

**INTERPRETATION IC 62.1-2004-21 OF  
ANSI/ASHRAE STANDARD 62.1-2004  
VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY**

Approval Date: June 23, 2012

**Request from:** Kamal Gunawardana ([kamal.gunawardana@milton.ca](mailto:kamal.gunawardana@milton.ca)), P.Eng., Member of ASHRAE, 150 Mary Street , Milton , ON L9T 6Z5.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1 -2004, Section 3 and Table 5.1, regarding separation distance.

**Background:** A 6 storey condominium resident building is designed with packaged gas fired furnaces each installed backing to exterior wall with a balcony. The balconies are open on three sides and have half height glazed walls. The flue vent from the furnace discharges on exterior wall, mid way in the balcony and directly towards the balcony. There is a fair chance that a person standing in the balcony during colder seasons (even in winter if he used to get out to the balcony to breath fresh air) will directly breath flue vent before it gets sufficiently diluted. Unlike a public space the resident balconies are occupied by the same person over a long period of time, therefore may subject to prolonged exposure to flue gas inhaling.

**Interpretation No.1:** Section 3 of 62.1 defines an *occupiable space* as an enclosed space, which arguably would not apply to a balcony. The balcony is considered an occupied space for calculating the separation distances per Table 5-1.

**Question No.1:** Is this Interpretation correct?

**Answer No.1:** Statement 1 – Yes, Statement 2 - No.

**Interpretation No.2:** If the answer to question number one is “Yes”, then the balcony wall is considered as the opening to the occupied space for the calcaultion of Separation distances per Table 5-1.

**Question No.2:** Is this Interpretation correct?

**Answer No.2:** Not applicable.

**Interpretation No.3:** If the answer to question number one is “Yes”, then direct discharge of flue gas within an open balcony is unacceptable per Standard 62.1.

**Question No.3:** Is this Interpretation correct?

**Answer No.3:** Not applicable.

**Comments:** By definition, the balcony is not an occupiable space. The flue vent location must comply with Section 5.6.1. Identification of an occupiable space is not relevant to determination of separation distances. Table 5-1 specifies a minimum separation distance of outdoor air intakes, including doors and windows that are required as part of a natural ventilation system, from “flues from combustion appliances and equipment.”