

Lighting Efficiency Programs at Work

An open discussion on lighting projects in Vermont, with case studies from Harrington's Ham, Rhino Foods, Love & Co.





210 E. Main Street, Richmond, VT

The Project: RELIGHT

Estimated Annual Energy Savings: 31,836 kWh

Estimated Annual Cost Savings: \$5,000

Incentives Provided: \$6,772

Simple Payback: ~3 years

Todd Liberty – Harrington's Production Manager

Steve Beard, Northeast Electrical Distributors - RELIGHT Lighting Design Professional

Scott Kimball, Visible Light – Lighting Rep & Project Assistance



Better Buildings by Design - 2015





Better Buildings by Design - 2015





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RELIGHT Checklist

Pre-Audit

- Notify RELIGHT Intake
- Submit RELIGHT Customer Agreement
- Schedule Audit
- Electric utility? _____
- Utility rate? _____
- Heating fuel type? _____
- Business operating schedule? _____
- Confirm project timeline (how quickly do they need a quote, how quickly would they need fixtures on site?)
- What is the customer's payback threshold to move forward with project (2 years, 5 years, etc?)
- Find out if drawings are available
- Which electrician does the customer like to work with?

Audit (for each space)

- Room name
- Room use (need for IESNA FC levels)
- Reflectances
- Variations in hours/day, etc?
- Dimensions of space?
- Photo of space
- Existing control?
- Is customer happy with existing light levels and controls?
- EM lighting (generator, emergency ballasts, wallpacks, UPS)?
- Voltage (120 or 277)?
- Ceiling types (grid, sheetrock, open)?
- Locations of existing power feeds

Post-Audit

- Suggested IESNA FC levels (do they differ from existing levels?)
- Control used where appropriate?
- Coordinate with EC for installed cost estimate
- Identify stakeholders / have them review and approve design



rhino
FOODS

Delicious things, done right.

79 Industrial Parkway, Burlington, VT

The Project: RELIGHT

Estimated Annual Energy Savings: 15,008 kWh

Estimated Annual Cost Savings: \$2,247

Incentives Provided: \$13,000

Simple Payback: 8.6 years

Gene Steinfeld, Rhino Foods - Director of Operations

Jay Hammond, Hammond Electric - Contractor

Steve Beard, Northeast Electrical Distributors - RELIGHT Lighting Design Professional

Scott Kimball, Visible Light – Lighting Rep & Project Assistance



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FOODS

Delicious things, done right.

Luminaire Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number of Lamps	Wattage	Light Loss Factor	Usage	
	B	44	Industrial Lighting Products	BLIZZARD-DIMMED-100W-8-FIT-LED	N/A	N/A	1	BLIZZARD-DIMMED-100W-8-FIT-LED	11225.87	0.9	109.6

BLIZZARD EXT FROSTED - 100W LED
WITH LOCATION

FEATURES

- 100W LED
- 8' x 4' x 1.5" (2030mm x 1016mm x 38mm)
- 1000lm (35lm/W)
- 50,000+ Hours
- 100% Dimmable
- 100% Recyclable
- 100% Energy Efficient
- 100% Mercury Free
- 100% Lead Free
- 100% RoHS Compliant
- 100% UL Listed
- 100% ETL Listed
- 100% CE Marked
- 100% FCC Compliant
- 100% EMC Compliant
- 100% RECYCLED


LED SYSTEM

Wattage	100W
Current	0.9A
Voltage	120V
Power Factor	0.95
Efficiency	100lm/W
Life Span	50,000+ Hours
Dimming	100% Dimmable
Temperature	100% RoHS Compliant
Material	100% Recyclable
Mercury	100% Mercury Free
Lead	100% Lead Free

ORDERING GUIDE

Part Number	Description	Quantity
BLIZZARD-DIMMED-100W-8-FIT-LED	BLIZZARD-DIMMED-100W-8-FIT-LED	44

Plan View
Scale - 1" = 10'



RHINO PRODUCTION LIGHTING

Designer
Date 8/11/2014
Scale Not to Scale
Drawing No.
Summary

1 of 1

The logo for Love & Co, featuring the words "LOVE" and "& CO" in a white serif font on a black rectangular background.

Burlington Town Center (49 Church St), Burlington, VT

The Project: Custom (MR16 → LED)
Estimated Annual Energy Savings: 19,428 kWh
Estimated Annual Cost Savings: \$2,890
Incentives Provided: \$3,420
Simple Payback: 0.1 years

David Amsellem, Love & Co.- Owner
Lee Spaulding, Walsh Electric Supply – Lighting Distributor