

Rim Exit Device

Series 21 | FL21 (non-handed)

Installation Instructions

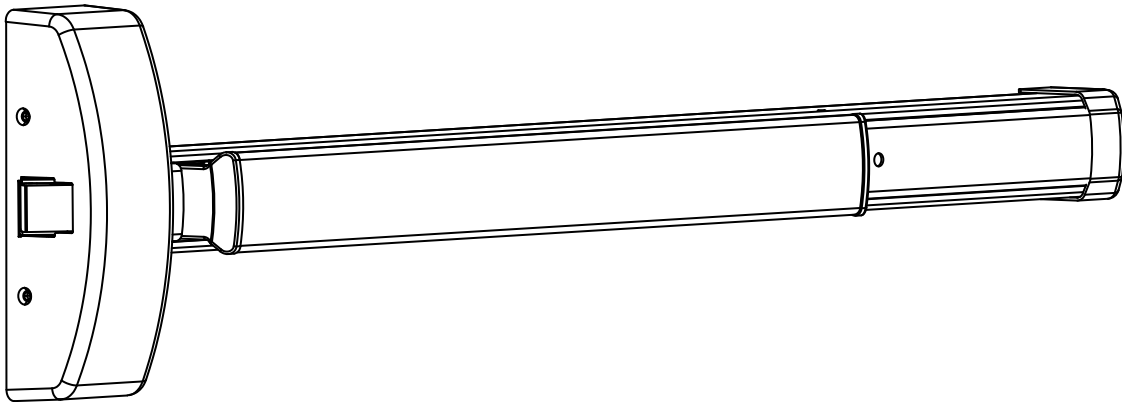


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1 Important safety information

1.1 Safety warnings

1.1.1 Safety instructions: To reduce risk of injury or damage, carefully read and follow safety warnings, cautions and notices provided.

1.1.2 Safety warnings: Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

 **WARNING**

1.1.3 Safety cautions: Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

 **CAUTION**

1.1.4 Notice: Indicates information considered important but not directly hazard-related.

NOTICE

- Protect inside of device from metal shavings.

2 Technical specifications

2.1 Tools needed

Table 1

Phillips head screwdriver	Level	Drill bits: #36, #25, #14, #7, 1/4", 5/16", 3/8", 9/16", 5/8", 3/4"	Hacksaw
Flat head screwdriver	Drill	Hole saw: 1-3/16", 1-3/8", 1-3/4"	Tap: #6-32, #10-24, 1/4-20

2.2 Measurements

2.2.1 All dimensions are given in inches [millimeters].

2.3 Overview and parts list

Fig. 1, Table 2

- A** Lock stile case

- B** Oval head screws
#10-24 x 1" MS or
#10 x 1" SMS (x4)

- C** Mounting bracket

- D** Endcap

- E** Flat head screws
#10-24 x 3/8" MS (x2)

- F** Pan head screws
#10-24 x 1/2" MS or
#10 x 1" SMS (x2)

- G** Lock washers (x2)

- H** Hex dogging key (Dogging
is not permitted series FL21.)

- I** Touchbar assembly

- J** Cover

- K** Flat head screws
#8-32 x 3/8" MS (x4)

- L** Pan head screw
#1/4-20 x 1" MS

- M** Lock washer

- N** Flat head screw

- O** Interlock

LHRB shown

Interlock required:

- FL21 Series device with mullion
- Hurricane code compliance "HC" devices

NOTE: To ensure proper installation, sex bolts or through bolts are required for composite (wood, plastic, and steel- covered) wood core, sheet metal, and hollow metal doors without reinforcement, unless door manufacturer specifies an alternate mounting method. For fire-rated doors with steel reinforcement, use machine screws to mount devices.

Table 2

Strikes and screws	S300 or S301	S458	S988
1/4-20 x 3/4" MS	2	2	0
#14 x 1" SMS	2	2	0
#10-24 x 3/4" MS	1	0	0
#10 x 1" SMS	1	0	2
#10-24 x 1/2" MS	0	0	2
Lock Washer	2	2	2
#6-32 x 1/4" MS	0	0	2
Rub strip	0	0	1

S300 (standard)

S988 (optional)
aluminum frame

S301 (optional)

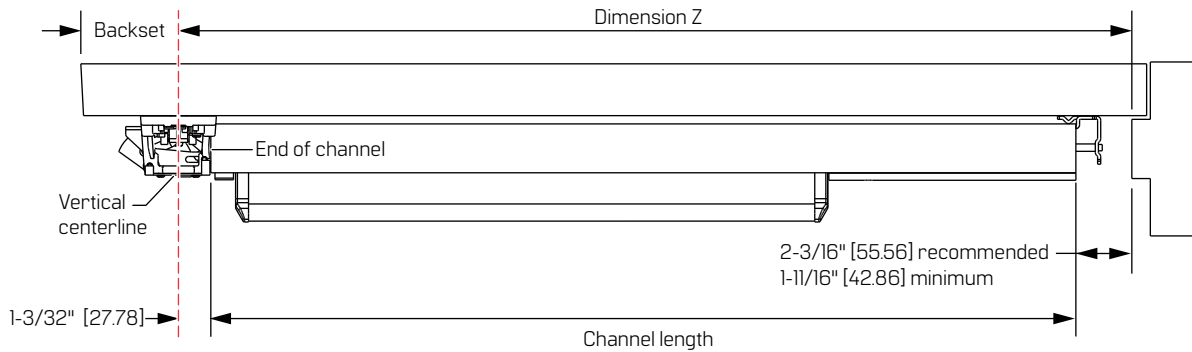
S458 (optional)

3 Device preparation

3.1 Cutting device (if necessary)

Fig. 2, Fig. 3, Table 3

Figure 2 Device schematic



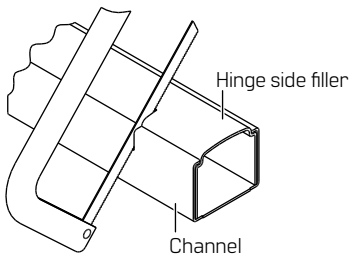
NOTE: If necessary, cut device.

- 3.1.1 Determine proper channel length by subtracting 3-1/4" [82.55] from dimension Z.
- 3.1.2 Mark cut-off point.

NOTE: Ensure hinge side filler is fully inside channel.

- 3.1.3 Cut off channel and hinge side filler and deburr.

Figure 3 Cutting device



NOTICE

Protect inside of device from metal shavings.

NOTICE

If your device is equipped with ALK, CD, DE or DS then please refer to appropriate instruction sheet listed below prior to cutting device.

Table 3

ALK	Alarm kit	T93642
CD	Cylinder dogging	T93616
DE	Delayed egress	T93654
DS	Door position	T93668

4 Installation instructions

4.1 Prepping door

Fig. 4, Fig. 5, Fig. 6, Fig. 7, Table 4

4.1.1 Circle-strike number, dimension "X," and backset as shown in Table 4 below. If specified, circle trim number for various locations, at hole B, on trim template.

4.1.2 Close door and mark horizontal centerline on inside face of door and on lock side door stop at 39-15/16" [1014.41] from finished floor as shown in Fig. 4, or as required for specific installation.

NOTE: If trim is specified, continue horizontal centerline to outside face of door.

4.1.3 Mark vertical centerline on lock side using dimension "X."

NOTE: If trim is specified, mark vertical centerline on outside face of door using backset dimension.
NOTE: Ensure vertical centerlines on both sides of door are the same dimension from edge of door.

4.1.4 Tape lock stile case template and (trim template, if specified) to door, aligning centerlines on template with centerlines on door.

4.1.5 Mark centerpoints and drill required holes as indicated on templates.

4.1.6 Fold strike template and place on door stop or mullion and inside face of door, ensuring horizontal centerline on template aligns with horizontal centerline on door stop and door.

4.1.7 Tape template to door stop or mullion and door face.

4.1.8 Mark centerpoints and drill holes as indicated on template.

Figure 4 Door prep

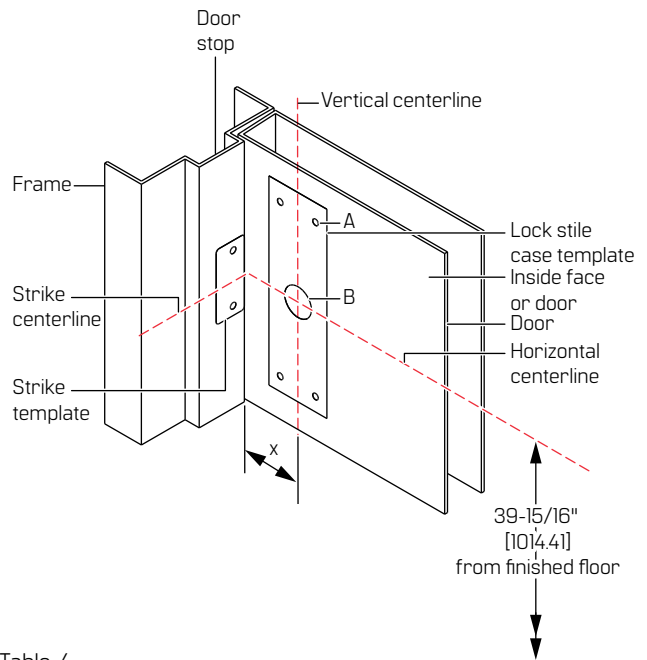
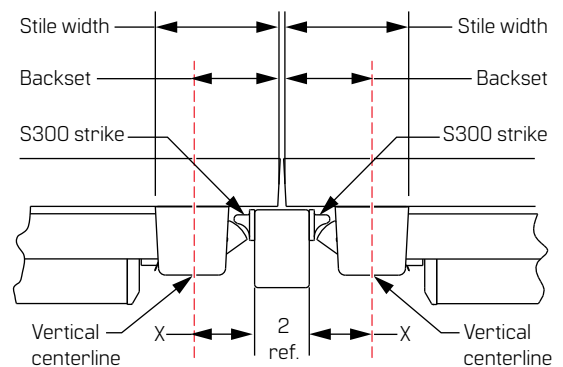
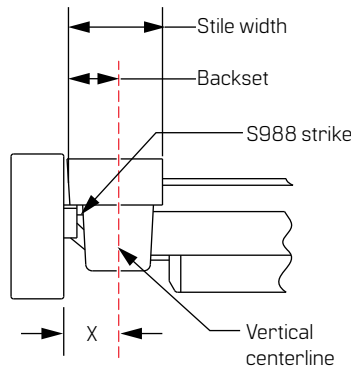
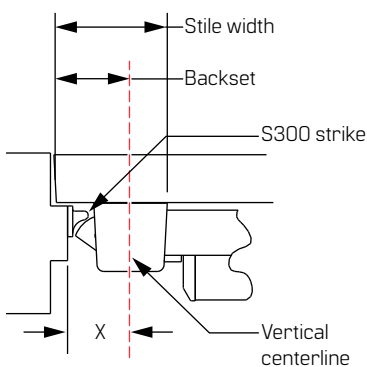


Table 4

Strike no.	Single door			Pair of doors with mullion	
	S300, S301	S458	S988, Aluminum	S300, S301	S458
Dimension X	2-1/4" [57.15]	2-1/16" [52.39]	2-1/16" [52.39]	2-1/4" [57.15]	2-1/16" [52.39]
Backset	2-3/4" [69.85]	2-9/16" [65.09]	1-15/16" [49.21]	3-1/8" [79.38]	2-15/16" [74.61]
Stile width	4-1/4" min. [107.95]	4" min. [101.60]	3-1/2" min. [88.90]	4-5/8" min. [117.48]	4-3/8" min. [111.13]

Figure 5 Single hollow metal door Figure 6 Single aluminum door and frame

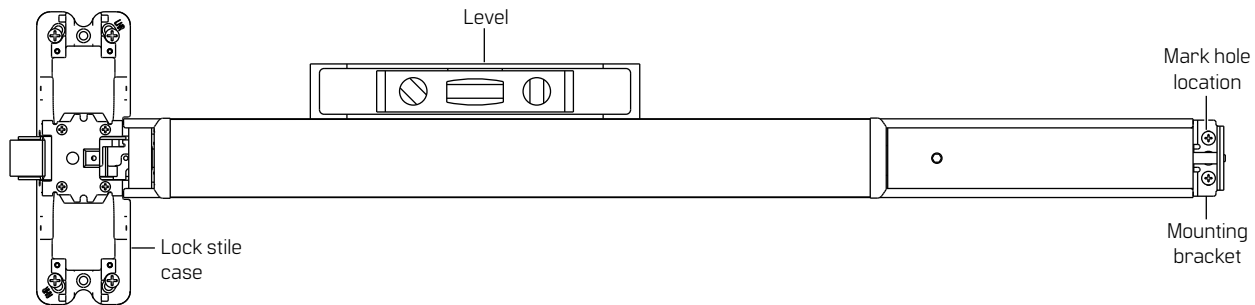
Figure 7 Pair of doors with mullion



4.2 Installing device

Fig. 8, Fig. 9, Fig. 10

Figure 8 Rim exit device series 2 1 | FL 2 1 (non-handed)



NOTE: If trim is specified, see trim installation instructions packaged with trim.

NOTE: If exit device has electrical or other options, see specific option instructions packaged in exit device carton.

4.2.1 Lock stile case mounting:

- **Device with trim:** See trim instructions.
- **Cylinder only:** Install cylinder with cylinder backplate, as shown in Fig. 9. Make sure tailpiece is extending 1/4" [6.35] to 5/16" [7.94] from inside face of door into CAM in lock stile case and mount it to door with four screws.
- **Exit only:** Mount lock stile case to door with four screws.

4.2.2 Insert mounting bracket into touchbar assembly tight against channel.

4.2.3 Level device.

4.2.4 Mark and drill two holes for #10 sheet metal screws or #10-24 machine screws.

4.2.5 Fasten mounting bracket to door and attach endcap with two flat head screws.

4.2.6 Fasten strike to frame and adjust strike so that device latches tightly without binding.

NOTE: Strike shims are provided if excessive gap is apparent between latch and strike lip.

- **For S300 and S301 strikes:** Apply third center screw once adjustment is complete.
- **For S988 strike:** Apply rub strip to aluminum frame as shown on instructions packaged with strike.
- **For FL with mullion and HC devices:** Install interlock by sliding it into slot under lock stile case. Secure with screws and lock washer.

4.2.7 Attach cover to lock stile case.

Figure 9 Cylinder only installation

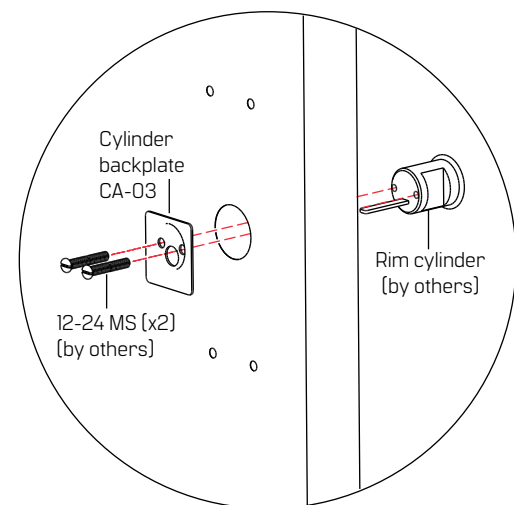
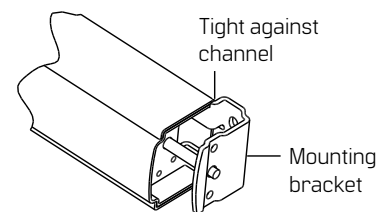


Figure 10 Mounting bracket





Document translations available.

Scan for product details and downloads.

Call 1-800-392-5209 or visit

<https://dhwsupport.dormakaba.com/hc/en-us>

for assistance and warranty information.

⚠ WARNING! This Manufacturer advises that no lock can provide complete security by itself. This lock may be defeated by forcible or technical means, or evaded by entry elsewhere on the property. No lock can substitute for caution, awareness of your environment, and common sense. Builder's hardware is available in multiple performance grades to suit the application. In order to enhance security and reduce risk, you should consult a qualified locksmith or other security professional.