

## DESCRIPTION

The Fail-Safe CFF is designed for use in horizontal or non-laminar air flow clean rooms. The enclosed and gasketed housing and one-piece, outside flanged door protect against infiltration of airborne bacteria. The die formed edges on the door frame and the hole-free design of the housing prevent air exchange between the fixture and plenum, allowing relamping without contamination of the clean areas. UL/cUL listed for wet locations under covered ceilings.

Catalog #		Type
Project		
Comments		Date
Prepared by		

## SPECIFICATION FEATURES

### Application

The CFF is suitable for use in I.E.S. Class 100, 1,000, 10,000 and 100,000 clean room environments. Applications include clean rooms, technical and biomedical labs, food processing/testing centers and pharmaceutical labs.

### Fasteners

Flush mounted, stainless steel machine screws secure through captive cage nuts in housing and are evenly spaced to compress gasketing on all sides.

### Housing

Die-formed, 20 ga. CRS with tightly butted and seam welded, sealed end caps. Contains no holes that would allow air passage. Standard white high reflectance polyester powder coat finish. Stainless steel and aluminum available.

### Finish

High gloss, electrostatically applied, white powder coat finish, average minimum reflectance 92%.

### Hinge

Two braided, stainless steel cables on one side of door provide hinging.

### Door

One piece, 18 ga. steel door with baked white polyester powder coat, fully gasketed, outside door with dieformed edges eliminates seams which could entrap microscopic contaminants. Stainless steel and aluminum available.

### Gasket

White, closed cell, Flexiseal™ gasketing surrounds perimeter of lens to seal lens to door frame and around perimeter of door to seal door to housing. Another layer seals fixture to ceiling system after installation.

### Access

A gasketed access plate on top of the housing with two flattened, 7/8" diameter knockouts allows connection of vapor tight conduit fitting. Optional, above ceiling, top access door for luminaire maintenance is available and ideal for food processing and cleanroom applications.

### Lens

Lens is clear Pattern 12 acrylic with prisms positioned inside fixture and smooth surface on the outside for easy cleaning.

### Lamps

(By others.)

### Lens Retention

Unique, Particlock™ lens retention system utilizes continuous, 18 ga. media clampdowns to sandwich gasketing and integrate lens and door frame for even environmental seal.

### Ballast

Electronic Class P, CBM/ETL ballast.

### Listings

UL/cUL listed for wet location under covered ceiling. IP66 rated for standard die-formed steel, stainless steel and aluminum doors.



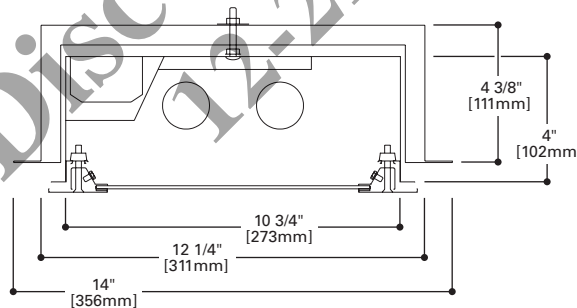
**CFF12**

1x2

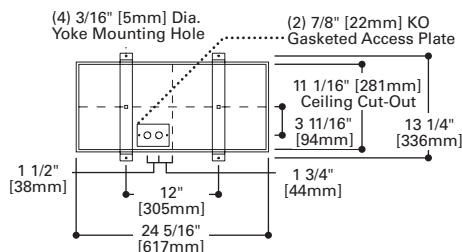
1x4

Cleanroom

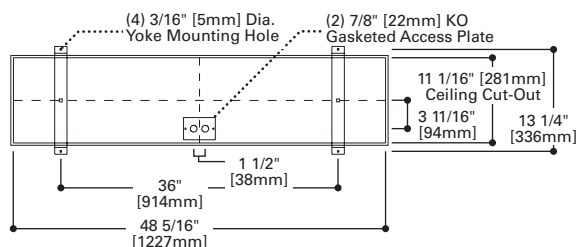
**RECESSED FLANGE  
Overlapping Door**



## MOUNTING DATA

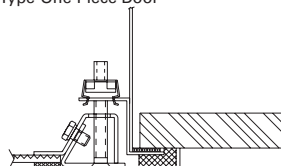


Cut out Dimensions  
1x2 = 11 1/16" x 24 5/16"  
1x4 = 11 1/16" x 48 5/16"



## DOOR FRAME

Flange Type-One-Piece Door



## ORDERING INFORMATION

SAMPLE NUMBER: CFF-12-332-277-IK12-EB81-GLR

Product Family	Width	Lamp Type	Voltage	Lens Type <sup>1</sup>	Ballast	Overlapping Door/Finish Options	Options
<b>CFF</b>	<b>12</b>						
CFF=Fluorescent Flange Type	12=12" (3 lamp max.)		120= 120V 277=277V UNV=120V-277V	IK12=Pattern 12 Prismatic Acrylic, 0.110" thick IP12=Pattern 12 Prismatic Polycarbonate, 0.110" thick KSH25= Linear Ribbed Acrylic, 0.115" thick 93=Prismatic Tempered Glass, 0.156" thick	<b>Electronic Ballast<sup>2</sup></b> EB51= (1) Ballast for use with T5 Lamp EB52=(2) Ballasts for use with T5 Lamp EB81= (1) Ballast for use with T8 Lamp EB82=(2) Ballasts for use with T8 Lamp EBX1=EB1 Ballast for use with Biaxial Lamp EBX2=(2) Ballast for use with Biaxial Lamps	Blank=Steel, powder coat painted white ALP=Aluminum die-formed, powder coat painted white SSN=Stainless Steel brushed finish SSP=Stainless Steel, powder coat painted white	
<b>2' Fixture Length</b> <b>T5 Fluorescent</b> 114=(1) 14W Lamp 214=(2) 14W Lamps 314=(3) 14W Lamps 124=(1) 24W Lamp 224=(2) 24W Lamps  <b>2' Fixture Length</b> <b>T8 Fluorescent</b> 117=(1) 17W Lamp 217=(2) 17W Lamps 317=(3) 17W Lamps	<b>Biaxial Fluorescent</b> 140BX=(1) 40W Lamp 240BX=(2) 40W Lamps  <b>4' Fixture Length</b> <b>T5 Fluorescent</b> 128=(1) 28W Lamp 228=(2) 28W Lamps 328=(3) 28W Lamps 154=(1) 54W Lamp 254=(2) 54W Lamps  <b>T8 Fluorescent</b> 132=(1) 32W Lamp 232=(2) 32W Lamps 332=(3) 32W Lamps					EL4=EM Pack, T8, BX EL5=EM Pack, T5, T5HO GLR=Fuse and Holder RIF=Radio Frequency Interference Filter TAD=Top Access Door <sup>3</sup> AM=Anti-microbial, matte white finish <sup>4</sup>  <b>Housing Options</b> ALH=Die formed Aluminum, powder coat painted white SHN=Stainless Steel, Brushed finish SHP=Stainless Steel, powder coat painted white	
						<b>Accessories (Order Separately)</b>	
							MCF12-2FT=2FT Mounting Frame, not required for installation MCF12-4FT=4FT Mounting Frame, not required for installation

## Notes:

- 1 Refer to Lens Ordering Guide for additional lens choices.
- 2 For specific electronic ballast, specify brand and catalog number.
- 3 Consult your Cooper Lighting Solutions Representative for dimensional details.
- 4 AM finish not available with brushed finish stainless steel.