

| | |
|--|---------------------|
| Install a High Efficiency Refrigerated Display Cabinet: Commercial Only | Activity No. |
| | RDC1 |

1. ACTIVITY SPECIFIC DEFINITIONS

GEMS Determination means the *Greenhouse and Energy Minimum Standards (Refrigerated Cabinets) Determination 2024* (effective 5 October 2024).

GEMS Register means the register established under the *Greenhouse and Energy Minimum Standards Act 2012*.

M-package temperature class means the Classification of M-package temperature according to temperatures to warmest and coldest M-packages during the temperature test defined in the GEMS Determination. (Refer also to the guidance note.)

Refrigerated Display cabinet (RDC) means a refrigerated cabinet that is designed for storage and display of, and access by consumers to, chilled or frozen items contained in the cabinet in a retail environment and is not a scooping cabinet; or an ice cream freezer cabinet, as defined in the GEMS Determination.

Total display Area means the total visible product storage area, including visible area through the glazing, defined by the sum of horizontal and vertical projected surface areas of the net volume as defined in the GEMS Determination and as listed in the eligible product GEMS registration. (Refer also to the guidance note.)

2. ACTIVITY DESCRIPTION (SUMMARY)

Installing a refrigerated display cabinet that is rated as 'high efficiency' within the meaning of the GEMS Determination.

3. ACTIVITY ELIGIBILITY REQUIREMENTS

Any commercial site in South Australia where the installed product requirements and minimum installation requirements can be met.

4. PRODUCT REQUIREMENTS

- (1) The RDC must be registered on the GEMS Register against the GEMS Determination for the relevant product class.
- (2) The RDC must have an Energy Efficiency Index (EEI) of less than 77.
- (3) For products registered to the GEMS Determination, this activity applies only to M-package temperature classes M1, M2, L1 and L2 (as applicable).
- (4) The activity does not cover the retrofitting of existing refrigeration equipment.

5. MINIMUM INSTALLATION REQUIREMENTS

- (1) Installation must be undertaken in strict accordance with the manufacturer's instructions.
- (2) If electrical work is required to be undertaken, then this must be performed by a licensed electrical worker under the supervision of a licensed electrical contractor.

- (3) If gassing or de-gassing is required to be undertaken, then this must be carried out by technicians licensed under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Cth).

6. NORMALISED REPS GIGAJOULES

Normalised REPS Gigajoules = (Baseline Efficiency x TDA-TEC) x 8.8385*

Where:

TEC, in kWh/day, is the daily Total Energy Consumption of the new refrigerated cabinet model, as determined in accordance with the GEMS Determination and recorded in the GEMS Register.

Baseline Efficiency, in kWh/day/m², is the corresponding figure for the type of the new refrigerated cabinet model, as determined in accordance with the GEMS Determination and recorded in the GEMS Register.

TDA, in m², is the Total Display Area of the new RDC model as determined in accordance with the GEMS Determination and recorded in the GEMS Register.

* 365 (days) x 8 (Years Lifetime) x 3.6 (convert to MJ) x 0.8 (additionality factor) x 1.051 (productivity factor) / 1000 (convert to GJ)

| Refrigerated Cabinet Product Class (product code) | Baseline efficiency (kWh/day/m ²) |
|---|---|
| Class 12 (RRH) | 5.54 |
| Class 13 (RFH) | 10.78 |
| Class 14 (RRV or RRV-2) | 14.01 |
| Class 15 (RFV) | 15.94 |

7. GUIDANCE NOTES (INFORMATIVE ONLY – NOT MANDATORY)

- (1) Information on registration data for current models can be obtained at: http://reg.energyrating.gov.au/comparator/product_types/37/search/. Download the CSV file:
- Total display area can be found under the column heading “total_dis”
 - M package temperature class can be found under the column heading “Temp_Class”
 - High Efficiency Status class can be found under the column heading “High Efficiency”
- (2) A reference to a standard, code or legislative instrument is a reference to the version of the standard, code or legislative instrument in force at the time the activity is undertaken, including as amended or replaced.