

Installation Standards

POWER SMART PRODUCT INCENTIVE PROGRAM

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INTRODUCTION

The Power Smart Product Incentive Program (“Program”) is intended to provide incentives for simple retrofits with energy-efficient products. The purpose of this document is to establish minimum guidelines and installation standards required for Alliance Contractors and Trade Allies eligible to participate in the Program.

CONTRACTOR CRITERIA

Contractors performing this Program work shall be registered Power Smart Alliance Contractors. The following exceptions are permitted:

- For Contractors performing energy retrofits who are not members of the Power Smart Alliance, the following criteria must be met:
 - Complete the required Power Smart Product Incentive Contractor Application form for BC Hydro (BCH) approval and have a minimum of five acceptable references for indoor lighting energy retrofits.
 - Have experience working with commercial buildings.
 - Receive a Program orientation by phone or in person as required.
- If work is being done in house, the person doing the work must be an employee of the company (not sub-contracted.) For hardwired projects, the employee must be a qualified electrician (license number will be requested) and the work must be performed under the required electrical permit.
- Maintenance staff may perform lamp and diffuser changes only for LED exit signs and compact fluorescent fixtures.

TRADE ALLY CRITERIA

BC Hydro defines Trade Allies as manufacturers and distributors of energy-efficient products. A trade ally interested in promoting any Power Smart program shall be registered as a Power Smart Trade Ally and meet the appropriate eligibility criteria. Trade Allies are not approved to perform the installation of energy-efficient products under the Power Smart Product Incentive Program. An approved contractor (see “Contractor Criteria”) must complete installation work.

INSTALLATION STANDARDS

- **Permits are required for all hardwired projects or if required by local / provincial codes.**
 - Permits must be issued in the BC Hydro Approved / Registered Contractor’s name – it cannot be issued in the name of a subcontractor. Approved contractors may subcontract up to 20% of the work. If more than 20% is subcontracted, the subcontracted firm must be approved by BC Hydro.
- Ensure that the products installed are eligible for incentives by checking the PIP website or e.Catalog.
- Manufacturers’ model numbers and quantities must be included on the invoice submitted to the customer or a supplier’s invoice must be included. Please also reference the installation address and PIP project number. This information must match products on application, if changes have been made, the application must be updated before installation declaration is submitted by customer.

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With the retrofit of luminaires under the Power Smart programs, the following guidelines must be adhered to:

- Old magnetic ballasts that are removed during a retrofit are to have all leads snipped off at the case (so they cannot be re-used) and disposed of in a safe manner.
- Ballasts that are disconnected and left in existing luminaires or luminaires removed during a retrofit shall also have the ballast leads snipped at the case. This ensures the inefficient ballast can not be reused.
- The luminaires can be re-used with new energy-efficient ballasts and lamps provided that the reflective finish of the luminaire or existing lens transmission factor has not deteriorated by more than 10%.
- Contractors shall arrange for orderly storage of removed ballasts, on site, up until the final inspection by BC Hydro has been completed, so that BC Hydro inspectors can easily verify quantities removed. Ballast should be separated by type (magnetic, electronic), for larger projects, contractors can call for interim inspections before removal. The contractor shall leave the ballasts on-site for 10 working days after contacting BC Hydro.
- Luminaires that have been modified during a retrofit shall be re-certified by an approved contractor or certification agency. New labels shall be installed confirming the re-certification.
- Master/Slave luminaires shall be identified - luminaires containing the ballast shall be identified by a uniform mark visible from below the luminaire.
- In delamping situations, the customer/contractor shall remove the unused T12 sockets from the luminaire. The new T8 sockets should be centered in the fixture as far as is practical.
- Contractors shall ensure that light levels meet IES and WorkSafe BC standards.

For installations of LED Refrigeration systems, the following parts are required for each corresponding system:

Type of Case	Quantity of cases	# of LED Fixture - End Sets (Left & Right)	# of LED Fixture - Centers	# of Brackets for End Sets	# of Brackets for Centers	# of Electrical Connection Cover	# of Power Supply Unit
6-door	1	1	5	4	10	7	3
5-door	1	1	4	4	8	6	3
4-door	1	1	3	4	6	5	2
3-door	1	1	2	4	4	4	2
2-door	1	1	1	4	2	3	1

INSTALLATION OF NON LIGHTING PRODUCTS

- Adjustable Speed Drives – suppliers should visit the customer’s site to recommend appropriate drive, filters and line / load reactors suitable for the existing motor to avoid premature motor failure.
- Low-E Ceilings – must be installed by experienced installers.
- Synchronous Belts – must follow manufacturers’ recommendations