



# Converting Existing Lighting Systems to LED's

Presented by:

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Legislation to phase out fluorescent lighting technology has been sweeping across the U.S. and Canada.

**U.S. States with Fluorescent Ban Legislation:**

- California
- Colorado
- Hawaii
- Illinois
- Maine
- Maryland
- Massachusetts
- Minnesota
- Nevada
- New Jersey
- New York
- Oregon
- Rhode Island
- Vermont
- Washington



## Why are states banning fluorescents?

### Two Primary Reasons:

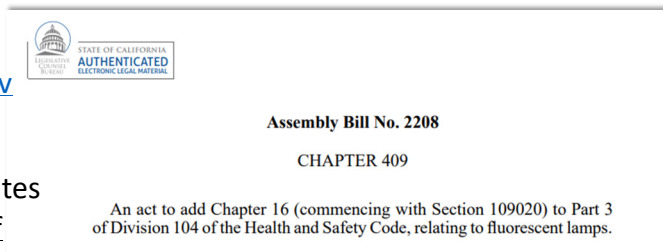
1. **Safety:** Fluorescent lights contain **mercury**. When fluorescent lamps break, mercury is released into the environment and can take a significant toll on both humans and the environment.
2. **Energy efficiency:** Modern **LED technology** offers luminaires that are substantially more energy efficient than fluorescents.

## California Fluorescent Ban

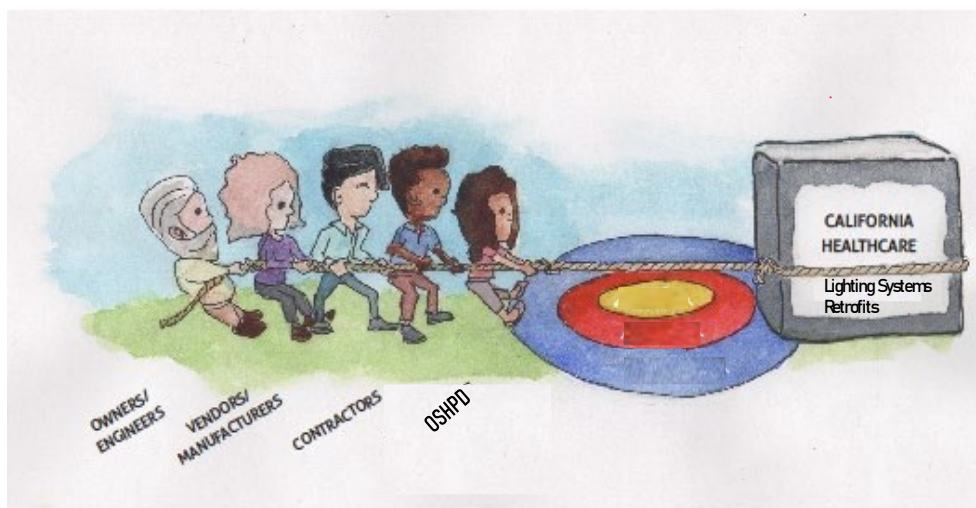
**Legislation source:** [leginfo.legislature.ca.gov](https://leginfo.ca.gov)

On September 2022, California lawmakers passed AB 2208, which sets the effective dates below prohibiting the sale or distribution of fluorescent lighting technologies:

- **Screw-base & bayonet-base CFL:** January 1, 2024
- **Pin-base CFL:** January 1, 2025
- **Linear fluorescent tube:** January 1, 2025

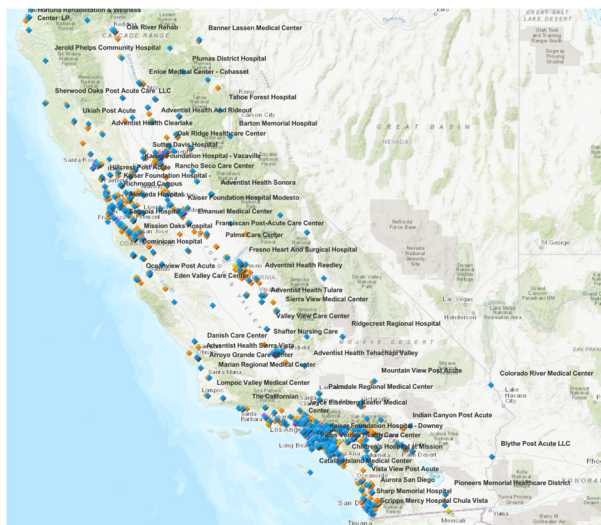


## Big Task to Support AB 2208

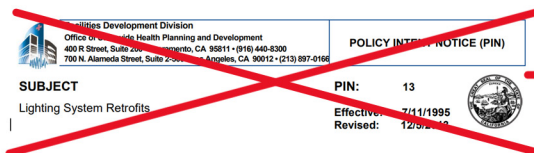


## OSHPD FACILITIES

- SNF facilities in service: 1,122
- GAC facilities: 414
- **Total Healthcare :** 1,536



OSHDP is here to help



 Department of Health Care  
Access and Information

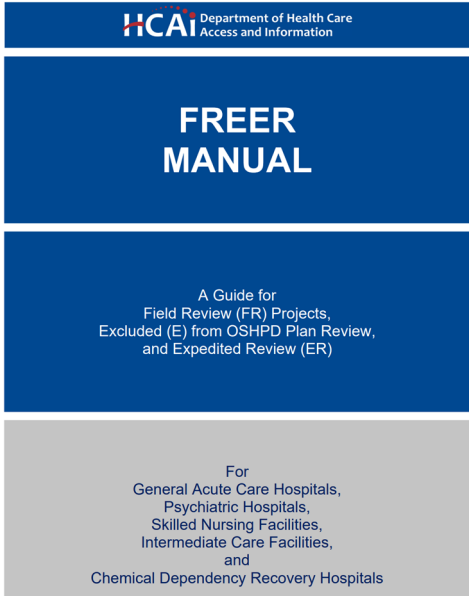
## **FREER MANUAL**

A Guide for  
Field Review (FR) Projects,  
Excluded (E) from OSHPD Plan Review,  
and Expedited Review (ER)

For  
General Acute Care Hospitals,  
Psychiatric Hospitals,  
Skilled Nursing Facilities,  
Intermediate Care Facilities,  
and  
Chemical Dependency Recovery Hospitals


Note: PIN 13 has been rescinded (7/12/22)  
Information regarding lighting system retrofits  
(previously found in PIN 13) has been added  
to the [FREER Manual](#).





The FREER manual is a guideline for **Field Review Projects** or **Excluded from Plan Review** or **Expedited Review Projects**.  
If the work qualifies, the steps required to start construction are streamlined.  
**We have included line items in this manual for converting fluorescent lighting to LED lighting** which should facilitate response to AB 2208.

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If the work qualifies, the steps required to start construction are streamlined.  
**We have included line items in this manual for converting fluorescent lighting to LED lighting** which should facilitate response to AB 2208.




FREER PROJECT TABLE						
GENERAL (G)						
Item #	Category/Item	FR= Field Review	E= Excluded	(E Only) Form 102	ER= Expedited (Office) Review	Remarks

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Department of Health Care Access and Information

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## Excluded (E) FR-E-ER

**Excluded (E) FR-E-ER** For Excluded work projects, there is not a requirement for submission of plans, building permit, or fees. New LED lighting projects will require submission of the HCAI-OSH 102 form as indicated in the Project Table located in Section IX of the FREER manual to determine if can be considered as Excluded work.



HCAI added to following line items to the **FREER** manual to address upgrading fluorescent lighting to LED lighting:

- **(E-6)** - one-for-one light fixture replacement at original location
- **(E-8)** – UL Type A LED retrofit
- **(E-9)** – UL Type A LED retrofit
- **(E-10)** – UL Type A LED retrofit

All have the potential to qualify as **excluded work**.

Item #	Category/Item	FR= Field Review	E= Excluded	(E Only) Form 102	ER= Expedited (Office)	Remarks
E-6	LIGHT FIXTURES Direct fixture Replacement		✓	YES		<ul style="list-style-type: none"> <li>• One for one, unlimited in amount.</li> <li>• (Original location only).</li> <li>• VA for replacement fixture is less than or equal to fixture being replaced.</li> <li>• Footcandle levels similar</li> <li>• Existing slack wires (if not add)</li> <li>• Fixture needs to match ceiling with mounting hardware and maintain rating for rated ceilings</li> </ul>
E-8	LIGHT FIXTURES (RE-LAMPING) Re-lamping existing fluorescent troffer or downlight luminaire with UL TYPE A LED (lamp/driver combination unit) while fixture body remains as original condition		✓	YES		<ul style="list-style-type: none"> <li>• One for one tube replacement.</li> <li>• Internal luminaire wiring remains unchanged.</li> <li>• Fixture body is to remain as original condition</li> <li>• VA for retrofit kit is less than or equal to existing.</li> <li>• Footcandle levels of retrofit kit are similar to existing.</li> </ul>
E-9	LIGHT FIXTURES (RE-LAMPING) Re-lamping existing fluorescent troffer or downlight with UL TYPE B LED (lamp/driver combination unit)		✓	YES		<ul style="list-style-type: none"> <li>• One for one tube replacement.</li> <li>• Ballast is bypassed or removed.</li> <li>• Fixture body is to remain as original condition.</li> <li>• VA for retrofit kit is less than or equal to existing.</li> <li>• Footcandle levels of retrofit kit are similar to existing.</li> </ul>
E-10	LIGHT FIXTURES (RE-LAMPING) Re-lamping existing fluorescent troffer or downlight with UL TYPE C LED (lamp and separate driver)		✓	YES		<ul style="list-style-type: none"> <li>• One for one tube replacement.</li> <li>• Ballast is replaced with LED driver.</li> <li>• Fixture body is to remain as original condition.</li> <li>• VA for retrofit kit is less than or equal to existing.</li> <li>• Footcandle levels of retrofit kit are similar to existing.</li> </ul>



**HCAI-OSH-102 Form** is available for download from the OSHPD web page at [HCAI-OSH-102 form](#).

HCAI-OSH-102 form should include the following attachments:

- A key plan that shows areas where fluorescent fixtures will be retrofit or replaced with LED's
- A fixture quantity, type of retrofit/replacement matrix, existing lumens, new lumens, existing VA and proposed new VA ...
- Spec sheets for LED light fixture or LED retrofit kits
- Manufacturer's installation instructions for electric work to be performed.
- Schedule of proposed work

**HCAI** Department of Health Care Access and Information  
Office of Statewide Hospital Planning and Development

**FREER MANUAL**  
Request for Excluded Work (HCAI-OSH-102)

**Facility Details**

Facility # \_\_\_\_\_ Facility Name \_\_\_\_\_

HCAI Building # BLD - \_\_\_\_\_ Building Name \_\_\_\_\_

Type of Facility ☐ Acute Psychiatric Hospital ☐ General Acute Care Hospital ☐ Skilled Nursing or Intermediate Care Facility  
☐ Correctional Treatment Center ☐ Licensed Clinic

**Proposed Work – Project Details**

Excluded Work Category \_\_\_\_\_

Detailed Description \_\_\_\_\_

**Contact**

Provide contact information for the facility representative requesting Excluded Work

Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
Address: \_\_\_\_\_

**Enclosures**

Provide details on submittal attachments (include sheet numbers, manufacturers information, etc.)

Plans: \_\_\_\_\_

Specs: \_\_\_\_\_

Site/Floor Plan: \_\_\_\_\_

Other: \_\_\_\_\_

Department of Health Care Access and Information  
HCAI-OSH-102 (Revised September 2023)

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**For LED Light Fixture Replacements** –Owner or owner's representative should submit form OSH-102 "Request for excluded work" to **OSHPD Compliance Officer** to determine if the proposed work is excluded or not – if accepted as excluded work (i.e., no project) no permit is required.



Item #	Category/Item	FR= Field Review	E= Excluded	(E Only) Form 102	ER= Expedited (Office) Review	Remarks
E-6	<b>LIGHT FIXTURES</b> Direct fixture Replacement		✓	YES		<ul style="list-style-type: none"> <li>• One for one, unlimited in amount.</li> <li>• (Original location only).</li> <li>• VA for replacement fixture is less than or equal to fixture being replaced.</li> <li>• Footcandle levels similar</li> <li>• Existing slack wires (if not add)</li> <li>• Fixture needs to match ceiling with mounting hardware and maintain rating for rated ceilings</li> </ul>

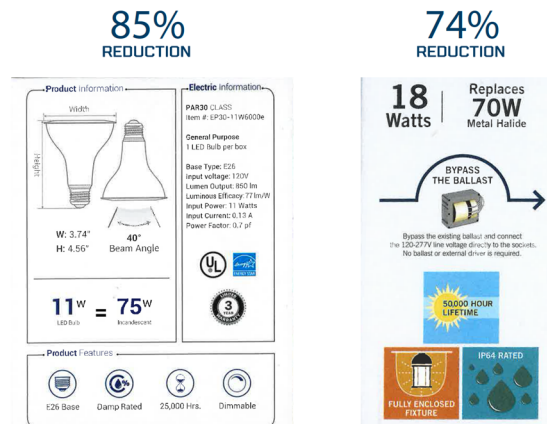


## EXTERIOR FIXTURES - Direct replacement

Direct replacement of existing exterior building mounted light fixtures with new LED fixtures can be considered excluded work if:

- 1-for-1 replacement
- New fixture weighs equal or less than the original
- Footcandle levels stay the same or increase
- Power consumption decreases or remains the same
- Have equal or lower Backlight Uplight Glare (B.U.G.) ratings
- Installed at same location of fixtures to be replaced**

Will need to submit documents (HCAI-OSH-102) documents identifying fixture locations and types to confirm excluded work status. These documents will be reviewed in the field by the CO. **Relocated fixtures will trigger a project which needs to be submitted to the field/office for review.**



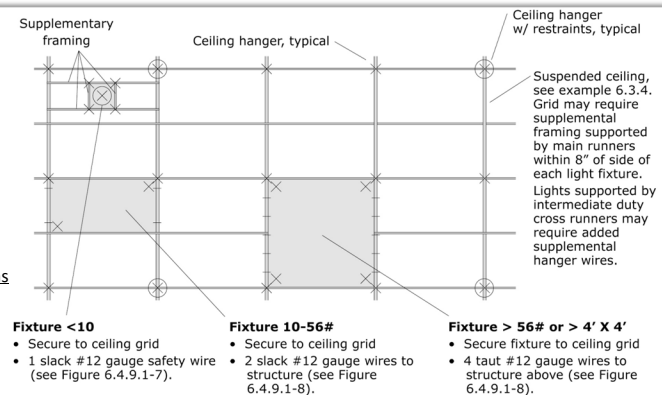
## INTERIOR FIXTURES – Direct Replacement

Direct replacement of existing interior light fixtures with new LED fixtures can be considered **excluded** work if:

- 1-for-1 replacement
- Fixture weighs equal or less than the original fixture
- Footcandle levels stay the same or increase
- Power consumption decreases or remains the same
- Installed at same location of fixtures to be replaced**

Prior to installation, the contractor shall review existing ceiling conditions and specifically state that replacement fixtures will need to meet requirements of the existing conditions:


- Maintain ceiling ratings**
- Maintain or provide proper fixture supports** - form 102 should include a detail on how the contractor is required to support the light fixture independent of the ceiling system. (i.e. 1 or 2 slack wires for standard downlights and lay-in fixtures) All replacement fixtures will need to e UL listed.



## INTERIOR FIXTURES – Retrofits

Retrofitting existing interior building mounted light fixtures with new LED fixtures can be considered **excluded** work if:



1. **UL listed** – Listed LED lighting retrofit kit required
2. **Reuse existing housing** – No need to address slack wires or rating of fixtures




**Over 20 Worldwide Patents Issued**


US #9,835,307 B1 US #10,012,360 B2

NO PRE-ASSEMBLY • QUICK INSTALL • ADJUSTABLE KELVIN & WATTAGE • 0-10V DIMMING








CCT Adjustable




DIMMABLE



Non Flicker



CRI > 80  
PF > 0.95



5 Year Warranty

**LED retrofit luminaire conversion kits** were created to convert existing luminaires with other types of light sources (incandescent, fluorescent, HID, etc.) converted to energy efficient LED Luminaires.

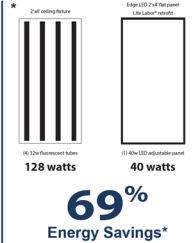
**Certified (Classified) retrofit kits installed in accordance with their installation instructions into the identified Listed (Certified) luminaires provide a method to Certify (Classify) the combination of the host luminaire and the retrofit conversion kit to comply with the host luminaire Certification (Listing) requirements and the Certification (Listing) requirements for luminaires and retrofit kits in the National Electrical Code (NEC).**

DIMMABLE 100% - 10%

**FEATURES AND BENEFITS** LITE LABOR® Retrofit LED Flat Panel

- Huge reduction in installation labor. Can be installed in just over 2 minutes
- Everything is integrated into a one piece design. No pre-assembly required
- Patented track frame allows for infinite mounting adjustability.

Weight: 2x4 = 4.1kg, 2x2 = 2.2kg, 1x4 = 2.4kg  
 UL listed with isolated external power supply  
 Lifespan: 50,000 hours / 5 year warranty  
 DLC: 5.1 standard



69%

Energy Savings\*

Size	Part number	Power (Watts)	Input (Volts)	Dimming	CRI	Kelvin (Adj.)	Total Fixture Lumens	LPW
1'x 4'	BLP-14-ADJ W/K-LL	20,30,40	100-277v	0-10v	>80	3500/4000/5000	2750/3300/4400	>113
2'x 2'	BLP-22-ADJ W/K-LL	20,30,40	100-277v	0-10v	>80	3500/4000/5000	2750/3300/4400	>114
2'x 4'	BLP-24-ADJ W/K-LL	30,40,50	100-277v	0-10v	>80	3500/4000/5000	3300/4400/5500	>117

Converting Existing Lighting Systems to LEDs

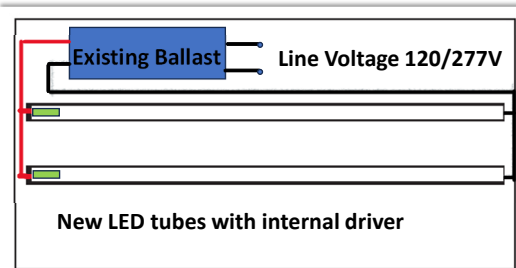
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### UL Type A LED Tube Retrofit

- No rewiring needed
- Intended for direct substitution of a fluorescent lamp with a LED lamp/driver unit
- Designed with an internal driver that allows the tube to operate directly from the existing fluorescent ballast and is installed in existing fluorescent tombstones.
- Light fixture body remains as is with existing support

For type A LED fluorescent lamp retrofits -The client should submit form OSH-102 "Request for excluded work" to **OSHPD Compliance Officer** to determine if the proposed work can be considered excluded– if accepted as excluded work (i.e., no project) no permit is required.

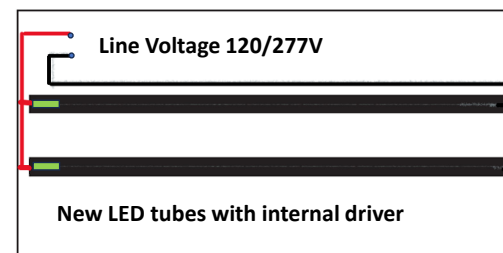


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E-8	<b>LIGHT FIXTURES (RE-LAMPING)</b> Re-lamping existing fluorescent troffer or downlight luminaire with UL TYPE A LED (lamp/driver combination unit) while fixture body remains as original condition		✓	YES		<ul style="list-style-type: none"> <li>• One for one tube replacement.</li> <li>• Internal luminaire wiring remains unchanged.</li> <li>• Fixture body is to remain as original condition</li> <li>• VA for retrofit kit is less than or equal to existing.</li> <li>• Footcandle levels of retrofit kit are similar to existing..</li> </ul>

### UL Type B LED Tube Retrofit

- Rewiring to bypass ballast needed
- Operates with an internal driver (no ballast losses)
- LED lamps designed with an internal driver that allows the tube to operate directly from the line voltage
- Existing Light fixture body remains as is with existing support

For type B LED fluorescent lamp retrofits - The client should submit form OSH-102 "Request for excluded work" to **OSHPD Compliance Officer** to determine if the proposed work is can be considered excluded– if accepted as excluded work (i.e., no project) no permit is required.

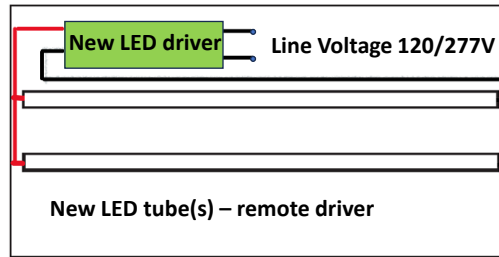


Item #	Category/Item	FR= Field Review	E= Excluded	(E Only) Form 102	ER= Expedited (Office) Review	Remarks
E-9	<b>LIGHT FIXTURES (RE-LAMPING)</b> Re-lamping existing fluorescent troffer or downlight with UL TYPE B LED (lamp/driver combination unit)		✓	YES		<ul style="list-style-type: none"> <li>• One for one tube replacement.</li> <li>• Ballast is bypassed or removed.</li> <li>• Fixture body is to remain as original condition.</li> <li>• VA for retrofit kit is less than or equal to existing.</li> <li>• Footcandle levels of retrofit kit are similar to existing.</li> </ul>

### UL Type C LED Tube Retrofit

- Offers the most flexibility and efficiency
- Unlike Type A and B, does not have LED driver provided integral with LED tube.
- Separate LED driver is connected between tombstones and building electrical wiring (branch circuit).
- Light fixture body remains as is with existing support

For type C LED fluorescent lamp retrofits - The client should submit form OSH-102 "Request for excluded work" to **OSHDP Compliance Officer** to determine if the proposed work can be considered excluded – if accepted as excluded work (i.e., no project) no permit is required.



Item #	Category/Item	FR= Field Review	E= Excluded	(E Only) Form 102	ER= Expedited (Office) Review	Remarks
E-10	LIGHT FIXTURES (RE-LAMPING) Re-lamping existing fluorescent troffer or downlight with UL TYPE C LED (lamp and separate driver)		✓	YES		<ul style="list-style-type: none"> <li>• One for one tube replacement.</li> <li>• Ballast is replaced with LED driver.</li> <li>• Fixture body is to remain as original condition.</li> <li>• VA for retrofit kit is less than or equal to existing.</li> <li>• Footcandle levels of retrofit kit are similar to existing.</li> </ul>

### So, let's get started for your project:

- (E-6) Direct Fixture Replacement
- (E-8) Retrofit via LED Type A
- (E-9) Retrofit via LED Type B
- (E-10) Retrofit via LED Type C

Download **HCAI-OSH-102 Form** and fill out. HCAI-OSH-102 form should include the following detailed information:

- A key plan that shows areas where fluorescent fixtures will be retrofit or replaced with LED's
- A fixture quantity, type of retrofit/replacement matrix that identifies retrofit or replacement, existing lumens new lumens, existing VA and proposed new VA
- Spec sheets for LED replacement light fixtures or LED retrofit kits
- Manufacturer's installation instructions for electric work to be performed.
- Schedule of proposed work

**HCAI** Department of Health Care Access and Information  
Office of Statewide Hospital Planning and Development

**FREER MANUAL**  
Request for Excluded Work (HCAI-OSH-102)

**Facility Details**  
Facility # \_\_\_\_\_ Facility Name \_\_\_\_\_

HCAI Building # BLD- \_\_\_\_\_ Building Name \_\_\_\_\_

Type of Facility ☐ Acute Psychiatric Hospital ☐ General Acute Care Hospital ☐ Skilled Nursing or Intermediate Care Facility  
☐ Correctional Treatment Center ☐ Licensed Clinic

**Proposed Work - Project Details**  
Excluded Work Category \_\_\_\_\_  
Detailed Description \_\_\_\_\_

**Contact**  
Provide contact information for the facility representative requesting Excluded Work  
Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
Address: \_\_\_\_\_

**Enclosures**  
Provide details on submittal attachments (include sheet numbers, manufacturers information, etc.)

Plans: \_\_\_\_\_

Specs: \_\_\_\_\_

Site/Floor Plan: \_\_\_\_\_

Other: \_\_\_\_\_



#### FREER MANUAL Instructions for Excluded Work (HCAI-OSH-102)

##### Facility

- Enter the HCAI facility identification number.
- Enter the name of the facility as it appears on the facility license.
- Enter the HCAI building number and building name where the work is to be performed.
- Indicate the type of facility as it is licensed.

##### Proposed Work - Project Details

- Provide the excluded work category as per the FREER Manual.
- Provide detailed description of proposed work.

##### Contact

- Project contact information for the facility representative requesting Excluded Work

##### Enclosures

- Provide in each type of enclosure the sheet numbers, manufacturers specifications, etc.

##### Submission

- Submit this request for excluded work to the HCAI Compliance Officer assigned to your facility. The assigned Field Staff to your facility can be obtained at: <https://hcai.ca.gov/construction-finance/facility-detail/>
- Enter your facility ID number or name of your facility to access the information for your facility.

For questions in **Northern California**, contact:  
Department of Health Care Access and Information  
Office of Statewide Hospital Planning and Development  
2020 West El Camino Avenue, Suite 800  
Sacramento, CA 95833  
(916) 440-8300 phone  
(916) 274-0102 fax

For questions in **Southern California**, contact:  
Department of Health Care Access and Information  
Office of Statewide Hospital Planning and Development  
355 South Grand Avenue, Suite 1900  
Los Angeles, CA 90071  
(213) 897-0166 phone  
(213) 217-8511 fax

## How to fill out:

Provide the following, in addition to the detailed information (scope of work):

- HCAI facility ID #
- Name of the facility
- HCAI building #
- Type of facility license
- Project contact info for facility representative

Submit the request to HCAI Compliance Officer assigned to your facility see <https://hcai.ca.gov/construction-finance/facility-detail/>

OSHPD Compliance officer to send e-mail or other documented communication as formal direction to proceed(or not) with excluded work, there 3 options for responding to form 102:

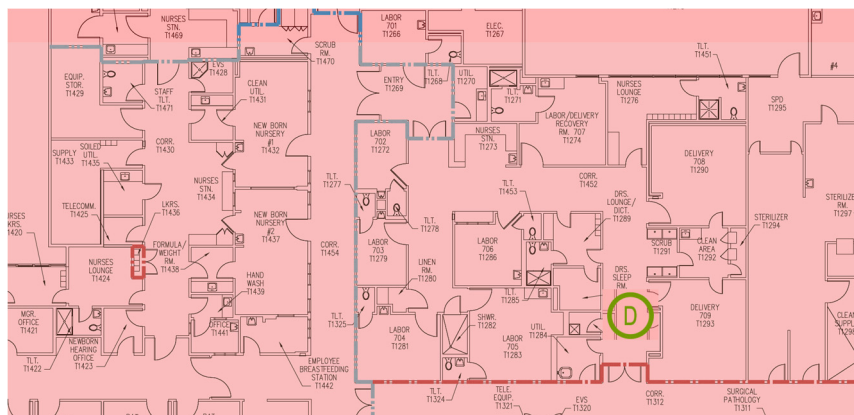
- Direct client to send more info
- Approve as Excluded work
- Disapprove as Excluded work, client will need to submit plans



## Example:

Provide a key plan that shows areas where existing fluorescent fixtures will be retrofit or replaced with LED's.

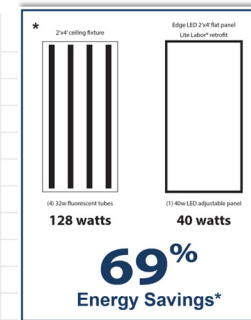
Can use exiting plans or other existing plans and just edit to show area of work (for reference) either manually or with computer.





## LED vs Fluorescent Watts/Lumens comparison sheet

Lumens	LED Watts	Incandescent Watts	Fluorescent Watts	Lumens
250	2 thru 4	25	6	250
450	4 thru 6	40	8 thru 12	450
560	6 thru 8	40	10 thru 12	560
800	8 thru 11	60	13 thru 15	800
1100	11 thru 12	75	15 thru 20	1100
1600	15 thru 18	100	25 thru 30	1600
2600	18 thru 23	150	30 thru 50	2600
2000	20 thru 30	200	40 thru 55	3000



In general fluorescents produce 50 - 100 lumens per watt and LEDs produce 75 - 200 lumens per watt.

Traditional T8 fluorescent tubes use 32 watts (2,900 - 3,000 lumens), while equivalent LED replacement tubes consume only 10 to 18 watts (1,500-2,400 lumens) to deliver the same brightness.

The light exiting fluorescent fixture to the task (delivered lumens) can measure 20% to 50% less than the light generated (total lumens). LED's are more efficient with higher % of lumens reaching the task.

## Example:

Spec sheets for LED retrofit kits:

- Fixture callouts (B1) should match callout on matrix and/or plan

**PHILIPS**  
Recessed  
EvoKit LED  
Retrofit Kit Gen 4

Product  
Description  
Color Temp  
Lumen  
Beam Angle

Philips EvoKit LED retrofit kit gen 4 is an energy efficient LED alternative to traditional linear fluorescent fixtures. Not only does it offer energy savings, it also helps reduce maintenance costs due to its long lifetime. Simple construction helps decrease the installation time meaning you can have an LED solution in your ceiling in just minutes. Additional information can be found at [www.philips.com/ledkit](http://www.philips.com/ledkit). Products can be found on the BIC CR, by searching the 6-digit product number.

**Ordering guide**

Product Number	SKU	Description	Watts	Beam Angle	Lumen	Color Temp	Efficiency	Notes
55500	5550000000	Linear 2'x4' 12W 835 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900020	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900030	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900040	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900050	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900060	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900070	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900080	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900090	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900100	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900110	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900120	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900130	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900140	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900150	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900160	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900170	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900180	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900190	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900200	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900210	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900220	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900230	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900240	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900250	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900260	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900270	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900280	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900290	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900300	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900310	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900320	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900330	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900340	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900350	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900360	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900370	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900380	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900390	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900400	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900410	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900420	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900430	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900440	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900450	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900460	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900470	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900480	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900490	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900500	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900510	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900520	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900530	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900540	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900550	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900560	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900570	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900580	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900590	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900600	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900610	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900620	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900630	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900640	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900650	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900660	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900670	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900680	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900690	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900700	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900710	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900720	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900730	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900740	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900750	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900760	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900770	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900780	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900790	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900800	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900810	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900820	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900830	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900840	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900850	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270	70000	3000	100	Recessed
55509	5550900860	Linear 2'x4' 12W 840 2.0-10 7 G4	12	120-270				



Provide Manufacturer's installation instructions for electric work to be performed:

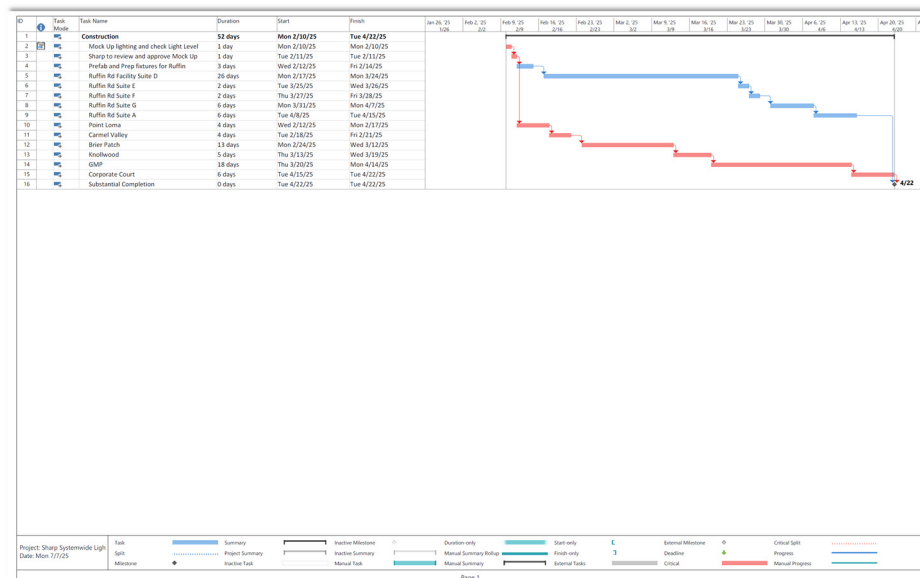
**Evokit Sensor Ready (SR)** | **Philips Advance Xitanium SR** for connected light solutions

Evokit SR is a new platform that allows users to choose different control platforms to suit their needs and budget, from simple occupancy and daylight sensing to cloud-connected reporting systems. This empowers users to have their own energy use reduced energy costs, responsive feedback, and energy forecasting, and other SR control features are available. Please refer to Philips website for details. Contact your Philips representative for a current list of additional approved systems. Sensors are connected in the field with a few simple steps:

- Step 1: Evokit SR is shipped with a plate covering the sensor hole. This plate is removed and the sensor wires secured to the back of the sensor.
- Step 2: The plate can be removed before or after you install Evokit SR. Just gently slide the plate away from the sensor.
- Step 3: Remove the two wires that were secured to the back of the plate.
- Step 4: Take these two wires and insert them into the sensor. The sensor may or may not polarity sensitive.
- Step 5: Insert the sensor back into the hole. The sensor may or may not require a sealant.

Contract Number	USNC	Description	Water	Wells	Current Production (bbl/d)	Apparent Reserve (MMbbl)	Future Production (MMbbl)	Efficiency	Remarks
125047	950013815	Surfaced 2x12x20, 20W 85.150 F/42	20	10-37/37	70,000	2600	3000	100	Revised
125045	950013815	Surfaced 2x12x20, 20W 85.150 F/42	20	10-37/37	70,000	2600	4000	100	Revised
125046	950013815	Surfaced 2x12x20, 20W 85.150 F/42	20	10-37/37	70,000	2600	4000	100	Revised
150001	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	3000	100	Revised
150002	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150003	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150004	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150005	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150006	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150007	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150008	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150009	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150010	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150011	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150012	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150013	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150014	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150015	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150016	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150017	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150018	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150019	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150020	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150021	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150022	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150023	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150024	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150025	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150026	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150027	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150028	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150029	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150030	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150031	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150032	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150033	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150034	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150035	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150036	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150037	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150038	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150039	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150040	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150041	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150042	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150043	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150044	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150045	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150046	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150047	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150048	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150049	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150050	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150051	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150052	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150053	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150054	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150055	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150056	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150057	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150058	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150059	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150060	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150061	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150062	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150063	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150064	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150065	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150066	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150067	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150068	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150069	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150070	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150071	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150072	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150073	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150074	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150075	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150076	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150077	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150078	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150079	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150080	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150081	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150082	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150083	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150084	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150085	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150086	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150087	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150088	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150089	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150090	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150091	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150092	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150093	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150094	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150095	950013815	Surfaced 2x12x20, 20W 85.150 F/42	25	10-37/37	70,000	3000	4000	100	Revised
150096	950013815	Surfaced 2x12x20, 20W 85.							

Provide schedule of proposed work:



## FAQ's:

**Q1:** Do I need to take foot candle (fc) measurements before and/or after retrofits?

**A1:** No, as long as the installed system matches matrix (which shows similar lumens for retrofit kits and power reduction), will not need to take fc measurements.

**Q2:** Does the \$50,000 limit for SB 1838 (exempt projects) come into play for FREER work on these LED retrofit projects?

**A2:** No, SB 1838 projects are a separate permit submittal that go thru the office and are not considered FREER excluded work.

**Q3:** Do I need to show that retrofit kits are UL listed?

**A3:** Yes, you will need to submit manufacturer literature that states UL listed and installation requirements with the listing.



## FAQ's:

**Q4:** Do I need to hire an IOR or Design Professional of Record for excluded work?

**A4:** No, this is not a permitted project, so IOR/DPOR are not required.

**Q5:** Do I need to notify OSHPD at start date or finish date of LED retrofit work?

**A5:** Yes, you will need to submit a schedule with form OSH-102 and per the FREER manual

### **SECTION VII: HOW TO START CONSTRUCTION:**

**NOTE:** For Excluded work that requires a HCAI-OSH-102 form, send an email or phone call notification to the OSHPD Compliance Officer (and OSHPD Fire Life Safety Officer when applicable) assigned to the facility when the Excluded work starts.

### **SECTION VIII: HOW TO CLOSE A CONSTRUCTION PROJECT**

**NOTE:** For Excluded work that requires a HCAI-OSH-102 form, send an email or phone call notification to the OSHPD Compliance Officer (and OSHPD Fire Life Safety Officer when applicable) assigned to the facility once the Excluded work has been completed



## FAQ's:

**Q6:** What if I start retrofit process and determine that I need to add or redesign portion(s) of the buildings lighting system (relocate fixtures, add fixtures use indirect vs direct fixtures etc...)

**A6:** A new project is required. See FREER category/item # E7 for requirements.

**Q7:** What if we want to change lighting controls? Upgrade controls?

**A7:** The proposed work should be shown on Form 102. Direct switch change outs/relocations are permitted under excluded work. Contractor will be responsible for compatibility of controllers with luminaires.

New daylight sensors, new power packs etc. will trigger requirement for submittal on new project. If new wiring is required.

Existing AB switches can be changed out to dimming controllers and still be considered as excluded work.

Item #	Category/Item	FR= Field Review	E= Excluded	(E Only) Form 102	ER= Expedited (Office) Review	Remarks
E-3	<b>ELECTRICAL RECEPTACLES / LIGHT SWITCHES</b> Existing General Purpose Relocation / Replacing used, worn out receptacles and switches		✓	YES		<ul style="list-style-type: none"> <li>Compliance Officer to verify receptacle type including circuit identification.</li> <li>Review required by Fire and Life Safety Officer to determine placement related to fire rated assemblies for relocation.</li> <li>Load reduction should be identified on related panel schedule when deleting non-code required general purpose receptacles.</li> <li>Relocating general-use switches, without causing non-conformance with the CEC and CBC.</li> <li>Listed Hospital Grade receptacles required at patient care areas. See CEC 210.8, 517.19(B)(2).</li> <li>Verify receptacle type including circuit identification EES vs normal power circuit.</li> </ul>

## FAQ's:

**Q8:** Will excluded work trigger Title 24 Part 6 (energy Code) requirements?

**A8:** No, the only Part 6 requirements that would apply is that for all fixtures the retrofit or replacement fixture has lower VA than existing and that for exterior light fixtures the retrofit or replacement fixtures have a Backlit/Uplight/Glare (B.U.G.) rating that is lower than the fixture to be replaced (or meets current BUG rating requirements.)

## FAQ's:

**Q9:** Can a facility plan to replace or retrofit luminaires installed in 1-hr ceiling still be considered excluded work?

**A9:** Let's take these one at a time.

- Fixture replacement- Yes, this can be considered excluded work, however as called out in item E-6 in the FREER manual, it will be the contractor's responsibility to ensure that replacement fixture(s) match ceiling type with mounting hardware and maintain the rating of existing rated ceilings.
- Fixture retrofits - Yes, this can be considered excluded work, however for retrofits, the existing housing needs to remain intact and as originally installed.

If the contractor or OSHPD field staff observes that a fixture to be replaced and or retrofit does not maintain the rating of existing rated ceiling, this should be reported and treated as a discovered non-code compliant condition. See the Architectural Narrative in [Advisory Guide 14 - Remodel](#) which states:

*"12. Decision Box: Code Compliant when Constructed? (See California Existing Building Code Chapters 3, 3A, 4, 4A, 5, and 5A)*

*a. If the discovered condition complies with the code that was in effect when the work was first constructed, it may remain. Go to item 13.*

*b. If the discovered condition IS NOT in compliance with the code that was in effect when the work was first constructed, it must be brought into compliance with the current code. Go to item 14.*

*c. Unauthorized work must be brought into compliance with the current code."*

## Moving Forward with LED retrofits

- Currently LED lighting retrofits are being sent to the office...
  - we should stay the course with these projects
- Webinar on LED lighting retrofits (9-18-25)
- Many LED lighting retrofits might be submitted as Excluded work
- Office to help Compliance officers Initially
- Field to take all projects that qualify as excluded work



# QUESTIONS

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