

# Criteria for Accepted Heat Pump Products

## 1) Introduction:

The Energy Efficiency and Conservation Authority (EECA) maintains a List of Accepted Heat Pump Products that may be installed under voluntary targeted rate schemes of local councils. The List of Accepted Heat Pump Products is published on EECA's Energywise website [www.energywise.govt.nz](http://www.energywise.govt.nz).

This policy sets out the criteria and outlines the process applied by EECA for assessing whether heat pump products are eligible for inclusion in EECA's List of Accepted Heat Pump Products.

Suppliers (manufacturers, importers and service providers) have obligations under the Fair Trading Act 1986, Consumer Guarantees Act 1993 and other Acts, Regulations, Codes and Standards. This policy applies in addition to any statutory requirements. In the case of a conflict between this policy and a statutory requirement, the latter will prevail.

Following are the product criteria for room air conditioners / heat pumps (herein referred to collectively as "heat pumps") to qualify as approved by EECA for consideration by Councils in Voluntary Targeted Rates (VTR) programmes (participating councils only) and procurement. A product must meet all of the identified programme requirements to be registered with EECA on the List of Accepted Heat Pumps.

## 2) Definitions:

**Non-ducted reverse-cycle air conditioner:** An enclosed assembly or assemblies designed as a unit, primarily for mounting through a wall, or as a console. It is designed primarily to provide free delivery of conditioned air to an enclosed space, room or zone (conditioned space). It includes a prime source of refrigeration for cooling, dehumidification and heating from a heat source. It may also include means for the circulation and the cleaning of air. Where such equipment is provided in more than one assembly, the separated assemblies (split-systems) are to be designed to be used together, and the requirements of rating outlined in the AS/NZS 3823 Standard are based on the use of matched assemblies.

**COP (Coefficient of Performance):** The ratio of the power input to a reverse cycle air conditioner (Heat Pump) to the heat energy supplied by the air conditioner.

**Annualised rates (ACOP)** incorporate any additional energy use, including that used in stand-by.

## 3) Qualifying Products:

All single phase Non-ducted Single-Split systems are eligible for registration provided they meet the criteria below.

## 4) Criteria:

### 4.1 EECA criteria for accepted heat pumps V2.0 is effective from 1 July 2019.

Only those products listed in Section 2 may qualify as approved if they meet either of the following criteria:

- The product is currently accepted for installations under EECA's Warmer Kiwi Homes programme **Or**
- The rated and tested energy performance must meet or exceed the levels outlined below:

Rated H1 heating Capacity band (kW)	Heating (ACOP at H1)	Heating (COP at H2)
Less than 4.0	4.4	2.88
4.0 to 7.5	3.8	2.76
7.5 to less than 10	3.5	2.56
10 to less than 18.9	3.7	2.68

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## 5) Test Criteria:

To qualify under 4.1b, products must be:

- Tested for ACOP performance under H1 conditions in accordance with **AS/NZS 3823.1.1:2012**
- Tested under H2 conditions in accordance with **AS/NZS 3823.1.1:2012**, and supporting test reports must be supplied (without exception).
- Testing must be completed and certified by an independent laboratory that has been accredited for testing thermal transmission properties of materials in accordance with AS/NZS 4859.1 by IANZ or an equivalent laboratory accreditation body that is a full signatory member of the International Laboratory Accreditation Cooperation (ILAC) and/or the Asia Pacific Laboratory Accreditation Cooperation (APLAC).

## 6) Product Approval Process:

To qualify under 4.1b, suppliers must complete the EECA Heat Pumps registration form for each product and supply the supporting documents as requested by EECA.

EECA will assess each application against the requirements of this policy. A supplier must satisfy EECA in its application that a particular product meets all of the above criteria.

EECA may, at its discretion:

- Accept information such as test reports from an IANZ accredited laboratory, BRANZ appraisals or installation trials, in support of a Supplier demonstrating compliance with the above criteria.
- Request further information in respect of any of the above criteria if, in EECA's view, the information supplied in an application is insufficient to demonstrate compliance.
- Refuse to accept a product for use if, in EECA's view, a product fails to comply with one or more of the above insulation product performance criteria

Following a decision to not approve a product, EECA will formally write to the supplier to advise of the outcome and the reasons for EECA's decision. If a product is approved for use, EECA will add the product to the List of Accepted Heat Pump Products as soon as is practicable.

## 7) Effective Date:

The specification for EECA Accepted Heat Pumps V2.0 is effective from 1 July 2019.

## 8) Valid Countries:

This specification applies to products listed in Section 2 that are sold in New Zealand only.

## 9) Future Revisions:

EECA reserves the right to change the criteria should regulatory, technological and/or market changes affect its usefulness to consumers, industry or the environment.