GFF SERIES™ LIGHT FIXTURE

EPCO's domestically manufactured GFF Series™ Light Fixtures accommodate both T5 and T8 fluorescent lamps, both rated for long life, energy efficiency, and more uniform lumen distribution. For high or low ceiling applications or wall mount applications, the highly reflective coated finish of the GFF Series Light Fixture's gear tray surface translates into improved lumen utility by providing more usable lumens per watt.

GFF Narrow Body

FEATURES

- Fast installation saves time and reduces labor cost.
- Reliable, durable, maintenance free performance!
- Meets the requirements of the 2011 National Electrical Code: Articles 410.10(A), 410.104(A), 410.130(G)(1), 547.5(C)(1) and (2), and 547.8(A) and (B).
- Long lasting light fixture will not deteriorate under most hostile environments when it is installed according to factory procedures.
- Suitable for indoor or outdoor use.
- Multiple configurations available in 2-foot, 4-foot and 8-foot lengths.
- Ingress Protection – NEMA 4X and IP67 rated dust and moisture resistant luminaire; suitable for use in wet locations where high-power pressure wash-down is required.
- Continuous "poured-in-place" closed cell polyurethane gasket completely seals the light fixture from dust and moisture.
- Gear Tray: Tethered to provide quick access to the ballast wiring to simplify installation, power-to-ballast termination, and allow for easy ballast replacement.
- GFF Series Ceiling and Wall Mounting Hardware allows the Installer to pre-install the mounting brackets to the mounting surface without drilling into the fixture housing.
- Luminaire Disconnect: Enables the Electrical Contractor to easily and safely disconnect the incoming power to allow safe servicing of the GFF Series Light Fixture.
- Impact resistant acrylic diffusers withstand breakage from high power pressure washers; lowers replacement and maintenance costs.
- Solid reinforced light fixture housings provide strong rigidity with no deflection. The fixture housing is rated 5VA-F1 fiberglass.*
- "Captive" Acetal (Plastic) or Stainless Steel Latches.
- Domestic Ballast Manufacturer.
- 100% factory tested before shipping. No Contractor callbacks!
- Two (2) 1/2" trade size knockouts on each end of the light fixture accommodate standard conduit fittings.
- UL Listed. Suitable for use in wet locations. File #E319552.

***Note:** *Quantified and tested by Underwriters Laboratories, reference UL 746C.*

TYPICAL APPLICATIONS:

- Food processing facilities
- Commercial kitchens
- Laundries
- Industrial facilities
- Saunas
- Car washes
- Storage buildings
- Pedestrian and road tunnels
- Parking garages
- Elevator shafts
- Refrigerators and freezers
- Locker rooms
- And more...

c UL us IP66/67 CERTIFIED NEMA 4X NSF

Specifications subject to change without prior notice.

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epco® ENGINEERED PRODUCTS CO.

GFF SERIES™ LIGHT FIXTURE

INGRESS PROTECTION

Continuous "poured-in-place" closed cell polyurethane gasket seals the GFF Series Light Fixture from dust and moisture and provides protection from –40ºC/–40ºF to 80ºC/176ºF.

GFF OCCUPANCY SENSOR – THE "R" OPTION

GFF Series Occupancy Sensor (OS) is the energy and cost efficient method to manage lighting infrequently or unpredictably in applications such as stairwells, warehouses, utility and maintenance buildings, storage areas, service tunnels and more.

Installing the occupancy sensor can reduce energy consumption by as much as 45%. Its installation lowers energy cost by operating similar to a light switch. The sensor turns the lights on when it senses someone coming into a room or area, and then turns the lights off automatically after sensing no activity after a preset time.

FIXTURE LATCH OPTIONS

The GFF Series Light Fixtures can be ordered with your choice of acetal (plastic) or stainless steel latches. Both cam-type latch options accommodate a variety of application environments.

Acetal (Plastic) Latches provide an exceptional combination of heat resistance, durability, excellent fatigue life, high resistance to solvents and chemicals, and strength over a wide range of ambient temperatures.

Stainless Steel Latches are intended for food processing facilities and related applications. These latches can withstand extreme temperatures for refrigerator and freezer applications as well as the chemicals present in car washes. They are also impervious to acidic conditions making them suitable for use in livestock containment buildings.

Tamper Resistant Screws can help the building owner save thousands of dollars in re-lamping cost by protecting the fluorescent lamps installed on the GFF Light Fixture from tampering, vandalism and theft.

UV STABILIZED DIFFUSERS

- 100% Impact Resistant Acrylic Diffusers.
- No tools or fasteners are required to attach the Diffuser to the fixture housing.

GFF Series Acrylic Ribbed Diffuser is standard on all GFF Series Light Fixtures. The Basic Specular Reflector can be used with this Diffuser.

GFF Series Acrylic Clear Diffuser is intended for use with the Basic and Wide Specular Reflectors.

Note: *Each end of the Acrylic Clear Diffuser is frosted to minimize untargeted light dispersion. Acrylic Clear Diffuser is available for 4-foot and 8-foot GFF Series Light Fixtures ONLY.*

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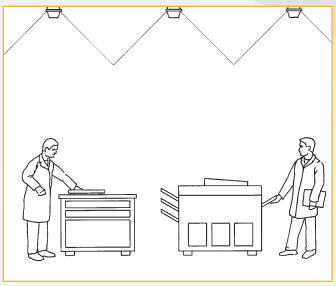
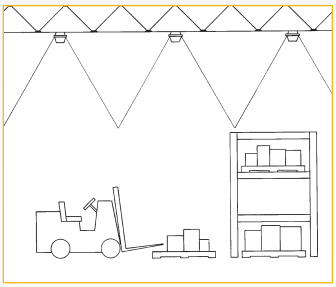
SPECULAR REFLECTORS

- Specular reflectors can reduce lighting energy costs by as much as 30%.
- Provides additional light into the work space.
- Delivers the highest light levels at the lowest watts per square foot.
- Enables lamps to perform to maximum efficiency.
- Two reflector styles:
  - ***The Basic Reflector*** concentrates light to specific work areas and provides more uniform illumination.
  - ***The Wide Reflector*** provides a broader dispersion of light at higher and lower mounting levels in warehouses, manufacturing areas, factories, commercial kitchens, parking garages, as well as outdoor lighting applications.
    Note: *Wide Reflector is available ONLY for 4-foot and 8-foot GFF Series Light Fixtures.*
- Both reflector styles provide 92% reflectivity to enhance energy efficiency for more effective lighting.



GFF Series - Wide Specular Reflector



GFF Series - Basic Specular Reflector

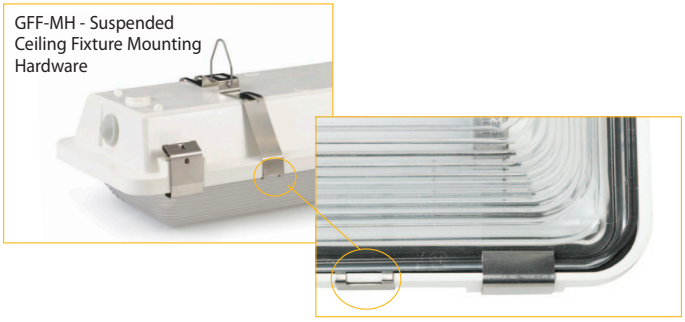
FIXTURE MOUNTING HARDWARE (OPTIONAL)

Using the Mounting Hardware eliminates drilling through the light fixture housing to maintain the IP67 "wet" location ingress protection rating.

- ***For Ceiling Applications (P/N: GFF-MH)*** the fixture mounting hardware includes two (2) "snap-on" stainless steel fixture hanging brackets that attach to the underside of the fixture housing.
- ***For Wall Mount Applications (P/N: GFF-WMH)*** the fixture mounting hardware includes two (2) "snap-on" mounting brackets that attach to the underside of the fixture housing after the brackets have been mounted to desired wall mount location.

Note: *EPCO recommends the purchase and use of the Fixture Mounting Hardware when installing a 2-foot, 4-foot or 8-foot GFF Series Light Fixture. Any GFF Series Light Fixture that has been incorrectly installed by drilling, puncturing, piercing or any other means that will alter the integrity of the light fixture housing will void the warranty!*

GFF-MH - Suspended Ceiling Fixture Mounting Hardware



GFF-WMH - Wall Mount Fixture Mounting Hardware

LAMP GUARD

The GFF Series Light Fixture Lamp Guards are constructed of cold-rolled steel wire and is resistance welded in a rectangular grid pattern. The Lamp Guard attaches to directly to the light fixture using the factory-mounted acetal (plastic) or stainless steel fixture latches.

Material Finish: Silver powder coated epoxy; moisture and weather resistant.

Typical applications:

- Classrooms
- Offices
- Lavatories
- Commerical Kitchens
- Restaurants
- Shopping Centers
- Factories
- Workshops
- Warehouses
- Parking Garages
- Gymnasiums
- Other areas where the fluorescent lamps may be exposed to forceful contact or damage.

GFF Series Lamp Guard

GFF Series Wire Spacing: Outside section - 2.75" x 3.0"
Center section - 3.0" x 3.0"

Note: *The Lamp Guard is available for 4-foot and 8-foot GFF Series Light Fixtures ONLY.*

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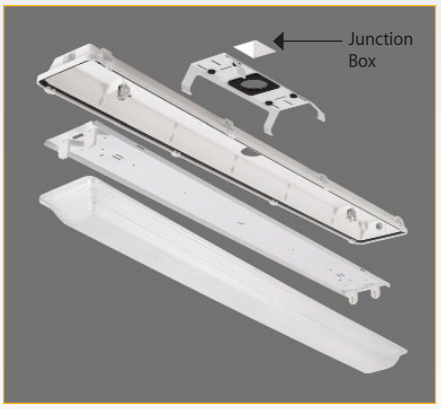
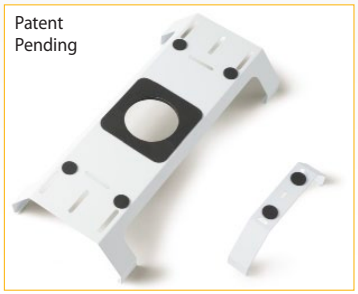
SURFACE MOUNT BRACKET- "Y" OPTION

The Surface Mount Bracket (SMB) provides the Contractor with the ability to locate, and install a 2-foot, 4-foot or 8-foot GFF Series Light Fixture directly under or over a junction box to surface mount the fixture to a ceiling or wall.



- The ability to wire directly into the junction box.
- Eliminates the cost and installation of a fixture whip and junction box cover plate.
- Reducing installation time and lowers labor cost.
- Providing a water and bug resistant seal that protects the critical area between the junction box's supply conductors and the light fixture. No adhesive sealant or gasket material is required.
- The finished installation of the light fixture will be more pleasing to the building owner without the fixture whip running across the ceiling.
- The SMB in combination with the GFF Fixture maintains its UL Listing for "Wet" Location Applications.
- Eight (8) slotted holes to simplify and expedite installation.
- Compliant with NEC, Article 410.24(B).



Note: *The Surface Mount Bracket is a "factory installed" option and is not available for Sale as an Accessory or for Field Retrofit.*

EPCO will pre-drill a hole in the GFF Series Light Fixture housing at the designated "number" location shown in the following diagrams to facilitate pulling the supply conductors from the junction box and into the fixture.

Surface Mount Bracket: 4-Foot GFF Fixture

Option - Y1
Large and Small Bracket

Option - Y2
Large Bracket

Surface Mount Bracket: 8-Foot GFF Fixture

Option - Y1
Large and Small Bracket

Option - Y2
Large and Small Bracket

Option - Y3
Large and Small Brackets (2)

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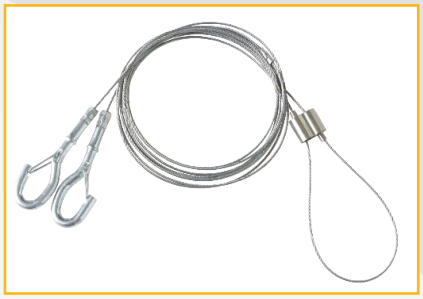
SUSPENSION KIT



The GFF Fixture Suspension Kit provides instant and "tool-less" infinite height adjustment when installing our GFF Series Light Fixtures.

- Accommodates two (2) GFF Light Fixtures.
- Easily suspends lighting fixtures, signage, mechanical, HVAC systems, and other objects that require suspension from beams, trusses, or joists.
- Eliminates the need for chain, S-Hooks, threaded rods and strut support nuts.
- Maintenance-free nad requires no ongoing adjustments.
- Suspension Cable Length: 100 inches with two (2) 20 inch Y-cables and two (2) swaged spring-loaded steel hooks with bright nickel plating on Y-cable ends with fuse cut cable to prevent fraying.
- Safe Working Load: 75 lbs. (34 kg.)
- Minimal breaking strength: 420 lbs. (190.5 kg.)
- Maximum load rating for one (1) cable: 62 lbs. (28.1 kg.); two (2) cables: 124 lbs. (56.2 kg.)
- Warranty - on (1) year.
- One kit includes:
  - Two (2) 1/16" (1.587 mm) x 10 foot (7 x 7) Galvanized steel cables. 7 strands per cable.
  - Two (2) spring-loaded steel hook end cables ensure positive attachement. Steel Hook Inside Diameter: 0.5 inches.
  - Two (2) tool-less suspension cable adjustment blocks.

GFF SERIES SPECIFICATIONS

GFF Series Fluorescent Light Fixtures provide a degree of protection against the ingress of solid foreign objects (e.g., falling dirt), the ingress of water (e.g., hose directed water), protection against corrosion, and will be undamaged by the external formation of ice on the enclosure.

- UL Listed and approved for use in wet locations.
- Meets the requirements of the 2011 NEC, Article 410.10(A).
- NEMA 4X and IP67 rated as a water resistant luminaire; protected against dust and strong jets of water.
- Meets the requirements of NSF ANSI Standard 2.*
- Operating Voltage: 120V - 277 VAC @ 60 Hz.

**National Sanitation Foundation (NSF International) is a leader in product certification and standards development. The NSF mark (NSF) is your assurance that all GFF Series Light Fixtures have been tested and certified. This Standard establishes minimum food protection and sanitation requirements for the materials, design, fabrication, construction, and performance of the GFF Series Light Fixture in the area of food handling and processing equipment.*

SHIPPING WEIGHT (APPROXIMATE):

- 2-Foot GFF Series Light Fixture: 8 Lbs. (3.62kg).
- 4-Foot GFF Series Light Fixture: 13 Lbs. (4.98kg).
- 8-Foot GFF Series Light Fixture: 21 Lbs. (8.61kg).

RECOMMENDED LAMP TYPES

- T5 Lamps
- T8 Lamps

Warning: *T8 HO and T8 VHO Lamps must not be used under any circumstances! You will damage the light fixture and void the warranty!*

MINIMUM STARTING TEMPERATURE:

- T5 - High/Standard Output: -20ºF / 29ºC.
- T8 - Standard Output Ballast: 0ºF / 18ºC.
- T8 - High Ballast Factor (HBF): -20ºF / 29ºC.

Note: *High Ballast Factor is a system operating a standard output lamp to a higher wattage and lumen performance within standard lamp design. High Output (HO) lamps operate with a higher current, thereby requiring ballasts to match the high output lamp designation and design.*

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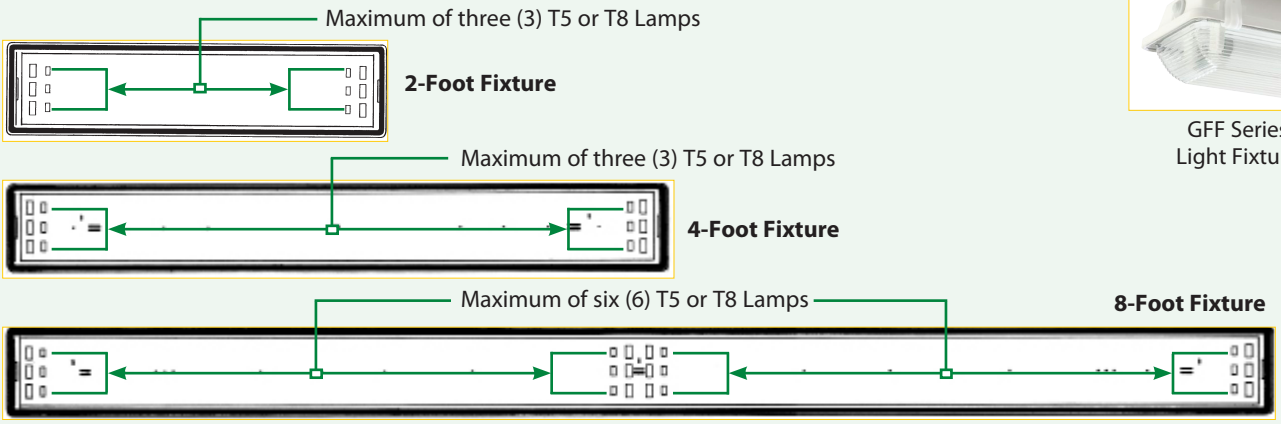
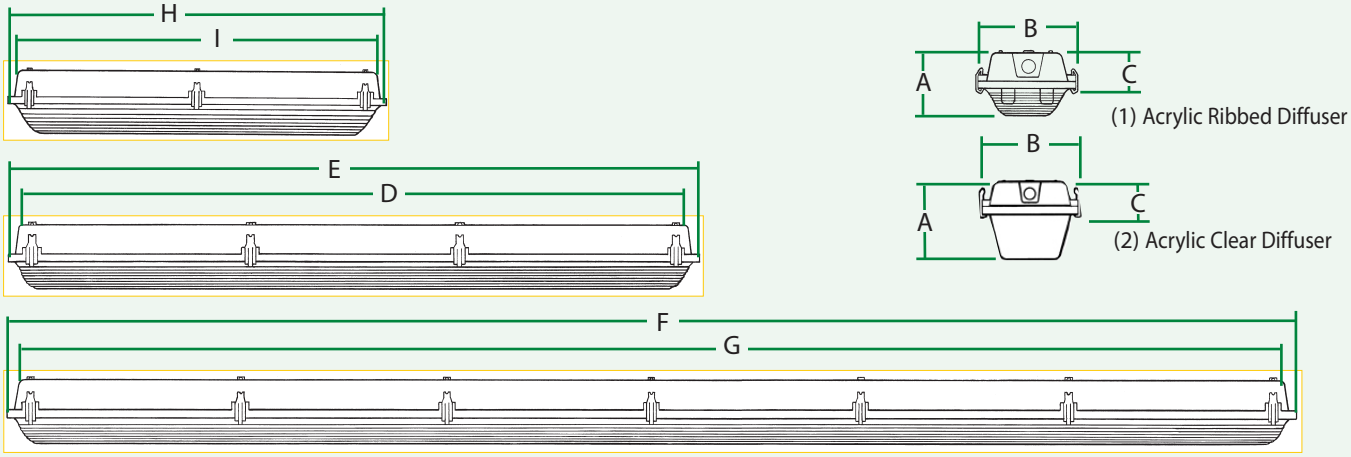
GFF Series Light Fixtures - Lamps per Fixture

GFF Series
Light Fixture



Note: *1. Top down view of 2-foot, 4-foot and 8-foot GFF Series Gear Tray.*
2. The GFF Series 8-foot Light Fixture <u>will not</u> accommodate F96 lamps.

A	B	C	D	E	F	G	H	I
4.25″ (1) / 5.75″ (2)	6.812″	2.44″	49.7″	51.7″	100″	98.0″	27.7″	25.7″



Note: *Dimensions "E", "F" and "H" reference the 1/2" trade size knockouts on each end of the fixture.*

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GFF Series – Ordering Information Example

Note: *GFF Series Light Fixture does not include T5 or T8 lamps!*

G 4 L2 T8 – B L S Y 3

Fixture	Length	Number of Lamps	Ballast Type
[G]	2 = 2-Feet 4 = 4-Feet 8 = 8-Feet	L1 = 1 Lamp L2 = 2 Lamps L3 = 3 Lamps L4 = 4 Lamps L6 = 6 Lamps	T5 – High/Standard Ouput T8 – Standard Output T8HBF – High Ballast Factor

The GFF Light Fixture can be built to your specifications by adding the respective Fixture Option Codes.

Note:

1. When entering Bulk orders, do not include Mounting Hardware or Tamper Resistant Screws in your part numbering scheme.
2. Acetal (Plastic) Latches are not recommended for the following applications:
   - Swimming Pools because of the chlorine.
   - Food Processing because of the cleaning chemicals.
   - Car Washes because of the chemicals used.
   - Agriculture because of the ammonia.
3. Two lamps is the maximum lamp configuration when specifying a T5 2-Foot Light Fixture with an Emergency Battery Back-up Ballast.
4. The Wide Reflector for T5 and T8 lamps can only be used with two (2) lamp 4-foot GFF Fixtures or four (4) lamp 8-foot GFF Fixtures.
5. The Wide Reflector can only be used in conjunction with the Acrylic Clear Diffuser (Option Q). The Standard Acrylic Ribbed Diffuser will not fit! The Wide Reflector WILL NOT fit a 2-foot GFF Light Fixture.
6. When your part number includes the Wire Lamp Guard:
   - The Acrylic Diffuser is not included with the light fixture.
   - UL listing changes from a "wet" location to a "damp" location light fixture.
7. When adding the Surface Mount Bracket (SMB - Y Option) to your part number, EPCO will pre-drill a hole in the fixture housing at the designated "number" location shown in the the following diagrams to facilitate pulling the supply conductors from the junction box and into the light fixture. When specifying the Y Option for the 2-foot GFF Light Fixture, there is no designated "number" location. Just include the Y Option as part of your 2-foot Light fixture order configuration.

GFF Series Light Fixture Options

A. 6-foot Power Cord (PSS6)
B. Basic Specular Reflector *(can be used with either the Acrylic Ribbed of Clear Diffuser)*
C. Acetal (Plastic) Latches *(See Note 2)*
E. Emergency Battery Back-up Ballast *(See Note 3)*
F. One (1) 1/2" Water Resistant Hub *(required for Pendant Mounting a 2- foot or 4-foot light ixture)*
G. Two (2) 1/2" Water Resistant Hubs *(required for Pendant Mounting an 8-foot light fixture)*
H. One (1) 3/4" Water Resistant Hub *(required for Pendant Mounting a 2-foot or 4-foot light fixture)*
I. Two (2) 3/4" Water Resistant Hubs *(required for Pendant Mounting an 8-foot light fixture)*
K. 3-Port Luminaire Disconnect *(required when a second ballast is installed)*
L. 2-Port Luminaire Disconnect *(included on all GFF Series Light Fixtures)*
M. Fixture Mounting Hardware for Hanging Applications *(two per package)*
O. Wire Lamp Guard *(See Note 6)*
P. Wall Mount Brackets *(two per package)*
Q. Clear Diffuser *(**Note:** The Acrylic Ribbed Diffuser is standard with all GFF Series Light Fixtures)*
R. Occupancy Sensor
S. Stainless Steel Latches
W. Wide Specular Reflectors *(See notes 4 and 5)*
Y. Surface Mount Bracket *(See Note 7)*
Z. Bulk Packaging *(25 or 50 per skid)*

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GFF SERIES LIGHT FIXTURE ACCESSORIES

Catalog Number	UPC Number	Description	Order Unit	Order Qty	Unit Pkg	Units/ Case	TL Case Qty	Min Order Qty	MM Req	Ship Wt (Lbs)
GFF-DC4	14251	**Replacement Clear Acrylic Diffuser:** for 4-foot GFF Series Light Fixture	EA	5	BN	0	0	5	Yes	10
GFF-DC8	14252	**Replacement Clear Acrylic Diffuser:** for 8-foot GFF Series Light Fixture	EA	5	BN	0	0	5	Yes	21
GFF-DR2	14335	**Replacement Ribbed Acrylic Diffuser:** for 2-foot GFF Series Light Fixture	EA	5	BN	0	0	5	Yes	5
GFF-DR4	14253	**Replacement Ribbed Acrylic Diffuser:** for 4-foot GFF Series Light Fixture	EA	5	BN	0	0	5	Yes	10
GFF-DR8	14254	**Replacement Ribbed Acrylic Diffuser:** for 8-foot GFF Series Light Fixture	EA	5	BN	0	0	5	Yes	21
GFF-FSSK	14256	**GFF/GFFW Fixture Suspension System Kit**	EA	2	BG	12	12	12	Yes	5
GFF-L2C	14336	**Replacement Acetal (Plastic) Latches:** for 2-foot GFF Series Light Fixture	EA	6	BG	0	0	6	Yes	1
GFF-L2SS	14337	**Replacement Stainless Steel Latches:** for 2-foot GFF Series Light Fixture	EA	6	BG	0	0	6	Yes	1
GFF-L4C	14240	**Replacement Acetal (Plastic) Latches:** for 4-foot GFF Series Light Fixture	EA	8	BG	0	0	8	Yes	1
GFF-L4SS	14239	**Replacement Stainless Steel Latches:** for 4-foot GFF Series Light Fixture	EA	8	BG	0	0	8	Yes	1
GFF-L8C	14250	**Replacement Acetal (Plastic) Latches:** for 8-foot GFF Series Light Fixture	EA	14	BG	0	0	14	Yes	1
GFF-L8SS	14249	**Replacement Stainless Steel Latches:** for 8-foot GFF Series Light Fixture	EA	14	BG	0	0	14	Yes	1
GFF-MH	14241	**Fixture Mounting Hardware:** for Ceiling Applications	EA	2	BG	0	0	2	Yes	1
GFF-SWLG4/8	14255	**Steel Wire Lamp Guard:** for 4-foot or 8-foot GFF Series Light Fixture	EA	5	BN	0	0	5	Yes	15
GFF-TPS-C	14248	**Tamper Resistant Stainless Steel Screws:** for Acetal (Plastic) Latches	BG	100	BG	0	0	1	Yes	1
GFF-TPS-S	14245	**Tamper Resistant Stainless Steel Screws:** for Stainless Steel Latches	BG	100	BG	0	0	1	Yes	1
GFF-WMH	14221	**Fixture Mounting Hardware:** for Wall Mount Applications	EA	2	BG	0	0	2	Yes	1
JC14B/100B	10205	**14 AWG Jack Chain:** 100-feet per Carton	FT	100	BX	5	500	100	Yes	30
DL3B/100B	10211	**14 AWG Bright Double Loop Chain:** 100-feet per Carton	FT	100	BX	5	500	100	Yes	30

GFF Series Light Fixture Limited Warranty

Engineered Products Company (herein known as EPCO) warrants that it will repair, replace or refund, at EPCO's sole option, any GFF Series Light Fixture that is defective in materials or workmanship for a period of one (1) year from the date of original purchase. This warranty only applies to the original purchaser and is not transferable.

This warranty does not apply to any of the following:

- Any GFF Series Light Fixture that has been incorrectly installed by drilling holes, puncturing, piercing or any other means that will alter the integrity of the fixture housing.
- Damage caused by the use of parts, components, and/or other equipment(s) that is not compatible, suitable, and/or authorized by EPCO for use with the GFF Series Light Fixture.
- Damage resulting from use of the GFF Series Light Fixture in what EPCO, at its sole discretion, considers extreme applications.
- **Note:** The Chemical Resistance of Plastics Chart (posted on EPCO's web site) provides an overview of those chemical compounds where these light fixtures should not be installed.
- Product damage as determined by EPCO to be caused by a crash, impact, or obvious signs of abuse to the GFF Series Light Fixture.
- No charge-backs for any labor required to remove, re-install, or re-power the GFF Series Light Fixture.

The Ballast Warranty is five (5) years and is limited to the original purchaser only. Contact the ballast manufacturer directly for more specific information on their warranty policy and procedures.

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UNITS OF MEASURE KEY

Order Unit: The Unit to be ordered; **Order Qty:** Number of pieces in each Unit; **Unit Pkg:** Packaging types - BG (Bag), BX (Box), BN (Bulk); **Units/Case:** Unit packages contained in the Case; **TL Case Qty:** The total number of items in each Master Case; **Min Order Qty:** The smallest Unit that can be ordered; **MM Req:** Must order multiples of the Unit in the stated quantities; **Ship Wt (Lbs):** Total weight of the units per carton

Distributed by:

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