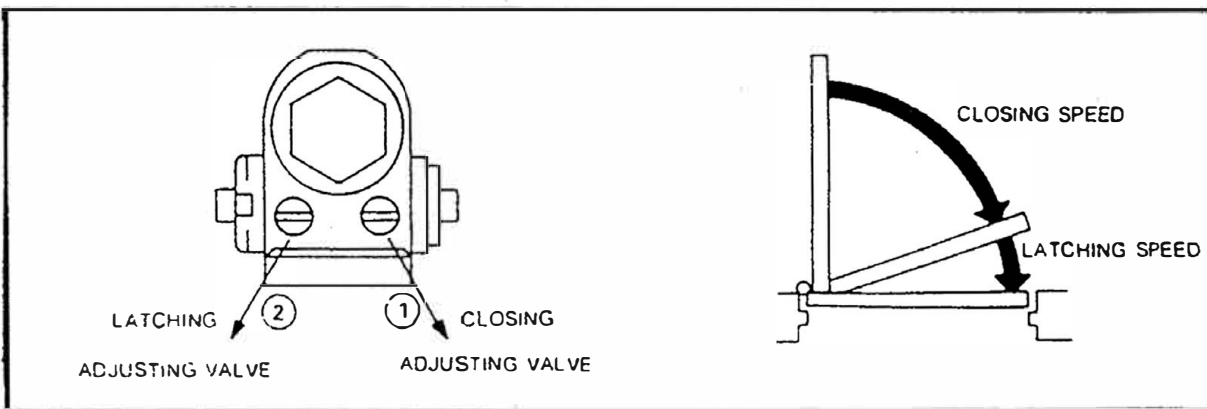
CLOSER ADJUSTMENT

CLOSING CYCLE

NOTE : Closing arcs ("CLOSE" and "LATCH") are controlled by two(2) separate speed adjusting valves adjust the CLOSING speed first, then adjust the LATCHING speed.

1. "CLOSING" speed adjustment is accomplished by full rotations of the speed adjusting valve.
 - Turn the speed adjusting valve **CLOCKWISE** for a **SLOWER CLOSE** arc closing speed.
 - Turn the speed adjusting valve **COUNTER-CLOCKWISE** for a **FASTER CLOSE** arc closing speed.
2. "LATCH" speed adjustment is accomplished by full rotations of the speed adjusting valve.
 - Turn the speed adjusting screw **CLOCKWISE** for a **SLOWER Latch** arc closing speed.
 - Turn the speed adjusting screw **COUNTER-CLOCKWISE** for a **FASTER Latch** arc closing speed.

CAUTION!! Do not turn speed adjusting valve more than two(2) full turns counter-clockwise from its factory set position, as two speed adjusting valves could become dislodged from the door closer body, resulting in the loss of internal fluid and failure of the device.

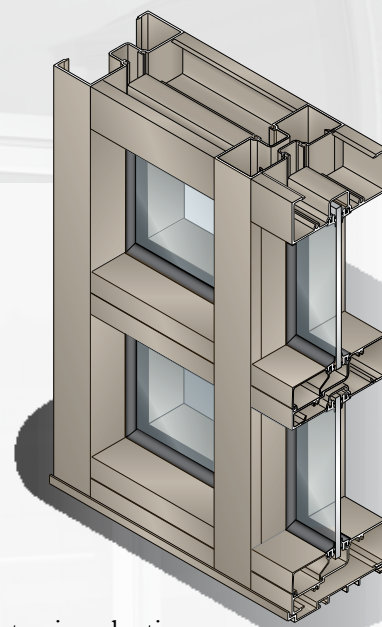


STOREFRONT SYSTEMS

SERIES 400 CENTER GLAZE

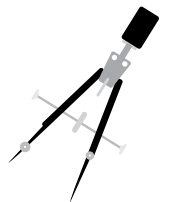
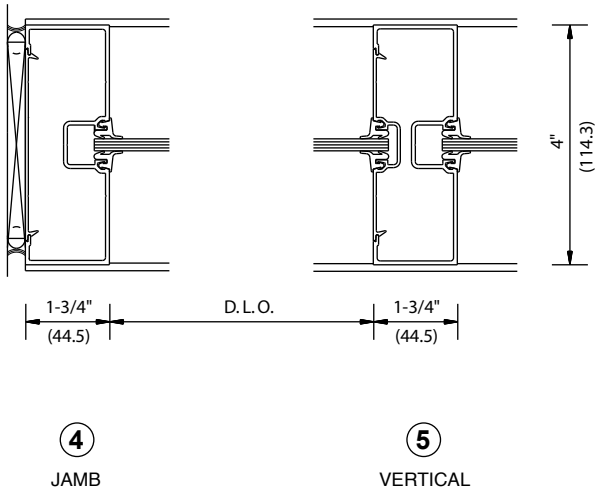
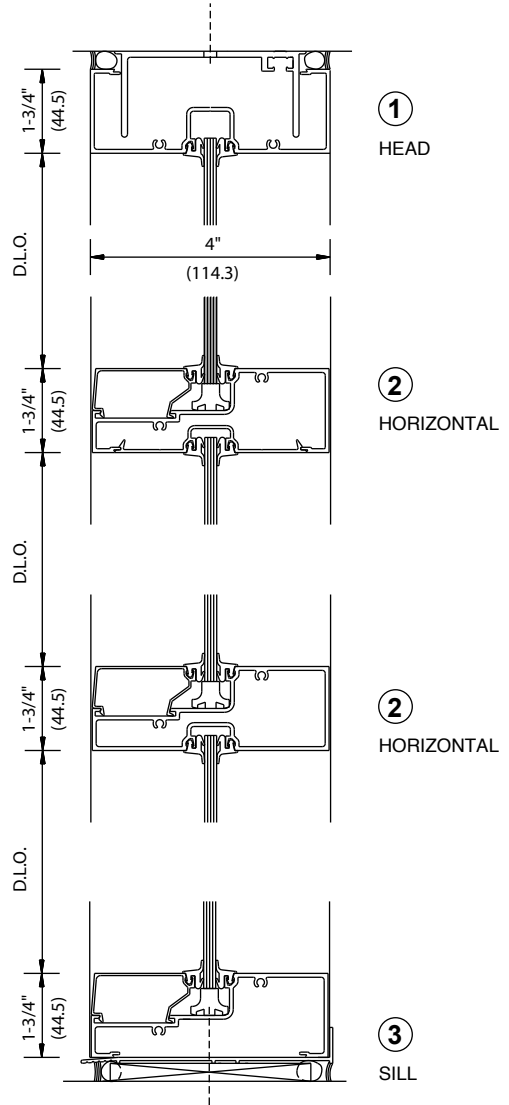
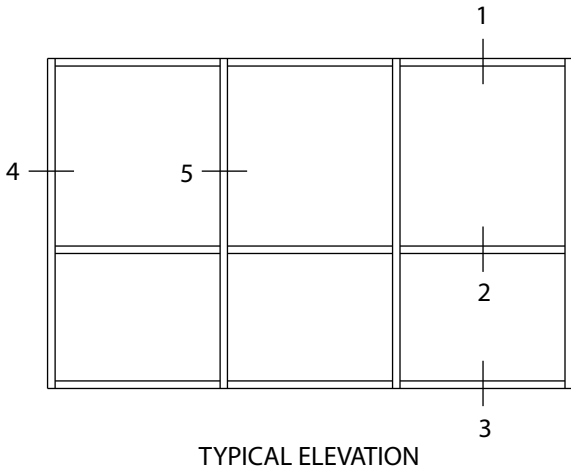


- Series 400 - 1-3/4" x 4" (44.5 x 101.6 mm)
- 1/4" Glazing Infills
- Injection Molded Water Deflectors
- Screw Spline Assembly
- Shear Block Assembly
- Stacking Installation Option
- Full Range of Accessory Components
- Available in Anodized or Painted Finishes
- Interior or Exterior Glazed



Fabrication and installation labor costs have always been a decisive factor in selecting framing systems for storefront projects. We offer cost efficient versatile Center Glazed Systems with clean lines and superb performance. All series may be interior or exterior glazed. A top load E.P.D.M. gasket is used to position and weatherseal the glass in the aluminum pocket. Center Glazed Systems are compatible with most Storefront Entrance Doors.

**SERIES 400 STOREFRONTS
TYPICAL DETAILS**



NOT TO SCALE

CRL JACKSON 1295 RIM PANIC EXIT DEVICE



INSTALLATION INSTRUCTIONS


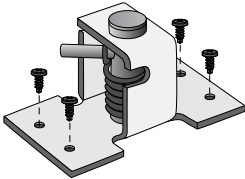

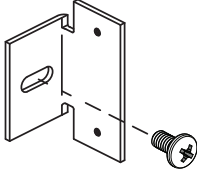
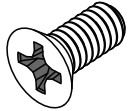
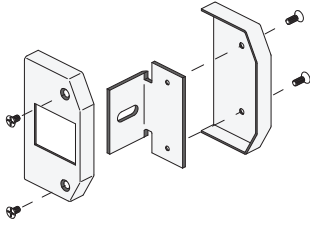
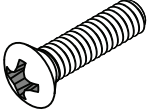
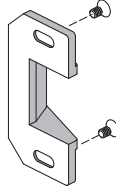
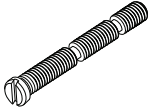
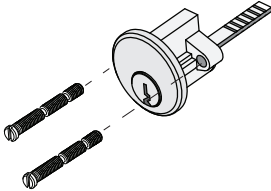
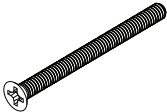
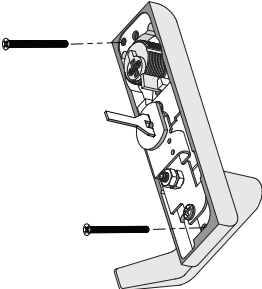
ORDER OF ASSEMBLY AND INSTALLATION

Tools Required	02
Parts Identification	03 - 04
Door Preparation	05 - 08
Remove Door	05
1295 Rim Panic Exit Device Installation	06
1295 Rim Panic Exit Device Installation with Optional Rim Lock Cylinder	07
1295 Rim Panic Exit Device Installation with Optional Exterior Trim and Rim Cylinder	08
Door Hardware Installation	09 - 13
Installation of Optional Rim Cylinder	09
Installation of External Trim (Optional)	10
Installation of 1295 Rim Panic Exit Device	11
Installation of End Caps and Cover Plates	12
Frame Preparation	13
Dogging Pin	14

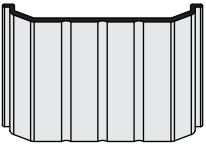
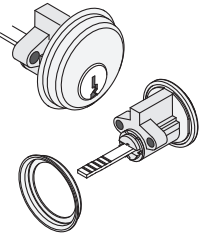
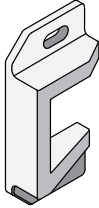
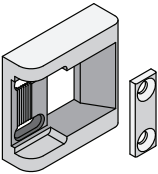
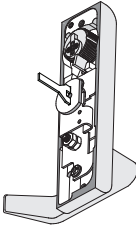
Tools Required

Drill bits: 5/8", 11/64", 13/64", 1-13/32"	Framing square/straight edge
Tap: 1/4" x 20	1/2" Masking tape
Tape measure	Center punch
Saw horses	Flat File
Drill	Round File
Phillips #2 screwdriver	Jigsaw with metal cutting blade
Standard screwdriver	

PARTS IDENTIFICATION

FASTENERS PROVIDED					
CALL OUT	QTY.	FASTENER	FASTENER DESCRIPTION	PART	USED WITH PART NUMBER
(A)	4		3/16" Pan Head Screw		302670 Dogging Assembly
(B)	1		1/4"-20 x 1/2" Pan Head SMS		Base End Plate (Included in 302654 Base Cover Plate Pkg.)
(C)	4		8-32 x 1/4" FHMS		302654 Base Cover Plate Pkg.
(D)	2		10-24 x 5/8" Oval Head Screw		302436 "C" Type Surface Mounted Strike
(E)	2		1-7/8" (47.6 mm)		DL911 Rim Key Cylinder
(F)	2		10-32 x 2-1/8" FHMS		9500LV02 Flat Handle Lever Trim 9500LV01 Round Handle Lever Trim

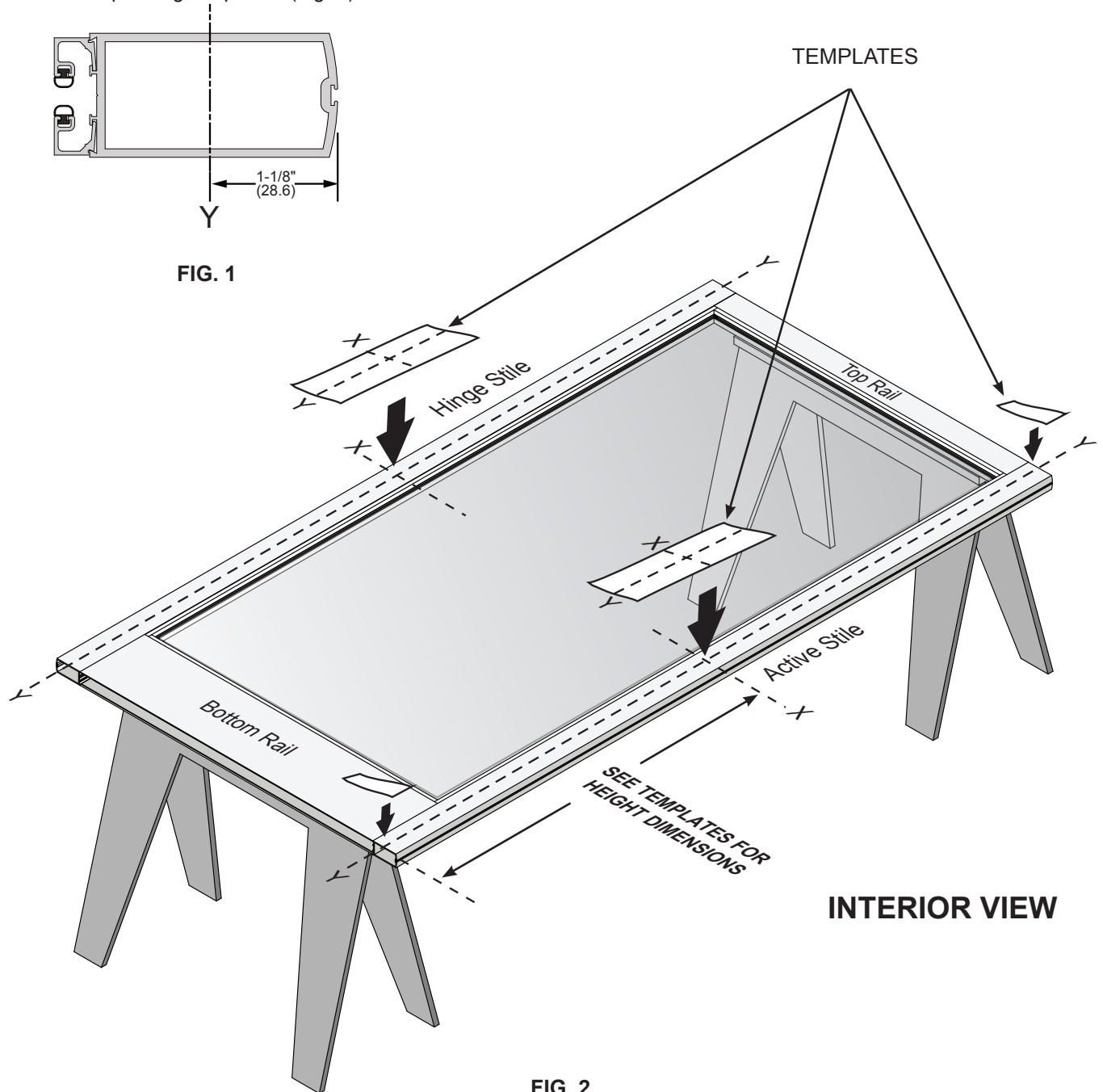
PARTS IDENTIFICATION

PARTS LIST				
CALL OUT	QTY.	PART	PART NO.	DESCRIPTION
Ⓒ	1		302674 and 30267448	Cover Plate
Ⓓ	1		DL911	Optional Rim Key Cylinder
Ⓔ	1		302436	"C" Type Surface Mounted Strike
Ⓕ	1		302501	"S" Type Surface Mounted Strike
Ⓖ	1		9500LV02/ 9500LV01	9500LV02 Flat Handle Lever Trim (Shown) 9500LV01 Round Handle Lever Trim (Similar)

DOOR PREPARATION

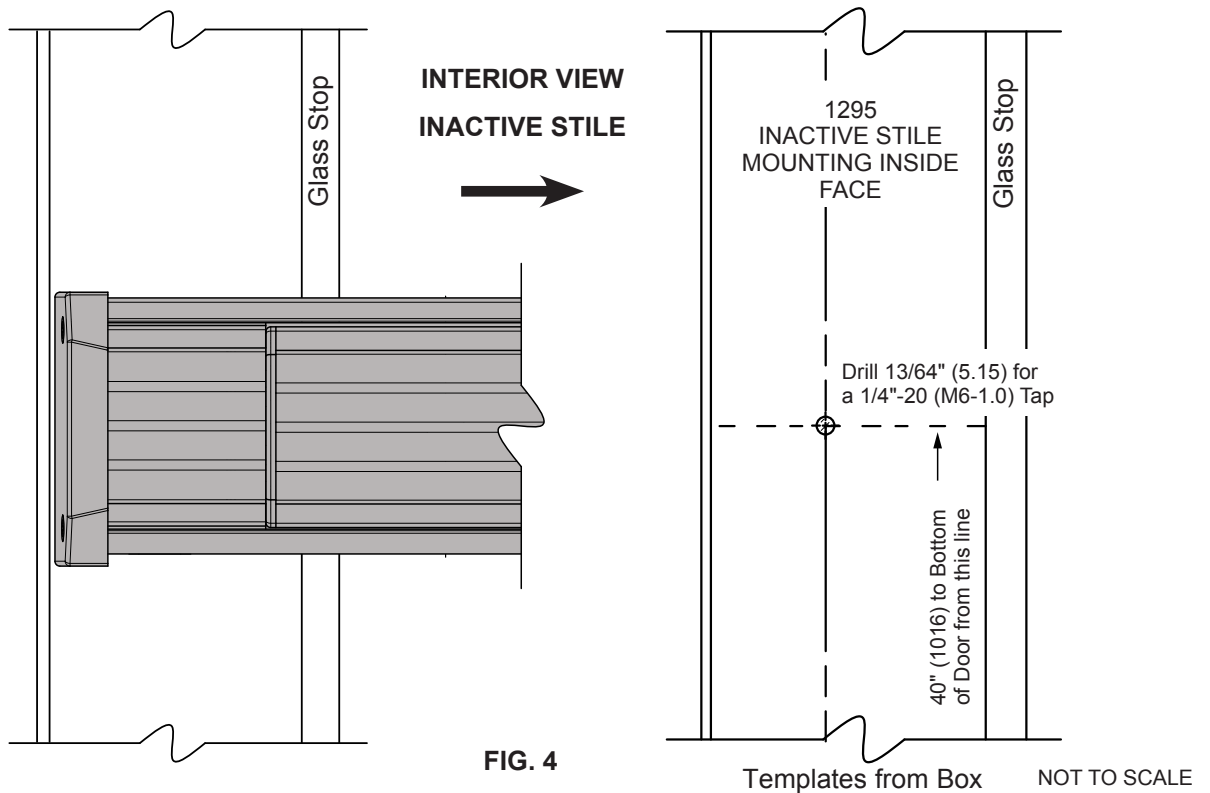
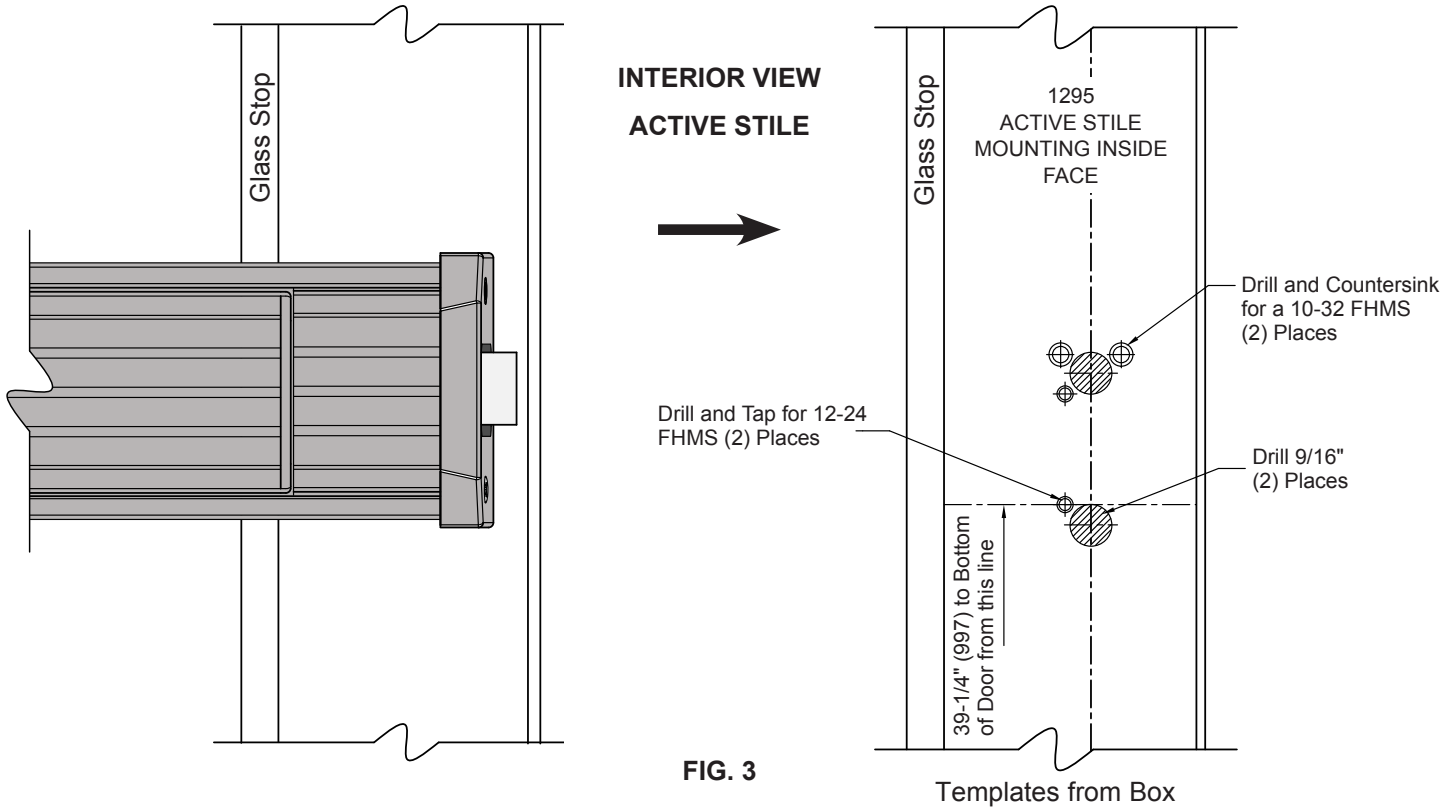
REMOVE DOOR

1. Place door horizontally on stands, interior side up.
2. Mark stile centerlines Y-lines, 1-1/8" (28.6) from outside edge for all stile widths. (Fig. 1)
3. Mark stile X-lines per template instructions. (Fig. 2)
4. Attach corresponding templates. (Fig. 2)



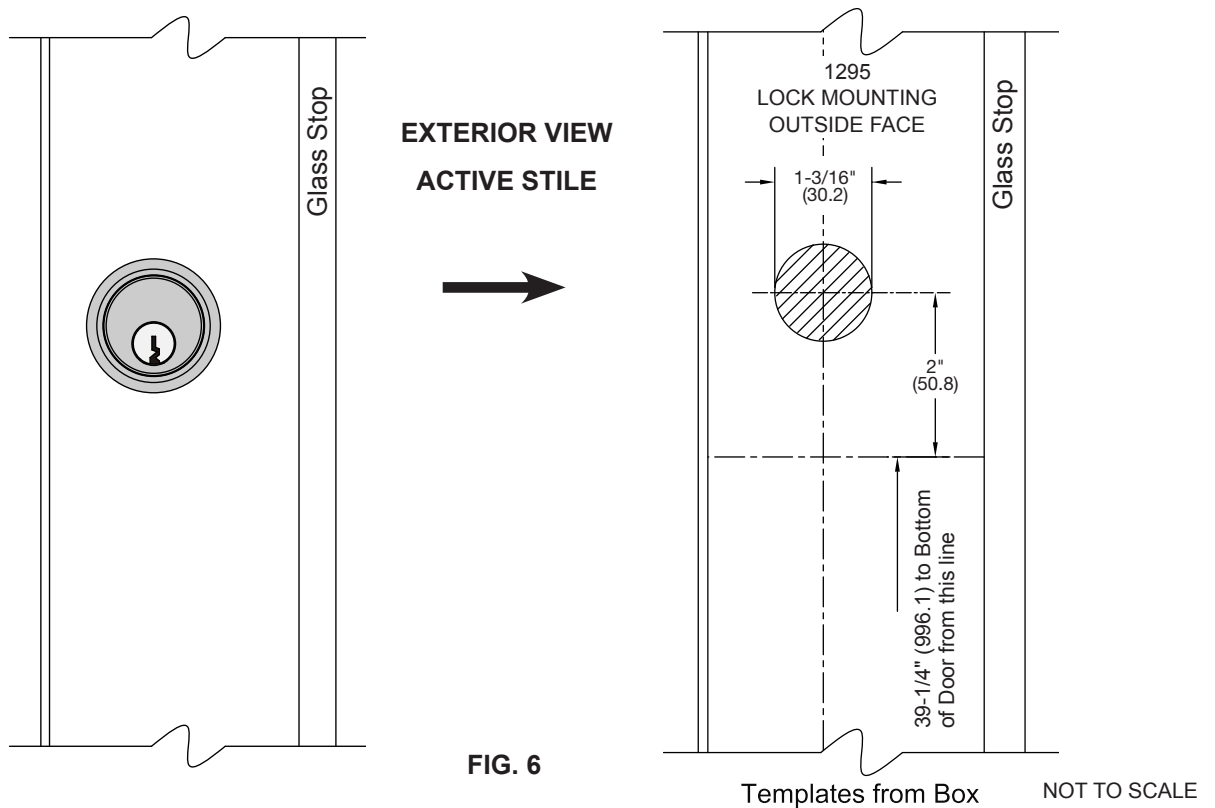
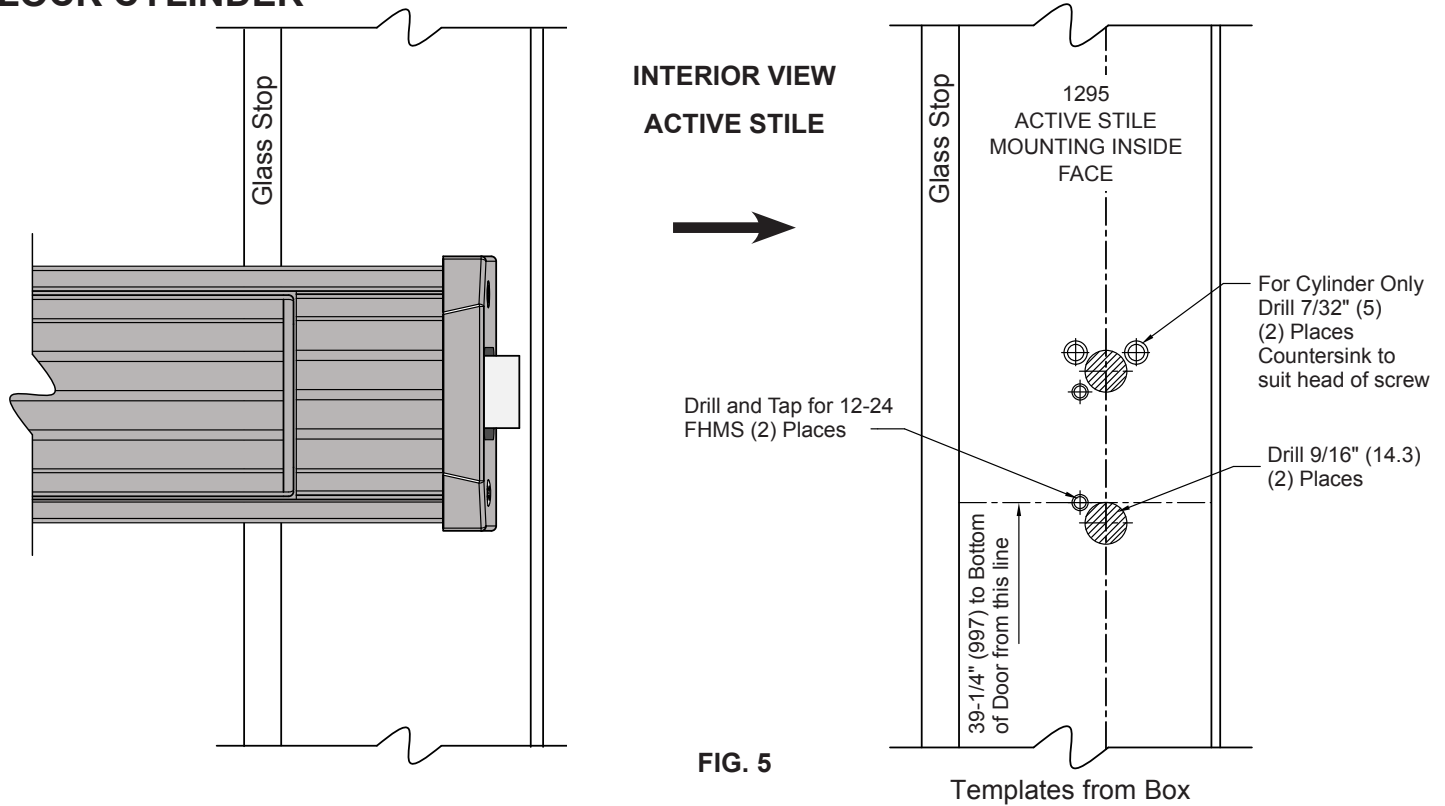
NOT TO SCALE

DOOR PREPARATION – LAYOUT SELECTION
1295 RIM PANIC EXIT DEVICE INSTALLATION



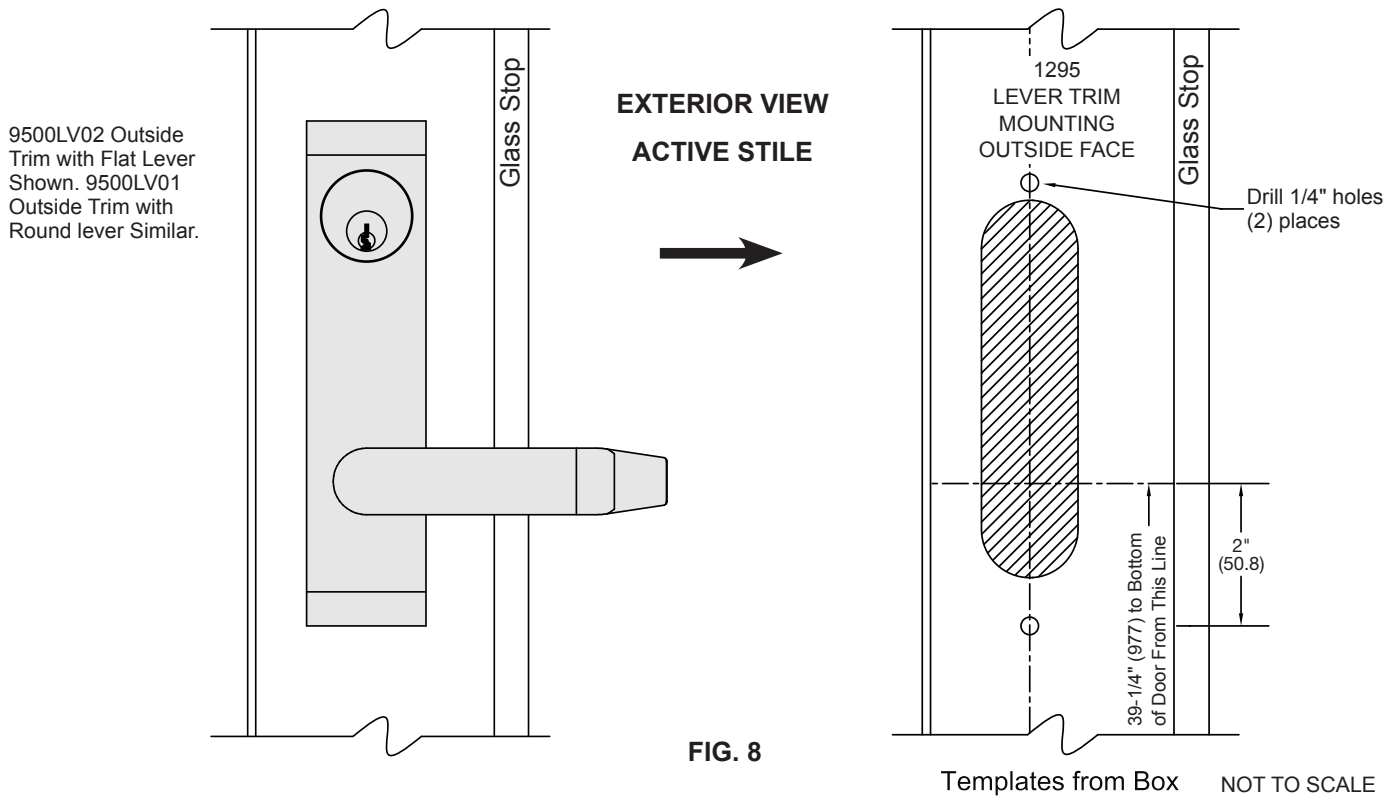
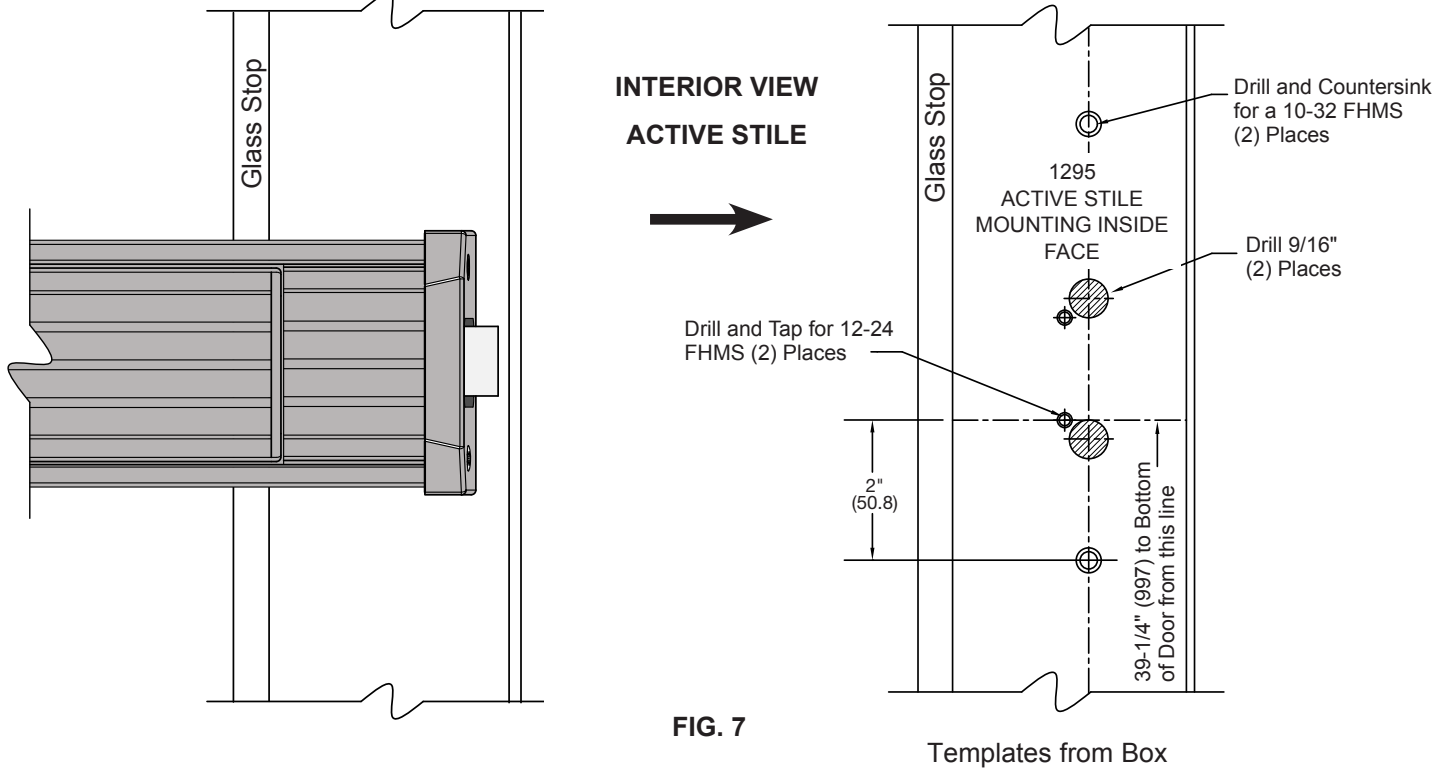
DOOR PREPARATION – LAYOUT SELECTION

1295 RIM PANIC EXIT DEVICE INSTALLATION WITH RIM LOCK CYLINDER



DOOR PREPARATION – LAYOUT SELECTION

1295 RIM PANIC EXIT DEVICE INSTALLATION WITH EXTERIOR TRIM AND RIM CYLINDER



DOOR HARDWARE INSTALLATION

INSTALLATION OF RIM CYLINDER

NOTE: Optional Rim Cylinder must be installed before attaching exit device.

1. Attach the Rim Cylinder on door stile with (2) 1-7/8" (47.6 mm) Breakaway Screws provided. Fig. 9

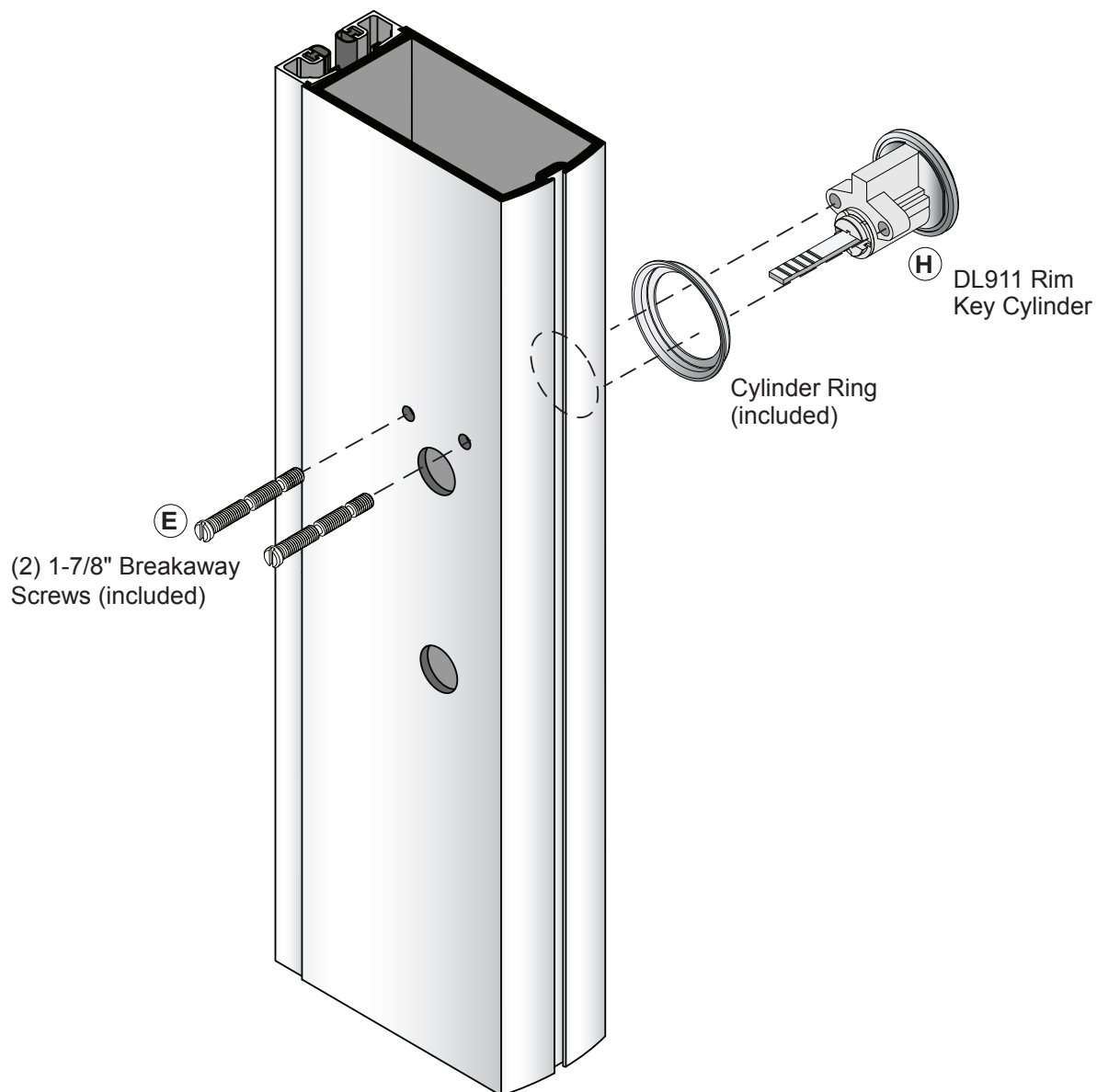


FIG. 9

DOOR HARDWARE INSTALLATION (CONTINUED)

INSTALLATION OF EXTERNAL TRIM

NOTE: Exterior trim must be installed before attaching exit device.

1. Attach the exterior trim with (F) (2) #10 x 2-1/8" Flat head screws provided shown in Fig. 10.

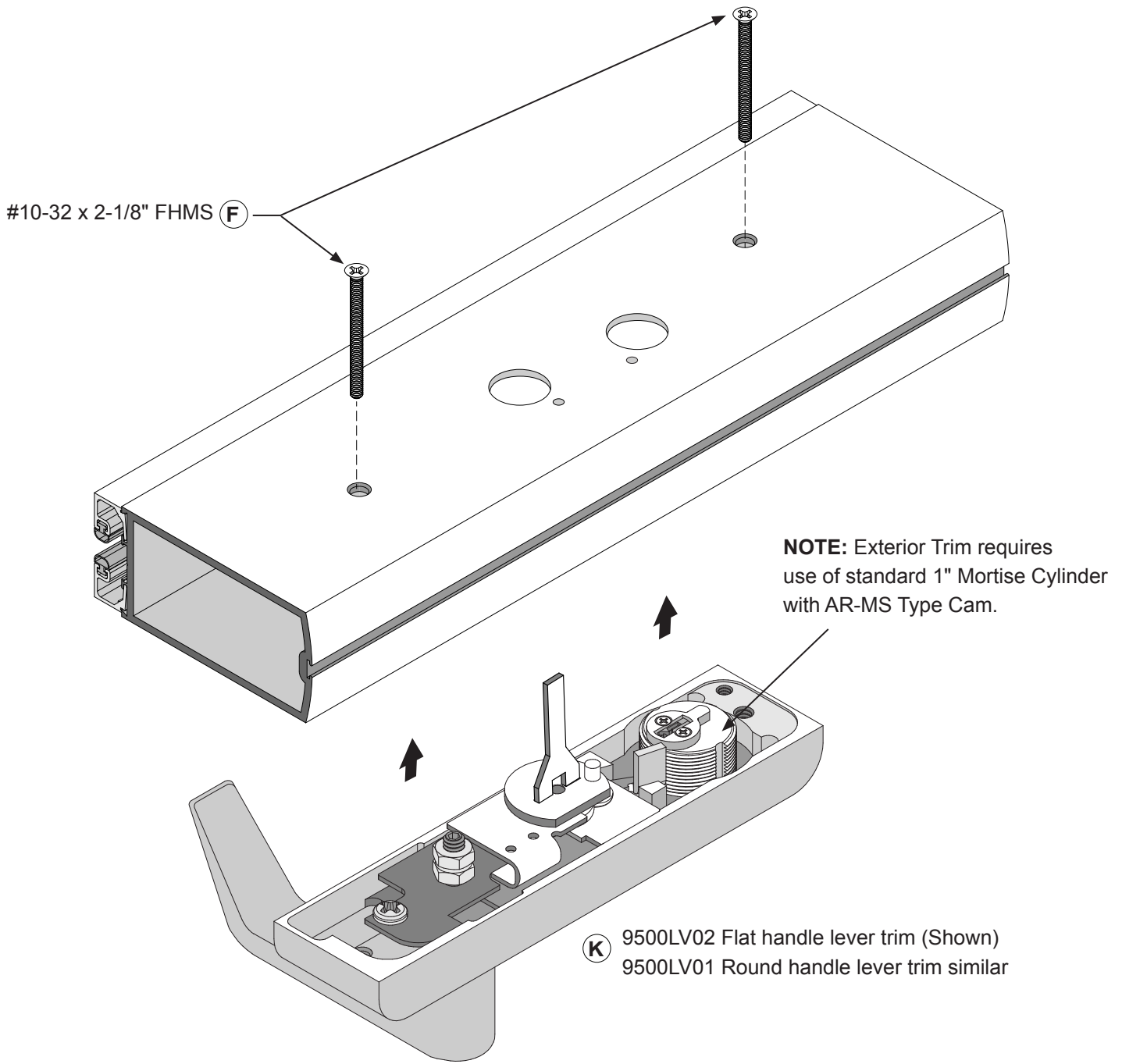


FIG. 10

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED) INSTALLATION OF 1295 RIM PANIC EXIT DEVICE

1. Attach exit panic device to door with **(C)** (2) 12-24 x 3/4" FHMS on active stile and **(B)** (1) 1/4"-20 x 1/2" PHSMS at end cap bracket on inactive stile as shown in Fig. 11.

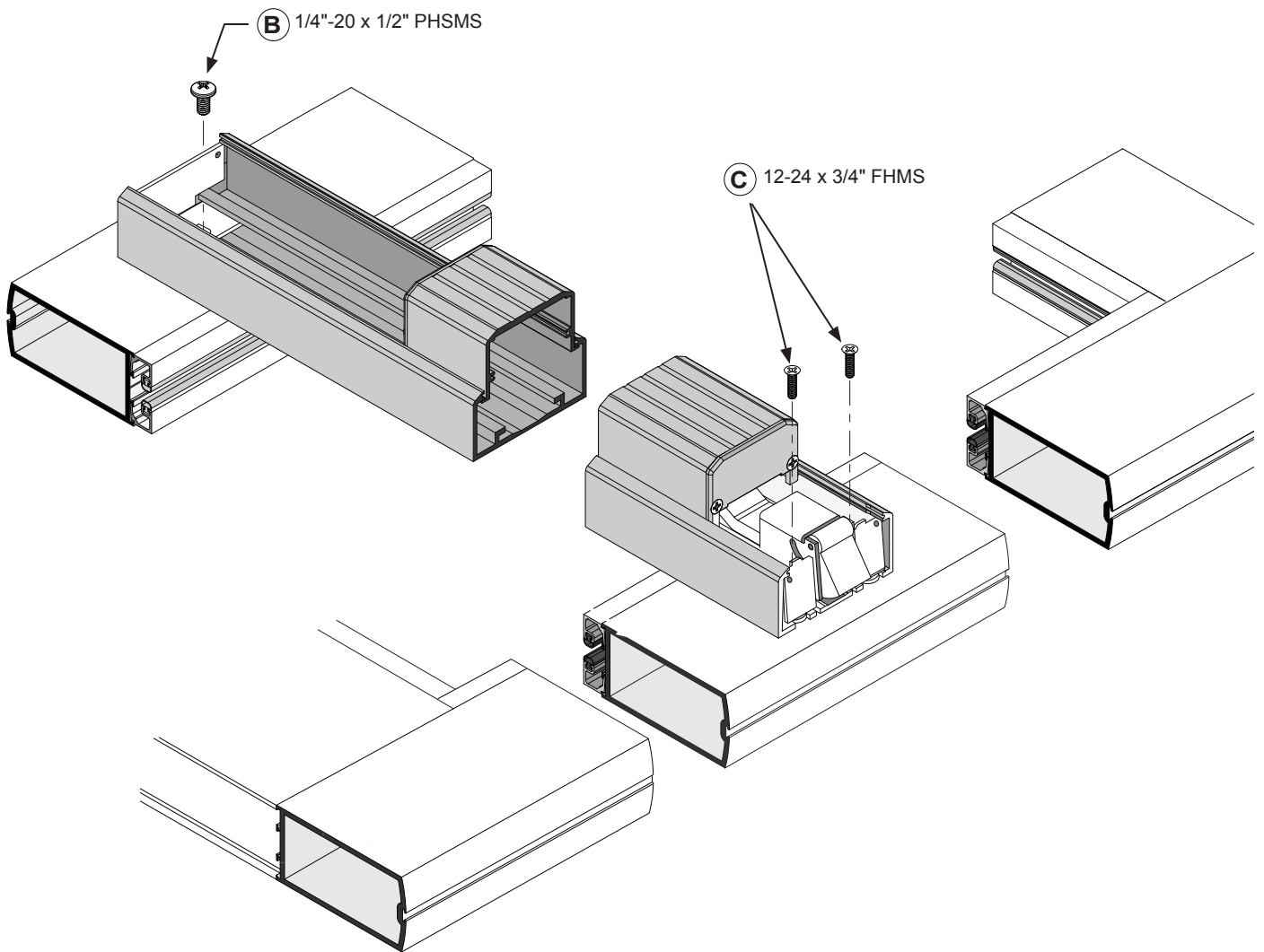


FIG. 11

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED) INSTALLATION OF END CAPS AND COVER PLATES

1. Slide the (2) base cover plates **G** 302674 and 30267448 in place.
2. Attach both end caps to the previously attached end cap brackets with **C** (4) 8-32 x 1/4" FHMS
Refer to (Fig.12).

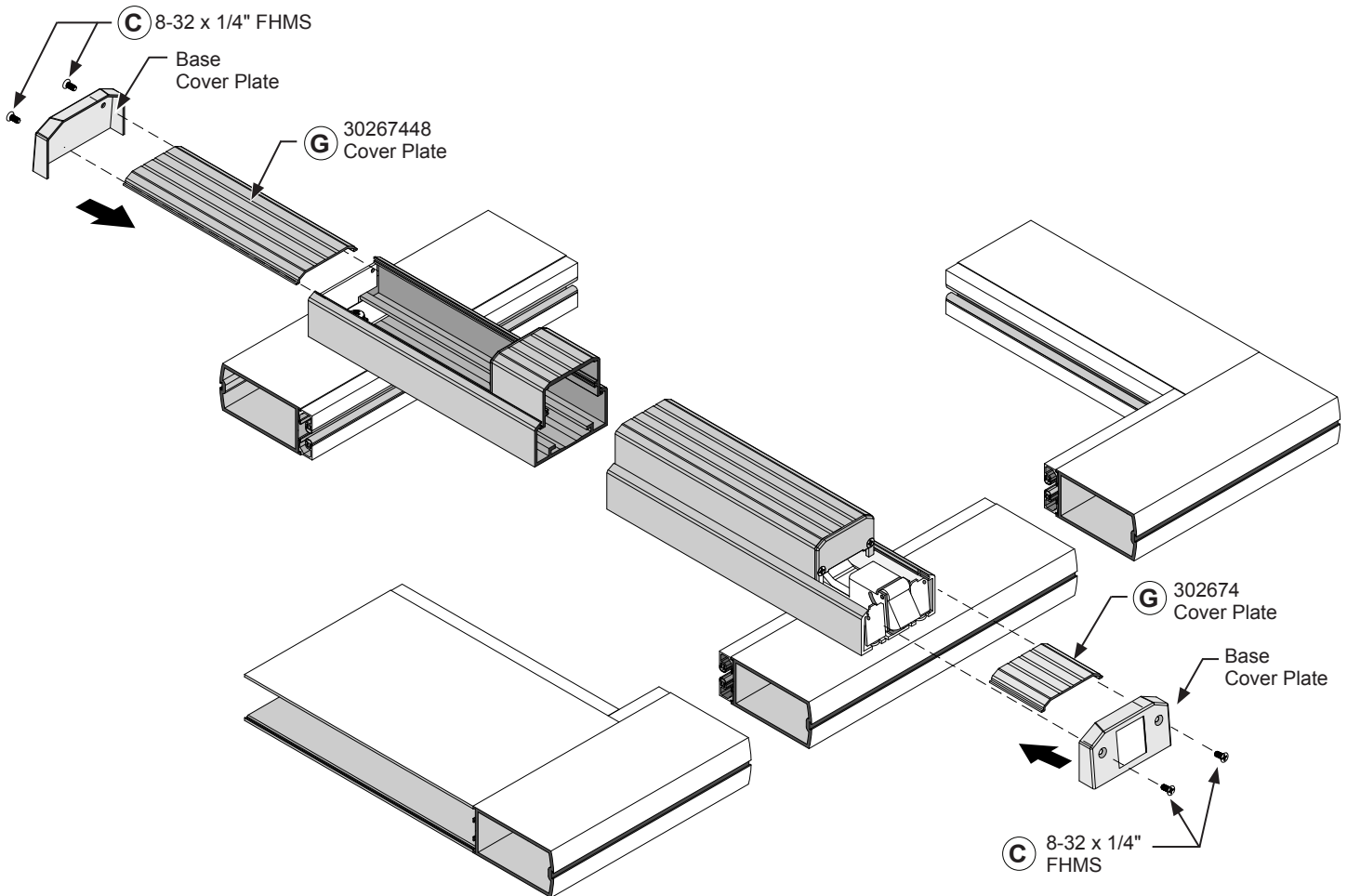


FIG. 12

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED)

FRAME PREPARATION

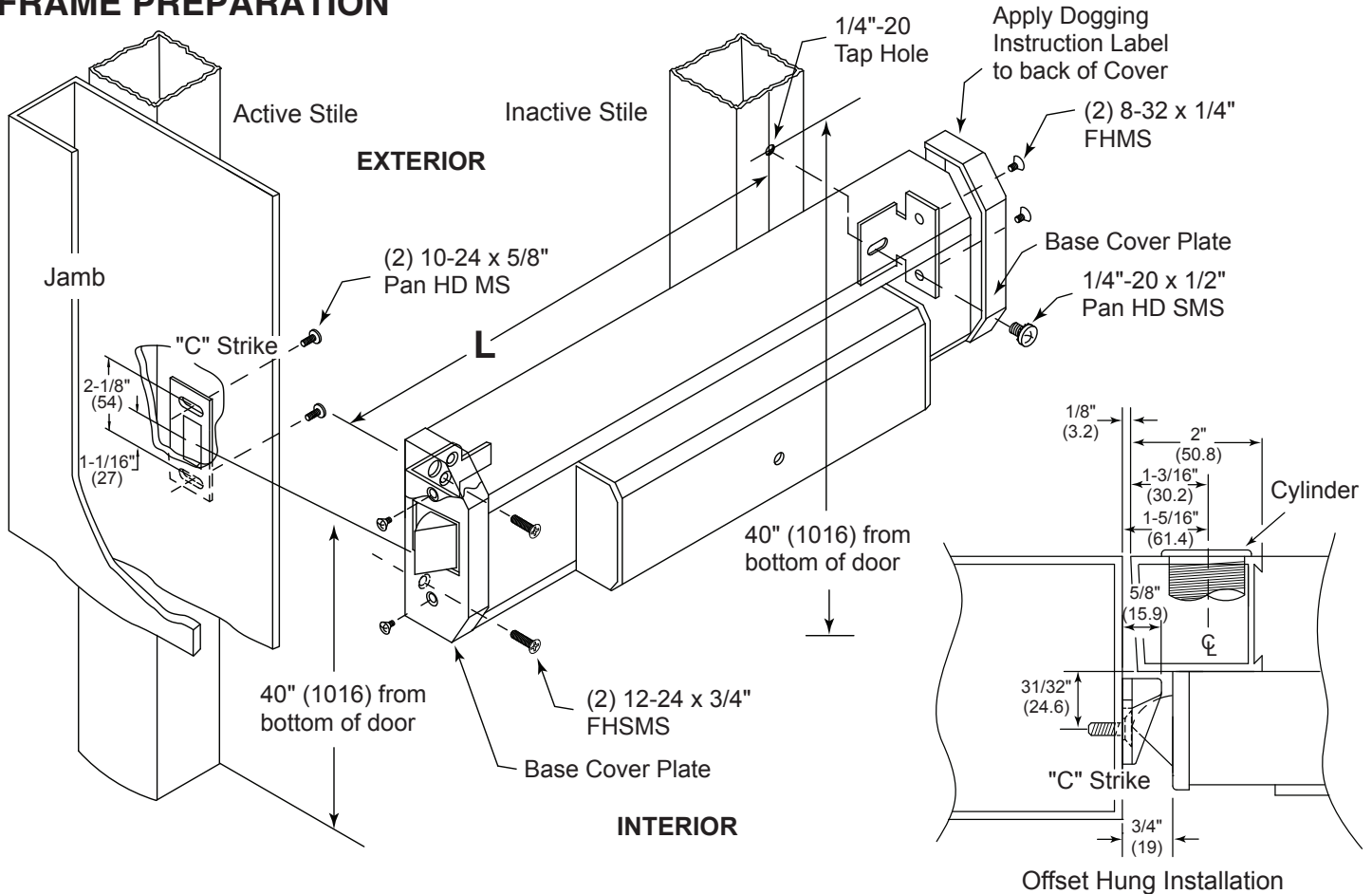


FIG. 13

Mounting Instructions

1. Prepare Lock Stile per Template, drill Cylinder mounting holes if required.
2. Locate Centerline of Cylinder on exterior of Door and drill if required.
3. Trim Tail Piece to fit into Panic Drive Bushing Assembly.
4. Mount Cylinder and secure with mounting screws. (Supplied by lock mfg.) If trim is required prepare per Template.
5. Locate mounting hole on Inactive Stile. Drill and tap 1/4"-20 Thds. 40" (1016) from the bottom of the Door.

Panic Attachment

1. Remove front and rear Base Cover Plates by removing (4) 8-32 x 1/4" Flat HD Screws. Secure active end of panic by installing (2) 12-24 x 3/4" Flat HD MS. Secure inactive end with single 1/4"-20 x 1/2" Pan HD SMS through Base Cover Plate Bracket. Re-install Base Cover Plates on each end of Panic Base.
2. To install "C" Strike, locate 10-24 tap holes on Active Stile (2 places).
3. Mount and secure "C" Strike.
4. Check operation of all parts including Cylinder (if applicable) to assure proper operation.

NOT TO SCALE

DOGGING INSTRUCTIONS

TO DOG Insert Hex Dogging Key (Cat. No. 302796). Turn Key clockwise until it stops. Depress and hold the Push Bar then release the Key. Push Bar will remain depressed. Remove Key. **(Fig. 14)**

TO UNDOG Insert Hex Dogging Key and turn clockwise until it stops. While depressing Push Bar turn and remove Key. Push Bar will become operable again. **(Fig.15)**

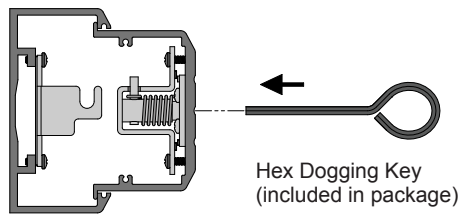


FIG. 14

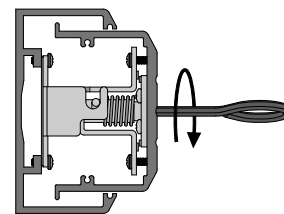


FIG. 15

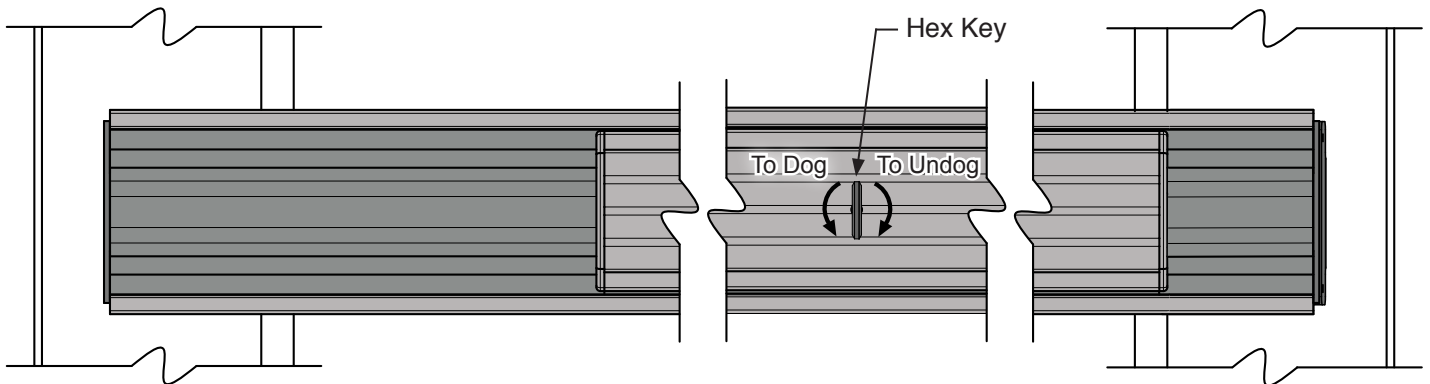
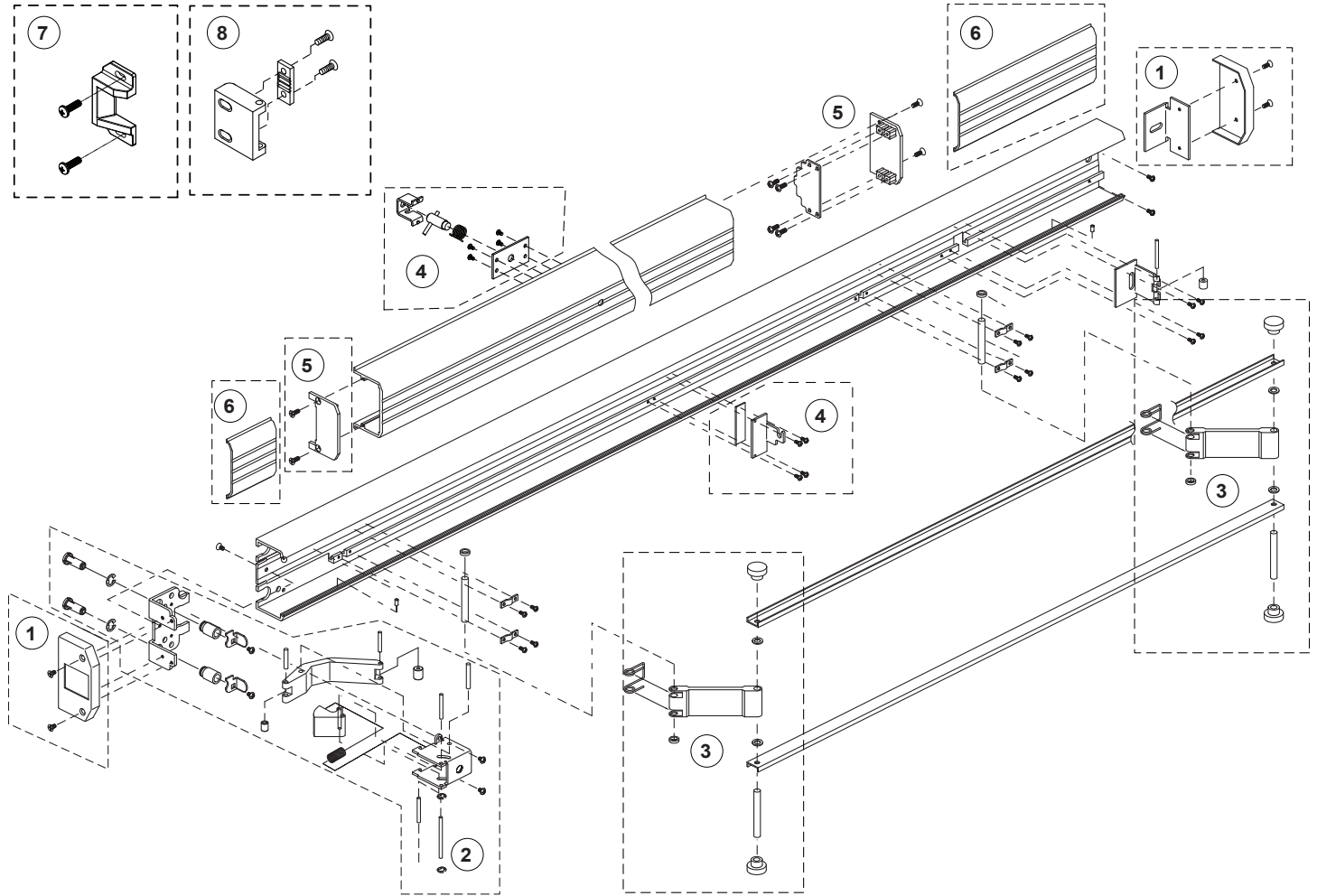


FIG. 16

NOT TO SCALE

PACKAGED PARTS AVAILABLE



Assembly No.	Part No.	Description
1	302654	Base End Cap Package
2	302679	Latch Assembly Package
3	302664	Control Arm Hardware Package
4	302670	Dogging Assembly
5	302650	Push Pad End Cap Package
6	302674	Cover Plate Package - Ribbed - 3/0 Panic
6	30267448	Cover Plate Package - Ribbed - 4/0 Panic
6	302674S	Cover Plate Package - Smooth - 3/0 Panic
7	302436	"C" Type - Surface Mounted Strike
8	302501	"S" Type - Surface Mounted Strike
Not Shown	302796	Dogging Hex Key (2 Pkg.)

DOWNBLAST DIRECT DRIVE CENTRIFUGAL ROOF EXHAUSTER

MODEL SDBD

APPLICATION

Model SDBD direct drive units are used to exhaust air from all types of commercial and institutional buildings such as hospitals and health care facilities, schools, recreational buildings, machinery and equipment rooms, offices, retail stores and similar applications.

The non-overloading wheel with its higher static pressure capability makes this unit suitable for either ducted or non-ducted applications. It's roof mounting permits location near the area to be ventilated, allowing short duct runs and more efficient operation.

The spun aluminum exterior provides an attractive appearance and is compatible with belt driven Model SDB and companion gravity units to make up a complete ventilation system. Direct drive units use smaller diameter wheels, resulting in low sound levels and quiet operation. They have no belts or fan bearings to maintain or adjust and consequently require very little maintenance.

CONSTRUCTION

Housing

- Curb cap has prepunched mounting holes for ease of installation.
- Fan plate isolates motor compartment from contaminated exhaust air.
- Spun aluminum hood and skirt for weather protection and attractive appearance.
- Heavy-gauge motor support for rigidity and strength
- Neoprene isolators for reduction of vibration and sound.
- Quick access to motor compartment for ease of maintenance.
- Conduit passage for easy electrical connection from below roof.
- Aluminum birdscreen and disconnect are included on standard models.

Centrifugal Wheel

- Non overloading for safe operation in ducted systems.
- Backward inclined wheels constructed of noncorrosive aluminum.
- Statically and dynamically balanced for smooth operation.

Speed Controllable Motors

- Standard motors are single speed, speed controllable and drip-proof.
- All motors are rated for continuous duty.
- Disconnect is standard with single speed drip-proof motors.
- Motors ship mounted as standard.

DIMENSIONAL DATA

MODEL SDBD	A	B	C	D	ROOF OPENING	Average Ship Wt. Lbs.
8	18 1/8	20 1/2	22 3/8	4 1/8	13 1/2	55



AMCA SEAL



S&P USA Ventilation Systems, LLC., Div. of Soler & Palau Ventilation Group, certifies that the Models SDBD shown herein are licensed to bear the AMCA Seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirement of the AMCA Certified Ratings Program.



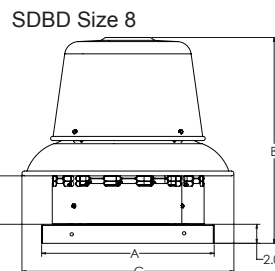
SPEED CONTROL

Solid State Speed Control:

Control is matched to the motor and blower wheel to allow continuous reduction in performance allowing adjustments of airflow for system balancing. CFM is reduced in direct proportion to motor speed reduction. Speed control is only available for single phase. Exhauster performance can be controlled from the ventilated area.

2727.1 MAX 1/3 HP-5 AMP 120V

2828.1 MAX 1/2 HP-10 AMP 120V



ALL DIMENSIONS IN INCHES, WEIGHTS IN POUNDS. OD IS OUTSIDE DIMENSION OF SQUARE CURB AND DAMPER. DUE TO CONTINUING RESEARCH, S&P RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE.

CENTRIFUGAL ROOF & WALL EXHAUSTERS

MODEL SDBD					Downblast Direct Drive Centrifugal Roof Exhauster										Ventilator with Open Drip-proof Motor		
Model SDBD	Motor Hp	Max. BHp	RPM	Sones @ 1/8 SP	CFM at Static Pressure										Stock No.	Stock No.	
					0	1/8	1/4	3/8	1/2	5/8	3/4	7/8	1	1-1/4			
8	1/25	.03	1150	6.5	592	514	421	206								SDBD08HM1AS ●	-

Speed (RPM) shown is nominal. Performance is based on actual speed of test.
 Performance certified is for installation type A-free inlet, free outlet.
 Performance ratings include the effects of birdscreen in the airstream.

The sound ratings shown are the loudness values in the fan sones @ 5' (1.5m) in an hemispherical free field calculated per AMCA Standard 301.
 Installation Type A: free inlet hemispherical sone levels.

Low Energy Automatic Door Operator for Single Doors

AO19-1

The AO19 Automatic Operator for single doors is an easy to install, heavy duty product for high use and high abuse low energy applications. The AO19 Series meets requirements for ANSI/BHMA A156.19 (American National Standard for Power Assist and Low Energy Power Operated Doors) and provides standard features that meet the requirements of the American Disabilities Act.



← AO19-1 RH Push

Shown with 21 Series
Electric Latch
Retraction (ER)

Benefits

- Economical operator provides safe and easy access in medium to high-traffic and security areas
- Provides ADA compliant access to handicap applications
- Quiet operation
- 115VAC power plug-in mounted in header
- Hanger plate allows quick installation
- Self-contained unit in an extruded case allows easy access for maintenance and adjustments
- Works with existing access control, locking and computer signal devices
- Easy manual use
- Reduced service calls due to heavy-duty construction
- 3-way low-voltage ON/OFF/HOLD switch for ease of service and setup
- Can be installed and adjustments can be made prior to electrician connecting building power

Features

- Available in single, pair (twin) for independent, simultaneous and dual egress openings
- Power close applies a reverse power to aid in latch check position. Must be selected to activate.
- Single voltage source required to operate
- Adjustable delayed activation for sequenced vestibule doors
- Reverse on obstruction stalls a door during closing cycle and re-activates to open if an obstruction is sensed anytime before the latch position. Must be selected to activate.
- Adjustable closing speed
- Push & Go (Use for Handicap) activates when door is manually pushed to open. Must be selected to activate.
- Electric lock relay provides an adjustable delay before door opens to unlock an electric strike, maglock or other types of electric locks - prevents binding

Mechanical

- LH Push - Left Hand Push
- RH Push - Right Hand Push
- LH Pull - Left Hand Pull
- RH Pull - Right Hand Pull
- 39.5" - Fits above most 36" doors

Technical Information

Power Requirements

- 115VAC 60 HZ 3 amps

Motor

- 115VDC rectified
- 1/8 hp
- 60:1 gearbox

- For use on doors 300 lbs or less

Module -

- Activation input terminals
- Form C lock switch terminals
- Safety lock-out built in
- 17 additional features standard on board

Enclosure -

- 7" h x 4 1/2" d
- Approximately 50 lbs
- Aluminum extrusion

- Push reveal depth up to 11" with standard arm. Extended arm available.

- Pull reveal depth 2-1/2"

Finish

- AL - 204-Ri Clear: Arch. Class II anodized coating, AA-M12C22A31 Silver

Listings and Approvals



Certified to ANSI/UL 325
Tested - ANSI 156.19



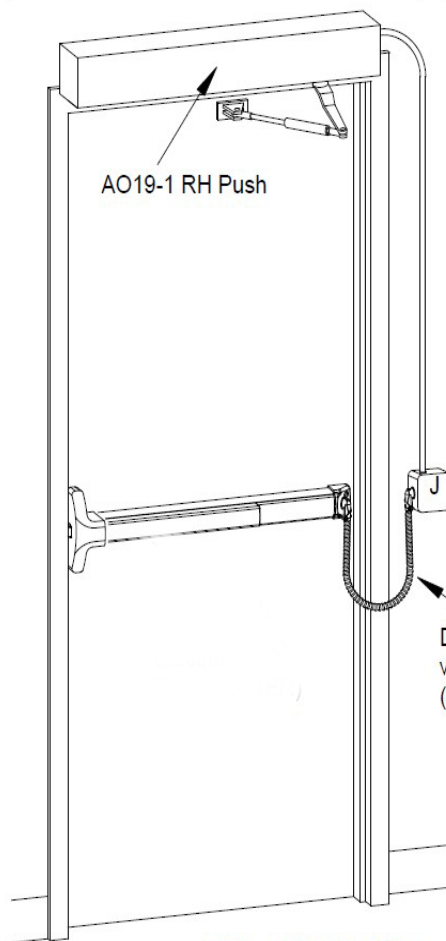
Meets ADA requirements



3-Hour Fire Listed

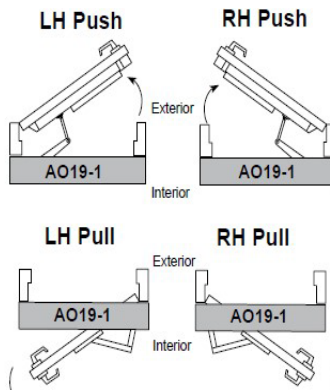
Intertek

Riser Diagram



Typical Application

Handing Diagram



Detex Limited Warranty

3 Year Mechanical / 1 year Electrical
Limited Manufacturer's Warranty