

3.3 Floor Protection and Clearances for Uncertified Appliances

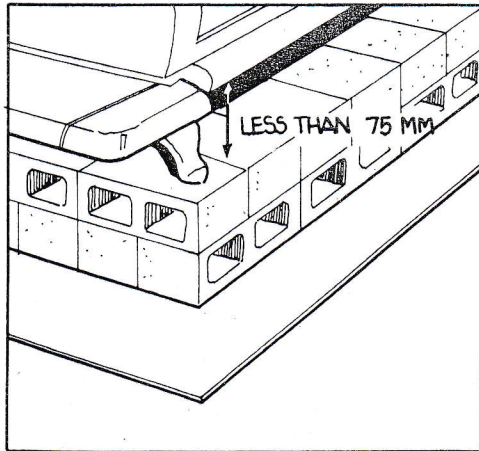
(B365-1984; Clause 7.1.2 — 7.1.6, Mounting of Appliances)

The minimum floor protection for woodburning appliances placed on combustible floors is a noncombustible surface extending 450 mm (18") beyond any side with a loading door, and 200 mm (8") on all other sides. The purpose of the noncombustible surface, or floor pad, is to prevent damage to the floor from hot embers which may fall from loading or ash removal doors. The pad is not intended to protect the floor from radiation coming from the bottom of the appliance.

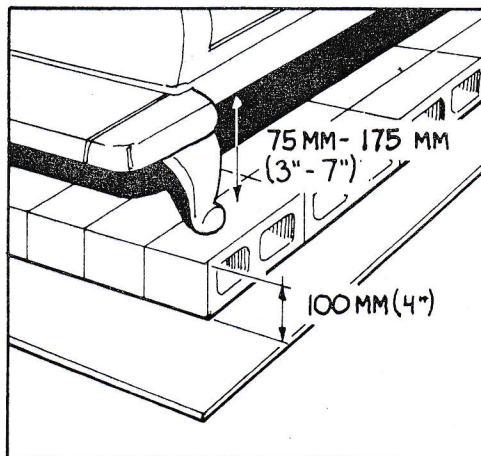
Any continuous, noncombustible material can make a suitable floor pad. Sheet metal or ceramic tiles with grouted joints are commonly used because they can handle the weight loading and abrasion of fuel loading. Brick or flagstone may also be used as floor pads provided the joints are mortared or grouted. When deciding on the materials to be used for a floor pad, consider the weight and normal wear to which it will be exposed. Make sure that tile, brick or flagstone floor pads have enough support to prevent cracking of grout and loosening of the pieces.

Radiation from the bottom of uncertified appliances can overheat combustible floors. Specified forms of protection are based on the distance above the floor that the legs support the appliance. These requirements are complicated, so you should always refer to B365 to make sure your interpretation is correct.

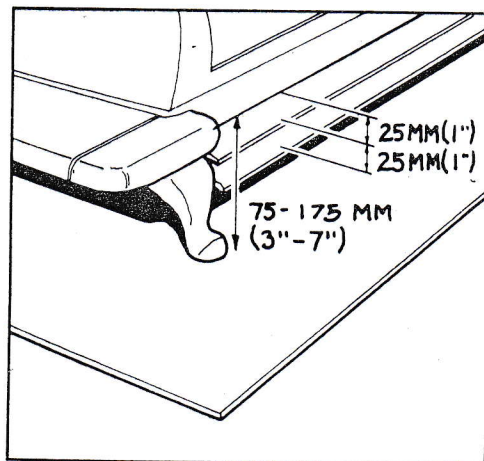
3. CLEARANCES FOR UNCERTIFIED APPLIANCES



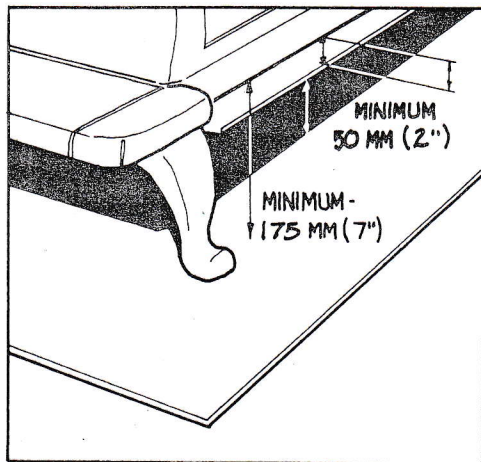
Appliances with less than 75 mm (3") floor clearance require floor protection consisting of two courses of 100 mm (4") thick hollow masonry, clay or concrete units arranged so that the hollow cores in the two courses are at right angles to each other and will permit air circulation through them. Standard 100 mm (4") concrete blocks are suitable for this job. The layer of hollow blocks must be at least as large in area as the appliance bottom to protect the floor from radiation.



Two approaches to floor protection are available for uncertified appliances with between 75 mm (3") and 175 mm (7") floor clearance. The first is a single course of hollow masonry units arranged to allow air circulation through the hollow cores. The second approach allows the appliance to be mounted directly on the floor pad if two sheet metal plates the area of the appliance bottom are installed between the bottom of the appliance and the floor pad. The sheet metal should be at least 0.55 mm (0.022") thick and the two sheets should be mounted at least 25 mm (1") apart and 25 mm (1") from the appliance bottom.



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Uncertified Appliances with more than 175 mm (7") floor clearance may be mounted directly on the floor pad if a single sheet metal plate is installed at least 50 mm (2") from the appliance bottom and at least 50 mm (2") from the floor pad. The attachment of these radiation shields should be permanent and made with non-combustible material or by attachment directly to the appliance legs. Bottom radiation shields should not rest on the floor on short legs.

A question of interpretation arises in the application of the rules to cooking ranges. The firebox of a range is often about 450 mm (18") above the floor and is separated from the floor by grates, an ash pan, and the base. The ash pan and base assembly of a conventional, uncertified range could be viewed as meeting the requirements for floor protection as long as a proper floor pad is provided. However, according to the strict interpretation of Standard B365, an additional shield may be needed under the firebox area. If in doubt, install a shield or check with the local inspection agency for their interpretation.

Flue gases pass under the oven of many cook stoves. This area may need shielding to protect the floor from radiation. If the flue gas passage under the oven is single-wall, protection for the floor will be needed. A simple sheet metal shield suspended 50 mm (2") from the bottom of the oven will eliminate the risk of overheating the floor.

What is a Combustible?

A combustible is anything that will burn. Wall paper, wood studs and paneling are the obvious examples of combustible material. Fire rated or fire resistant gypsum board (dry-wall) panels are sometimes thought to be noncombustible. However, for the purposes of establishing clearance requirements for solid fuel burning appliances, all gypsum products should be considered combustible.

Even if a wall has a noncombustible surface of tile or brick slices, it is considered combustible if the surface is mounted on combustible material such as gypsum board and wood studs. Only a wall of concrete, brick or one made of metal studs and a totally noncombustible covering can be considered noncombustible.