



January 24, 2018

Dear Stakeholders:

Natural Resources Canada (NRCan) would like to clarify the requirements for make-up air (MUA) large air conditioners and direct expansion dedicated outdoor air systems under Canada's [Energy Efficiency Regulations](#) (the Regulations).

Any type of equipment that meets the regulatory definition under Division 2, section 116 of the Regulations must be tested according to the prescribed test procedure and bear a verification mark from a certification body accredited by the Standards Council of Canada showing that it meets the minimum energy efficiency requirements of the Regulations.

According to the regulatory definition, "Large air conditioner means a commercial or industrial unitary air conditioner with a cooling capacity of at least 19 kW (65,000 Btu/h) but less than 223 kW (760,000 Btu/h). It does not include a single package vertical air conditioner".

Additionally, the prescribed test procedures, CSA C746-06 and AHRI 340/360-2007, define a commercial and industrial unitary air conditioner as a "factory-made assembly that normally includes an indoor conditioning coil, an air-moving device, one or more compressors, and one or more outdoor coils. In the case of an air conditioner, it can include a heating function in addition to the cooling function".

A MUA large air conditioner meets this definition and must satisfy all regulatory requirements including being tested under the standard rating conditions as stated in C746-06 and AHRI 340/360-2007 regardless of its field application.

In order to comply, the MUA unit can be adjusted to achieve the testing conditions regardless of the difference between the standard vs actual operating conditions.

NRCan would also like to take this opportunity to address the special case of direct expansion - dedicated outdoor air systems (DX-DOAS) that are designed to provide only 100% outdoor air to the conditioned space.

Given that DX-DOAS meet the regulatory definition set out in the *Energy Efficiency Regulations*, these units are subject to the requirements of the Regulations, including meeting the minimum energy performance standard and third-party verification. However, it is our understanding that the design of this product is such that it cannot be tested using the currently prescribed test standards, CSA C746-06 and AHRI 340/360-2007, because DX-DOAS' do not have an air intake control mechanism to recirculate return air and operate only using 100% outdoor air. Therefore, NRCan will not be taking enforcement action pertaining to the minimum energy performance standard and testing requirements of the *Energy Efficiency Regulations* for DX-DOAS at this time. NRCan does expect, however that all other regulatory requirements are met. An energy efficiency report for all DX-DOAS models must be submitted to NRCan

(reporting template attached). The energy efficiency report for DX-DOAS models must include the following information:

- brand name,
- model number,
- whether the model is a DX-DOAS unit, and
- the AHRI classification

As with all regulated products, the information provided on the energy efficiency report will be required to be verified by a Standards Council of Canada accredited certification body, and an energy efficiency verification mark will be required on the product.

In the spirit of regulatory alignment of standards, should changes be made to this product by the U.S. we would consider applying those for Canada in a future amendment.

Yours sincerely,



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Attachment: (1)