

**Gas Water Heaters
Building (Planning) Regulation 35A**

Building (Planning) Regulation 35A requires suitable provision for the installation of a room-seated gas water heater in every bathroom in a building. This note specifies the arrangements considered generally to be acceptable.

2. In some instances (e.g. with special ducted flue systems), other arrangements may be accepted. Each case will be carefully considered on its merits and in the light of any special circumstances presented for consideration.

Size of the Aperture

3. A standard aperture should be :
- (a) 380 mm by 380 mm normally; or
 - (b) 240 mm by 240 mm when the bathroom is of such a size that only a shower could be fitted.
4. Non-standard apertures may be constructed provided that :
- (a) the size is to suit a specific water heater flue installed before completion of building; and
 - (b) if necessary, the aperture may be enlarged later to the appropriate standard size (the provision for which can be clearly discernible) without cutting reinforcing bars, re-positioning services or the like.

Location

5. The general requirements are as follows:
- (a) An aperture should be located in the clear face of an external wall, except that in buildings served by a permanently open and well ventilated balcony approach, apertures may be placed so as to vent into such balconies;
 - (b) As for the internal face of the wall, there should be an unobstructed area around the aperture. The minimum dimensions are as follows :-

50 mm above
100 mm to each side
150 mm below

- (c) The base of the aperture should be not less than 200 mm and not more than 2 400 mm above floor level.
 - (d) The aperture should be not less than 300 mm from any corner or from any other opening into the building (e.g. an openable window, a vent, an air-conditioner opening or another aperture);
 - (e) The aperture should be in a wall which has a clear space of not less than 1 500 mm between it and any facing wall or other part of a building, or site boundary. However, if the boundary abuts a street, an aperture may be provided in any wall abutting that street;
 - (f) An aperture should not be positioned directly below any fixed clothes drying racks installed during the construction of the building. Flue terminal guards (supplied/designed by the appliance manufacturers) should be fitted at aperture locations if selected water heating appliances do not incorporate an overheating protector.
 - (g) The water heater, when fitted, should not cause obstruction or inconvenience to the normal use of the room in which it is installed, and should be readily accessible for use; and
 - (h) The length of the hot water pipes from the water heater should comply with the requirements of Waterworks Regulation 19 (Cap 102).
6. For apertures facing into an enclosed space (such as a light well) :
- (a) The entire enclosed space should contain no obstruction to restrict a vertical flow of air;
 - (b) The enclosed space should be ventilated to the external air below the lowest aperture so as to maintain the air flow. The area of the vents providing this ventilation should be not less than 0.05 m² for each aperture which faces into the enclosed space. No vent may have any internal dimension less than 200 mm; and
 - (c) The minimum plan dimension of the enclosed space in relation to its height should be -
 - not less than 3 m - not more than 10 storeys high
 - not less than 4 m - between 11 - 19 storeys high
 - not less than 5 m - 20 or more storeys high
7. For apertures facing into a re-entrant :
- (a) The minimum plan width of the re-entrant should be not less than 1.5 m;

/(b)....

- (b) At each storey, any obstruction (e.g. tie beam) at the open end of a re-entrant may not reduce the vertical open area by more than 20%; and
- (c) The entire re-entrant should contain no obstruction to restrict a vertical flow of air.

8. With respect to the location of the standard aperture for water heaters, please refer to the drawing at Appendix A.

Sealing

9. When a gas water heater is not fitted at the time of construction, a standard aperture must still be provided. There is no objection to it being sealed. However, any such sealing should be of easily removable brickwork or blockwork. Moreover, any aperture so sealed should be clearly discernible (e.g. by means of recessing) from the inside of the building.



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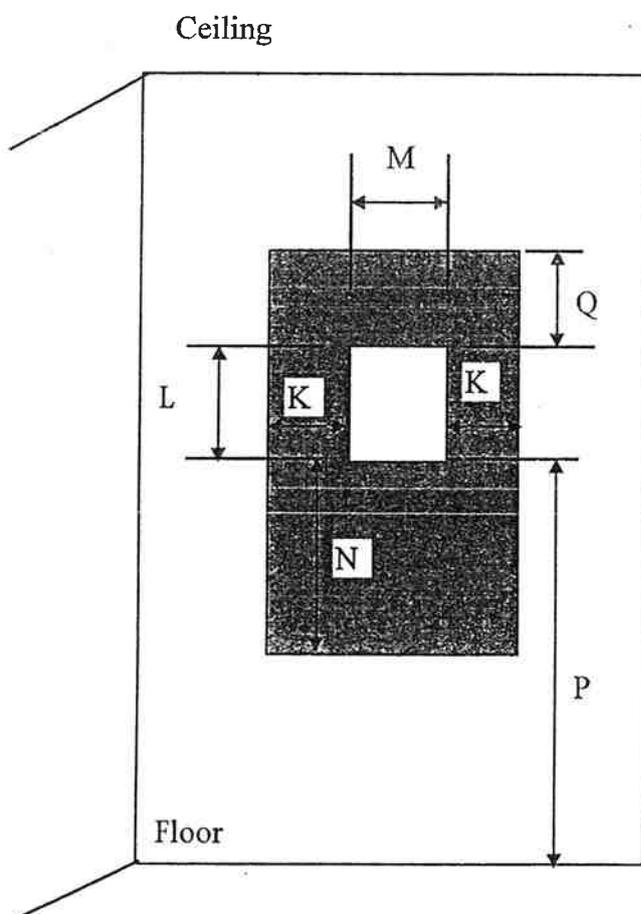
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ACCEPTABLE LOCATION OF
ROOM-SEALED WATER HEATER TERMINAL

INTERNAL VIEW



Dimension		Minimum
K	Unobstructed Area	100 mm
N		150 mm
Q		50 mm
P	Height Above floor	200 mm (2400 max.)
L x M	Standard size	380 x 380 mm or 240 x 240 mm
	Non standard	to suit

* Unobstructed area shaded