

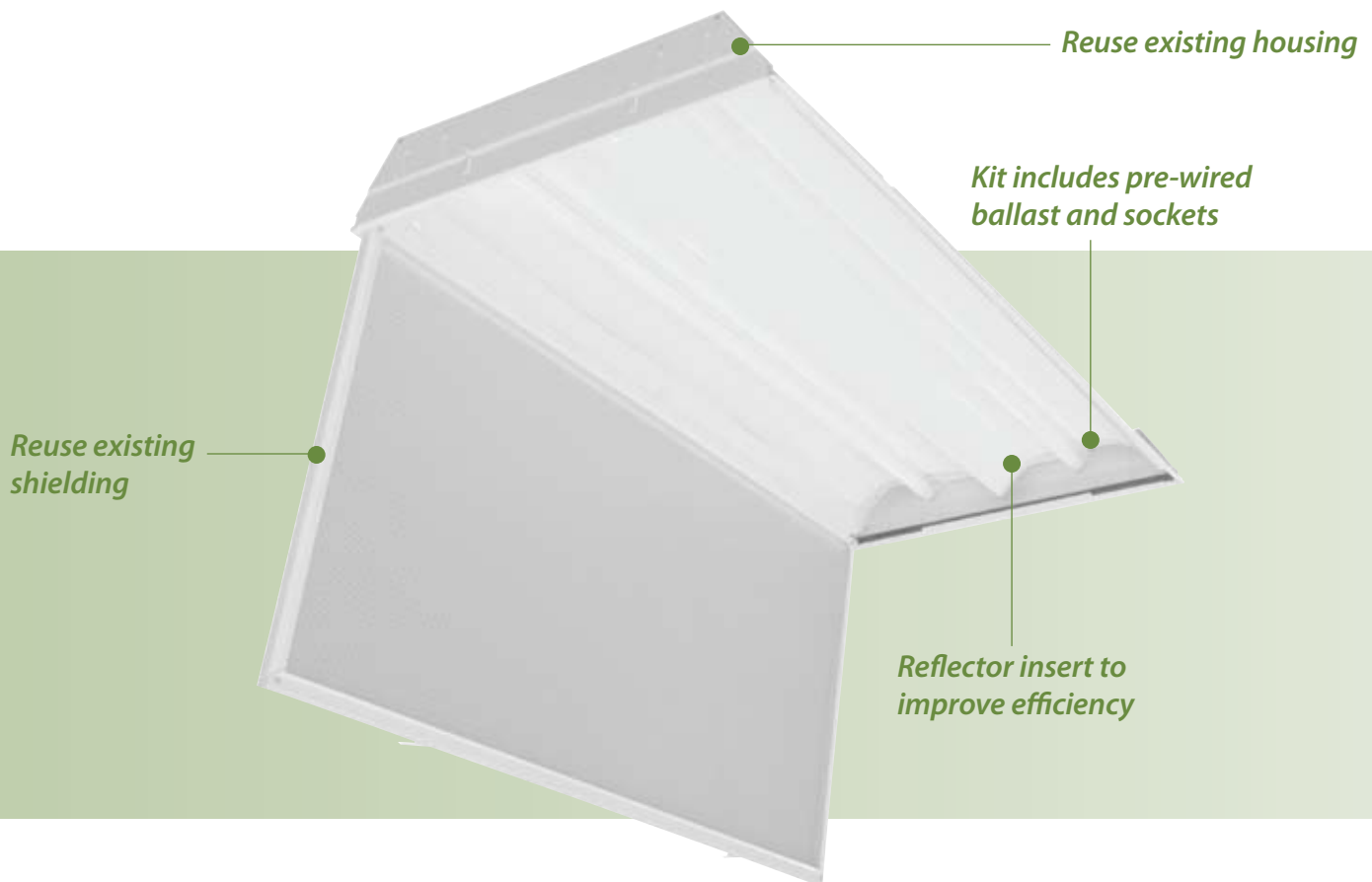


# RKT RKS RKSr

TROFFER AND INDUSTRIAL STRIPLIGHT RETROFIT KITS

## UPDATE YOUR LIGHTING TO MEET TODAY'S NEEDS

Yesterday's office lighting environment called for high illumination levels—typically 100 foot-candles—to help workers perform tasks of that era. Office tasks required high light levels due to the amount of work assigned to reviewing paper copies with poor quality or pencil written pages. Over-lighting spaces was commonplace, because energy costs were not the primary concern.

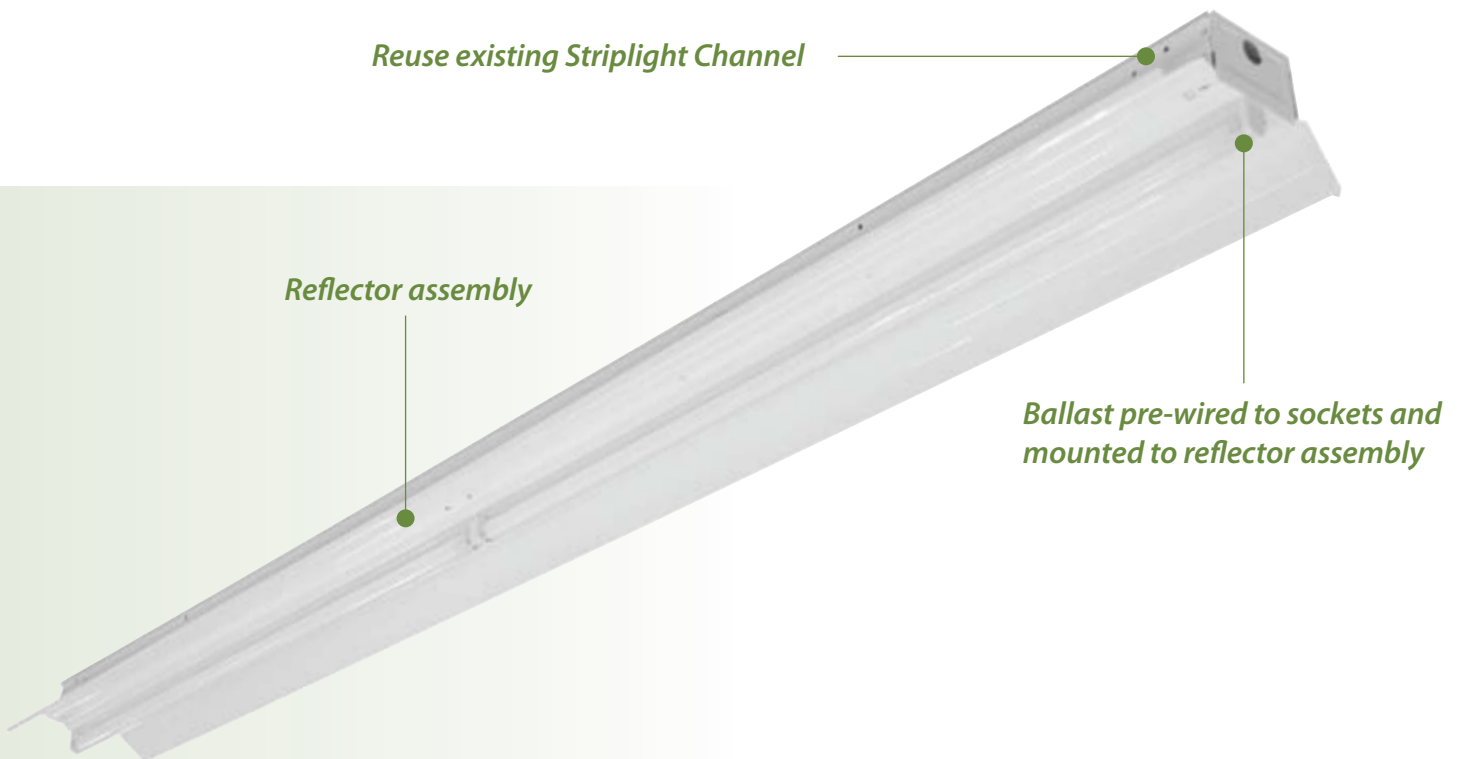


Lighting designers today face a much different setting. Energy costs are considerably higher and lighting design has changed to reflect new technologies and work conditions. The widespread use of computers with low-reflectance CRT and LCD monitors and high-quality printers has altered lighting requirements. With today's current working conditions, lighting designers are now recommending 30-50 footcandles in offices.

Lighting technology has drastically improved over the years, resulting in improved efficiencies, longer component life, and lower maintenance costs. Now is the time to update your lighting to reflect today's working conditions and to realize lower energy costs using Columbia Lighting's package of retrofit kits.

## COLUMBIA LIGHTING'S PACKAGE OF RETROFIT KITS

*Columbia Lighting's retrofit kits are the most economical way to transform your lighting environment. Retrofit kits are available for 2' x 2' and 2' x 4' troffers as well as 4' and 8' striplights. These kits contain the very latest in fluorescent lighting technology, resulting in up to 44% energy savings without sacrificing light levels. More energy savings can be obtained in areas where lighting levels can be reduced to meet updated office lighting requirements.*



## ADVANTAGES OF USING RETROFIT KITS FROM COLUMBIA

### LESS WASTE

Reusing the existing luminaire housing and shielding assembly will result in less handling and less cost for disposal.

### CEILING REMAINS UNDISTURBED

All work of installing kit is performed below the ceiling, resulting in an undisturbed plenum space.

### ALL KITS COME PRE-WIRED

Ballasts are wired to the lamp sockets at factory to avoid unnecessary labor costs of field wiring by installing personnel.

### IMPROVED EFFICIENCY

Kits include a gloss white or specular reflector. This provides an updated finish and improved reflectance for higher efficiencies over existing luminaires.

### MULTIPLE BALLAST OPTIONS

Offers latest fluorescent ballast technology, including low wattage, high lumen and step dimming ballasts.

## UTILITY REBATES

Utility rebates are available for retrofit kit products. Most rebate programs consider retrofit kits as a lamp/ballast replacement/removal measure and give rebates per existing lamp removed or replaced. Please refer to your local Utility Lighting Rebate program for specific details. Take advantage of these programs to reduce the payback period for completing a lighting retrofit.

### Example:

**Existing Fixture: 3-lamp T12**

**Retrofit: 2-lamp T8**

**California (Southern California Edison) \$14.50 rebate per kit**

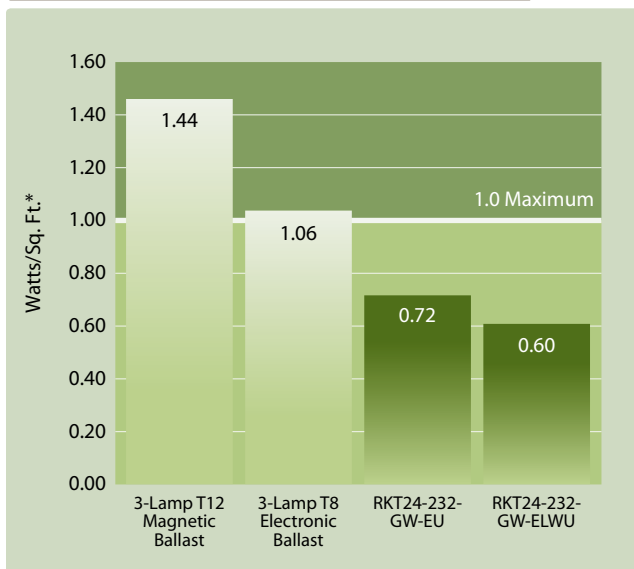
**Massachusetts (NGRID) \$10.00 rebate per kit**



## EPACT 2005 TAX DEDUCTION

Per the Energy Policy Act of 2005, lighting retrofit projects, including retrofit kits, completed before January 1, 2014 can take the Energy Efficient Commercial Buildings tax deduction (CBTD). The amount of the deduction is based on the % of the W/ft<sup>2</sup> reduced from ASHRAE 90.1-2001 standards for that space. The deduction ranges on a sliding scale from \$0.30/ft<sup>2</sup> to \$0.60/ft<sup>2</sup> based on the reduction of W/ft<sup>2</sup> of 25% and 40% respectively. Please refer to <http://www.hubbellighting.com/epact/> for the latest details and specific requirements.

ASHRAE 90.1-2004 OFFICE LPD REQUIREMENT



\*Assumes fixtures on 8' x 10' centers.

EPACT TAX DEDUCTION



## PRODUCT HIGHLIGHTS



### TROFFER RETROFIT KIT (RKT)

- Available for 2' x 2' or 2' x 4' fixtures
- Utilizes the latest in T8 fluorescent technology
- Includes high reflectance 91%-95% reflector insert for improved efficiency
- Reuses the existing housing and shielding/louver assembly



### INDUSTRIAL STRIPLIGHT RETROFIT KIT (RKS, RKSR)

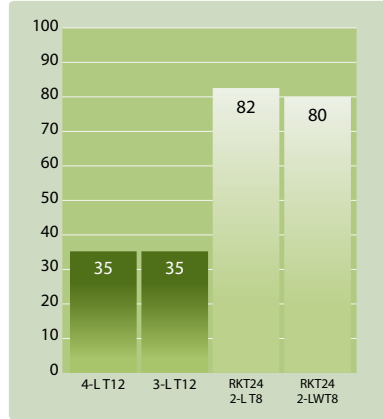
- Available for 4' or 8' striplights
- Utilizes the latest in T8 and T5HO fluorescent technology
- Ballast is pre-wired and pre-installed to reflector assembly
- Includes high reflectance 91%-95% reflector for improved efficiency

# ANNUAL ENERGY COST COMPARISON (PER LIGHTING FIXTURE)\*

## ENERGY SAVINGS



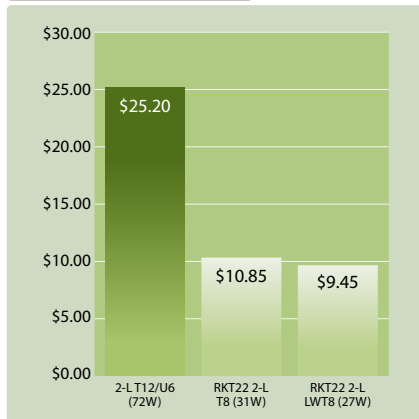
## DELIVERED LUMENS/WATT



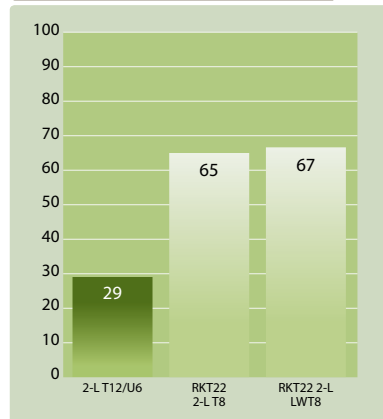
### EXISTING 2' x 4' T12 VS RKT24

Replacing a typical 3-lamp T12 2 x 4 lens troffer with a 2-lamp T8 RKT24 retrofit kit saves over half the energy with a minimal reduction in lumens. Even larger energy savings can be obtained by lower the light levels to meet today's ASHRAE 90.1 standards.

## ENERGY SAVINGS



## DELIVERED LUMENS/WATT



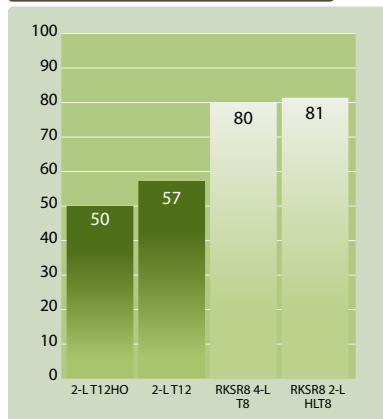
### EXISTING 2' x 2' T12 VS RKT22

Replacing a typical 2-lamp T12 2 x 2 lens troffer with a 2-lamp T8 RKT22 retrofit kit saves over half the energy with a minimal reduction in lumens. Even larger energy savings can be obtained by lower the light levels to meet today's ASHRAE 90.1 standards.

## ENERGY SAVINGS



## DELIVERED LUMENS/WATT



### EXISTING 8' T12 VS RKS8

Replacing a typical 2-lamp T12HO 8' Industrial Striplight with a 2-lamp T8 8' retrofit kit saves half the energy with a minimal reduction in lumens.

\*Based on 3,500 operating hours per year and energy cost of \$0.10/kWh.

# RKT ORDERING GUIDE

EXAMPLE RKT24-232-EU

RKT						U			
MODEL	NO. OF LAMPS IN CROSS SECTION	SIZE	LAMP TYPE	REFLECTOR TYPE	BALLAST	VOLTAGE	LAMP OPTIONS	OPTIONS	
<b>RKT</b> Retrofit Kit Lens Troffer	2 Two 3 Three	22 2' x 2' 24 2' x 4'	17 2', T8: 17 Watt 32 4', T8: 32, 30, 28 or 25 Watt	<b>GW</b> Gloss White, 91% Reflective <b>M4R</b> Enhanced Specular Aluminum, 95% Reflective	<b>ELW</b> Electronic T8, Instant Start, 0.77 Ballast Factor <b>E</b> Electronic T8, Instant Start, 0.88 Ballast Factor <b>E104</b> Electronic T8, Instant Start, 1.04 Ballast Factor <b>EHL</b> Electronic T8, Instant Start, 1.18 Ballast Factor <b>ESD</b> Electronic T8, Step Dimming, Programmed Start, 0.88 Ballast Factor <b>EP</b> Electronic T8, Programmed Start, 0.88 Ballast Factor <b>3ELW</b> 3-Lamp Electronic T8, Instant Start, 0.77 Ballast Factor <b>3E</b> 3-Lamp Electronic T8, Instant Start, 0.88 Ballast Factor <b>3EHL</b> 3-Lamp Electronic T8, Instant Start, 1.04 Ballast Factor <b>3EP</b> 3-Lamp Electronic T8, Programmed Start, 0.88 Ballast Factor <b>Blank</b> No Ballast supplied (Please specify socket type under options)	<b>U</b> 120V-277V	<b>F0830</b> 85CRI, 3000K <b>F0835</b> 85CRI, 3500K <b>F0841</b> 85CRI, 4100K	<b>GTS</b> Hi-Lo Control, Single Circuit Toggle Switch (used for Step Dimming Ballast) <b>(Required when no ballast is supplied)</b> <b>IS8</b> Instant Start T8 Sockets <b>PS8</b> Programmed Start T8 Sockets	

# RKS/RKSR ORDERING GUIDE

EXAMPLE RKSR8-232-GW-4EU

						U			
MODEL	NO. OF LAMPS IN CROSS SECTION	SIZE	LAMP TYPE	REFLECTOR TYPE (RKSR ONLY)	BALLAST	VOLTAGE	LAMP OPTIONS	OPTIONS	
<b>RKS</b> Retrofit Kit Strip Type Fixtures <b>RKSR</b> Retrofit Kit Industrial Reflector Type	1 One 2 Two	4 4' 8 8'	32 4', T8: 32, 30, 28 or 25 Watt 54 4', T5HO: 54 or 51 Watt	<b>GW</b> Gloss White, 91% Reflective <b>M4R</b> Enhanced Specular Aluminum, 95% Reflective	<b>ELW</b> 1 or 2-Lamp, Electronic T8, Instant Start, 0.77 Ballast Factor <b>E</b> 1 or 2-Lamp, Electronic T8, Instant Start, 0.88 Ballast Factor <b>EHL</b> 1 or 2-Lamp, Electronic T8, Instant Start, 1.18 Ballast Factor <b>ESD</b> 1 or 2-Lamp, Electronic T8, Step Dimming, Programmed Start, 0.88 Ballast Factor <b>EP</b> 1 or 2-Lamp, Electronic T8, Programmed Start, 0.88 Ballast Factor or Electronic T5HO, 1.0 Ballast Factor <b>4ELW</b> 4-Lamp, Electronic T8, Instant Start, 0.77 Ballast Factor <b>4E</b> 4-Lamp, Electronic T8, Instant Start, 0.88 Ballast Factor <b>4EHL</b> 4-Lamp, Electronic T8, Instant Start, 1.18 Ballast Factor <b>4EP</b> 4-Lamp, Electronic T8, Programmed Start, 0.88 Ballast Factor or Electronic T5HO, 1.0 Ballast Factor <b>Blank</b> No Ballast Supplied (Please specify socket type under options)	<b>U</b> 120V-277V	<b>T8</b> <b>F0835</b> 85CRI, 3500K <b>F0841</b> 85CRI, 4100K <b>F0850</b> 85CRI, 5000K <b>T5</b> <b>F5835</b> 85CRI, 3500K <b>F5841</b> 85CRI, 4100K <b>F5850</b> 85CRI, 5000K	<b>(Required when no ballast is supplied.)</b> <b>IS8</b> Instant Start T8 Sockets <b>PS8</b> Programmed Start T8 Sockets <b>PS5</b> Programmed Start T5 Sockets	

- BIL**     **Bi-Level Luminaire**  
*3-lamp fixture designed to maximize energy savings in low occupancy areas such as stairwells and storerooms.*
- EMI**     **EnergyMax® Intersect™ Full Distribution Luminaire**  
*2-lamp, energy efficient, louvered luminaire designed to provide full distribution and tremendous energy savings.*
- EMS**     **EnergyMax® Stratus Energy Saving Architectural Recessed Indirect Luminaire**  
*2-lamp, energy efficient, recessed indirect luminaire tuned to meet strict Lighting Power Density requirements.*
- EMX**     **EnergyMax® Parabolic Energy Saving Parabolic**  
*A system of tuned components designed to provide the perfect balance between light output and energy conservation.*
- EPC**     **e-poc® Full Distribution Luminaire**  
*2-lamp, energy efficient, lensed luminaire with contemporary styling, full distribution, and huge energy savings.*
- LHV**     **VersaBay® Fluorescent High Bay**  
*The new industry standard for fluorescent high bay lighting with Advanced Thermal Management.*
- MB/MC** **Morph™ Fluorescent Exterior Area Lights**  
*T5HO luminaires with unprecedented energy savings and light control.*
- RKT/  
RKS/  
RKSR**     **RKT/RKS/RKSR Troffer and Industrial Striplight Retrofit Kits**  
*Retrofit kits to update existing lighting to meet today's lighting needs and lower energy costs.*
- XFSW**     **XFSW Severe Fiberglass Low/High Bay**  
*A 4- or 6-lamp IP67 Rated, NSF Rated, and 5VA fire rated low/high bay ideal for cold temperatures.*
- XTS**     **XTS Enclosed and Gasketed Acrylic Tube, Severe Environment**  
*2-lamp, energy-efficient, enclosed and gasketed lighting suitable for wet locations.*
- ZPT**     **Zero Plenum® Troffer High Efficiency Architectural Luminaire**  
*High performance, ultra-low profile luminaire that significantly reduces energy costs.*

## Columbia LIGHTING

701 Millennium Blvd. Greenville, SC 29607  
Tel 864.678.1000 Fax 866.898.0131  
[www.columbialighting.com](http://www.columbialighting.com)

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