

Update No. 1

CAN/CSA-B149.1-05

February 2007

Note: General Instructions for CSA Standards are now called Updates. Please contact CSA Information Products Sales or visit www.ShopCSA.ca for information about the **CSA Standards Update Service**.

Title: *Natural gas and propane installation code* — originally published January 2005

Revisions issued: Supplement No. 1 — January 2007

If you are missing any updates, please contact CSA Information Products Sales or visit www.ShopCSA.ca.

The following revisions have been formally approved and are marked by the symbol double delta ($\Delta\Delta$) in the margin on the attached replacement pages:

Revised	Clause 8.2.3
New	None
Deleted	None

CAN/CSA-B149.1-05 originally consisted of **286 pages** (xii preliminary and 274 text), each dated **January 2005**. It now consists of the following pages:

January 2005	vii–xii, 5–8, 11–14, 23, 24, 27, 28, 37–42, 45, 46, 55–66, 69–74, 77–80, 85–88, 91–94, 97–216, 219–232, and 235–274
January 2007	iii–vi, 1–4, 9–10A, 15–22, 25, 26, 29–36A, 43–44A, 47–54E, 67–68A, 81–84, 89, 90, 95–96A, 217, 218, 233, and 234
February 2007	75 and 76

- Update your copy by inserting these revised pages.
- Keep the pages you remove for reference.

8.2.2

Except as permitted in Clause 8.2.3, the free area of the outdoor **air supply** required by Clause 8.2.1 shall be determined from Table 8.1 for an **appliance** having a **draft-control device** and from Table 8.2 for an **appliance** not having a **draft-control device**, using the total input of all **appliances** in the **structure** or **enclosure**. If an **appliance** with a **draft-control device** and an **appliance** without a **draft-control device** are installed within the same **structure** or **enclosure**, the required free area of the **air-supply** opening shall be the greater of

- (a) that required by Table 8.1, using the total input of only those **appliances** having **draft-control devices**; or
- (b) that required by Table 8.2, using the total input of all **appliances**.

ΔΔ 8.2.3

An outdoor **air supply** shall not be required for a single water heater with an input of 50 000 Btuh (15 kW) or less within an **enclosure** or **structure** where there are no other **appliances** that require an **air supply**. Except for **direct vent** water heaters, when the water heater is contained in an **enclosure**, permanent openings shall be provided as described in Clause 8.2.6.

8.2.4

An outdoor **air supply** sized in accordance with Clause 8.2.5 shall be provided for an **enclosure** or a **structure** in which an **appliance** is installed when the **enclosure** or **structure** is neither constructed as described in Clause 8.2.1(a) nor complies with Clause 8.2.1(b).

8.2.5

The free area of the outdoor **air supply** required by Clause 8.2.4 shall be determined from Table 8.3 for an **appliance** having a **draft-control device** and Table 8.4 for an **appliance** not having a **draft-control device**, using the total input of all **appliances** in the **structure** or **enclosure**. If an **appliance** with a **draft-control device** and an **appliance** without a **draft-control device** are installed within the same **structure** or **enclosure**, the required free area of the **air supply** opening shall be the greater of

- (a) that required by Table 8.3, using the total input of only those **appliances** having **draft-control devices**; or
- (b) that required by Table 8.4, using the total input of all **appliances**.

Table 8.1
Combustion/dilution air requirements for appliances having
draft-control devices when the combined input is up to
and including 400 000 Btuh (120 kW) and the structure
complies with Clause 8.2.1(a) or (b)

(See Clauses 8.1.5, 8.2.2, and 8.21.2 and Tables 8.3 and 8.4.)

Total input of appliances*, thousands of Btuh (kW)	Required free area of air-supply opening or duct, in ² (mm ²)	Acceptable approximate round duct equivalent† diameter, in (mm)
25 (8)	7 (4 500)	3 (75)
50 (15)	7 (4 500)	3 (75)
75 (23)	11 (7 000)	4 (100)
100 (30)	14 (9 000)	4 (100)
125 (37)	18 (12 000)	5 (125)
150 (45)	22 (14 000)	5 (125)
175 (53)	25 (16 000)	6 (150)
200 (60)	29 (19 000)	6 (150)
225 (68)	32 (21 000)	6 (150)
250 (75)	36 (23 000)	7 (175)
275 (83)	40 (26 000)	7 (175)
300 (90)	43 (28 000)	7 (175)
325 (98)	47 (30 000)	8 (200)
350 (105)	50 (32 000)	8 (200)
375 (113)	54 (35 000)	8 (200)
400 (120)	58 (37 000)	9 (225)

*For total inputs falling between listed figures, use next largest listed input.

†These figures are based on a maximum equivalent duct length of 20 ft (6 m). For equivalent duct lengths in excess of 20 ft (6 m) up to and including a maximum of 50 ft (15 m), increase round duct diameter by one size.