

Chester Police Station 3rd Floor Office Renovation

Electrical Scope of Work

The Electrical Contractor shall provide all labor, materials, equipment, permits, and incidentals necessary to complete the electrical work for the renovation.

The work shall include, but not be limited to, the following:

1. Remove existing light fixtures in areas shown on the plans where the ceilings will be replaced.
2. Furnish and install new LED light fixtures of similar type, size, mounting, and light output as existing.
3. Remove and replace existing lighting controls, including wall switches, with new devices of equal rating and function.
4. Remove and replace existing receptacles, cover plates, and associated devices within the renovated areas with new commercial-grade devices matching existing configuration.
5. Remove and replace damaged or obsolete junction boxes, wiring devices, and branch circuit wiring as required to provide a complete operational system.
6. Disconnect and reconnect all electrical equipment affected by the renovation.
7. Relocate existing electrical devices where required to accommodate new wall finishes, or ceiling modifications.
8. Remove abandoned wiring back to the nearest active junction box or panelboard. Do not leave abandoned wiring concealed in walls or ceilings.
9. Provide new wiring, conduit, fittings, supports, and accessories required for relocated or replacement devices.
10. Coordinate lighting fixture installation with the new reflected ceiling plan and ceiling grid layout.
11. Protect existing electrical systems serving occupied portions of the building and maintain continuous operation throughout construction.
12. Patch and repair surfaces disturbed by electrical work.
13. Test all new and reconnected circuits and verify proper operation of lighting, receptacles, and switches.
14. All work shall comply with the 2023 NEC (or applicable adopted edition), local codes, and the project requirements.

Basis of Design

1. Existing electrical distribution equipment, panelboards, feeders, and branch circuits shall remain unless replacement is required due to damage or to accommodate the renovation. New wiring is required for additional lighting fixtures and installation shall comply with 2023 NEC (or applicable adopted edition). Any concealed conditions requiring additional work shall be brought to the Owner's attention before proceeding.

2. This scope aligns with the architectural demolition notes requiring removal of wiring, switches, and outlets as necessary, relocation of electrical work affected by construction, and coordination with the new ceiling and finishes.

Proposed new light fixtures:

1. Furnish and install new RAB Lighting T34FA-2X2 recessed LED troffer luminaires, or approved equal at all locations indicated on the drawings. Fixtures shall be field-adjustable with selectable light output (20W/30W/40W), selectable color temperature (3500K/4000K/5000K), and integral 0-10V dimmable LED drivers suitable for 120-277V operation. Fixtures shall be recessed in the new 2' x 2' ceiling grid and include all mounting hardware and accessories required for a complete installation. Coordinate fixture installation with the new reflected ceiling plan and ceiling grid layout

Next Page



Project: 	Type:
Prepared By: 	Date:

Driver Info		LED Info	
Type	Constant Current	Watts	30W
120V	0.25A	Color Temp	3500/4000/5000K
208V	0.15A	Color Accuracy	81-84 CRI
240V	0.13A	L70 Lifespan	50,000 Hours
277V	0.11A	Lumens	2279-4328 lm
Input Watts	17.5-34.4W	Efficacy	118.8-134.1 lm/W

Technical Specifications

Field Adjustability

Field Adjustable:

Field Adjustable Light Output:
40W/30W/20W (factory default 30W)
Color temperature (selectable by 3500K, 4000K and 5000K)

Compliance

UL Listed:

Suitable for damp locations

IC Rated:

Suitable for direct contact with insulation

CCEA Compliant:

Luminaire Requirements used in Environmental Air Space per the electrical code specification of the City of Chicago

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

Trade Agreements Act Compliant:

This product is a product of Cambodia and a "designated country" end product that complies with the Trade Agreements Act

DLC Listed:

This product family is listed with the DesignLights Consortium (DLC). Individual SKUs within this family may carry either a DLC Standard or DLC Premium qualification. Please refer to the individual product specification sheet or the DLC Qualified Products List (QPL) at designlights.org to confirm the qualification status of a specific SKU prior to specification or purchase.

LED Characteristics

LEDs:

Long-life, high-efficacy, discrete, surface-mount LEDs

Performance

Lifespan:

50,000-Hour LED lifespan based on IESIm-80 results and TM-21 calculations

Wattage Equivalency:

Equivalent to (2) F32T8 or (5) F17T8 or (4) F14T5

Electrical

Drivers:

20W: Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.17A, 208V: 0.10A, 240V: 0.09A, 277V: 0.08A
30W: Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.25A, 208V: 0.15A, 240V: 0.13A, 277V: 0.11A
40W: Constant Current, Class 2, 120-277V, 50/60 Hz, 120V: 0.34A, 208V: 0.20A, 240V: 0.17A, 277V: 0.15A

Dimming Driver:

Driver includes dimming control wiring for 0-10V dimming systems. Requires separate 0-10V DC dimming circuit. Dims down to 10%.

THD:

5.44% at 120V, 8.25% at 277V

Power Factor:

99.7% at 120V, 95% at 277V

Construction

Cold Weather Starting:

The minimum starting temperature is -4°F (-20°C)

Maximum Ambient Temperature:

Suitable for use in up to 104°F (40°C)

Technical Specifications (continued)

Lens:

Frosted polystyrene

Housing:

Cold Rolled Carbon Steel Sheets and Strip (SPCC)

Finish:

White

Green Technology:

Mercury and UV free. RoHS-compliant components.

Installation

Mounting:

Recessed into T-grid ceiling. Surface and recessed mounting kits available for drywall ceilings.

Other

5-Year Limited Warranty:

The RAB 5-year, limited warranty covers light output, driver performance and paint finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

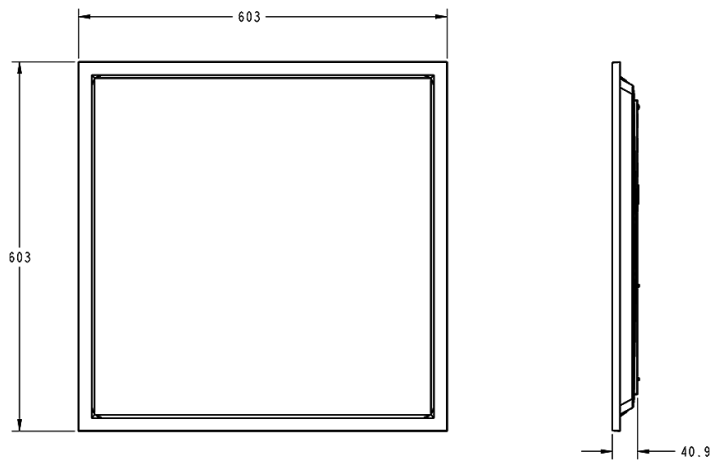
Compatible Accessories:

RMKEZPAN[2X2][1X4][2X4]
Recessed mounting kit

SMKEZPAN[2X2][1X4][2X4]
Surface mounting kit

EMB-[9][15][25]
0-10V Dimmable 120-347V emergency driver

Dimensions



Features

- 0-10V dimming
- 50,000-Hour LED lifespan
- 5-Year, limited warranty
- 4 per case, must order in case quantity increments

Ordering Matrix

Family		Size/Wattage	Color Temp	Finish	Driver	Options
T34FA	-	2X2				
		2X2 = 2' x 2' 40/30/20W 1X4 = 1' x 4' 40/30/20W 2X4 = 2' x 4' 50/40/30W	Blank = 3500/4000/5000K	Blank = White	Blank = 0-10V Dimming, 120-277V	Blank = No Option /LC = Lightcloud /MVS = Microwave Occupancy Sensor /E = Battery Backup