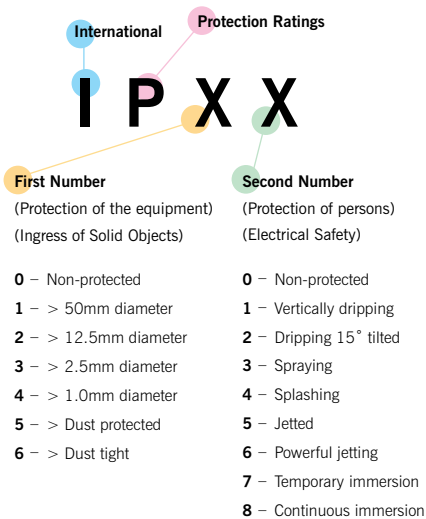


IP REQUIREMENTS

FOR INSTALLATION OF FANS IN BATHROOMS AND SHOWERS

As a result of European standardisation, Amendment 3 of the 16th addition of the IEE Wiring Regulations came into effect in April 2000. This outlined the new zoning and ingress protection criteria for bathroom fans, having effect on product safety and installation location. To achieve IP ratings are rigorously tested using a series of graded water tests and location advice ensures installers and users are not at risk at operating products in unsuitable areas.



To achieve IP Ratings electrical appliances are rigorously tested.

IP Ratings – IPX4

To achieve the electrical protection level equivalent to level 4, a fan is continuously sprayed with fine water jets for ten minutes whilst constantly running. The fan is then left running for a further ten minutes after which it is checked for water ingress.



Locational Zones

In addition to tougher product safety, the standards will have an effect on where products are located within the bath/shower room area. The standards will clarify the current confusion regarding the siting of electrical appliances and will reduce the risk to end users operating products within these areas. The new wiring regulations will assist specifiers and installers with the selection and positioning of the correct electrical product.

The new regulations will divide the 'location containing the bath or shower' into four zones – provisionally named 0, 1, 2 and 3*.

Zone 0

Represents the central layer, the interior of the bath tub or shower, unless there is no shower basin or the shower head is demountable. Electrical appliances will have an IP (International Protection) X7 Rating which means the product must be capable of temporary immersion.

Zone 1

Wraps around and on top of Zone 0 and is limited up to the horizontal plane 2.25m above the floor and by the bath/shower room wall and floor. IPX4 rating with or without SELV will be required.

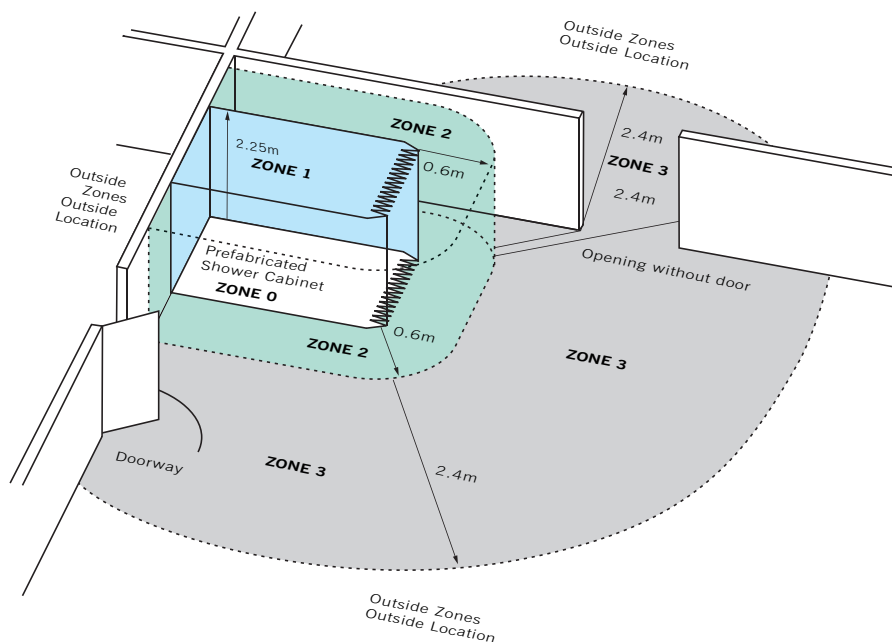
Zone 2

Reaches 0.60m outside of Zone 1 which, in the average bathroom should reach the ceiling. Most electrical installations are within this Zone. IPX4 rating (protection against splashing) with or without SELV will be required.

Zone 3

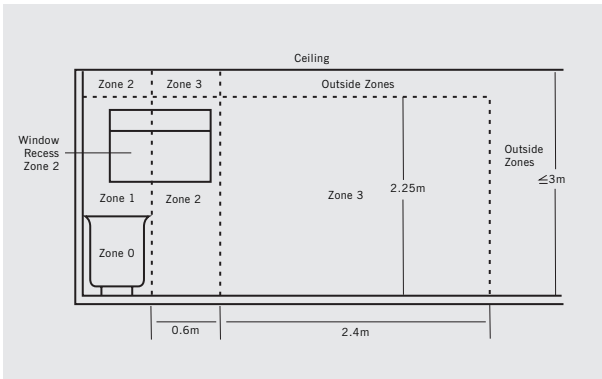
The outer layer, Zone 3 is therefore the rest of the bath/shower room.

* Zones 0, 1, 2 and 3 could be renamed A,B,C and D at a later stage.



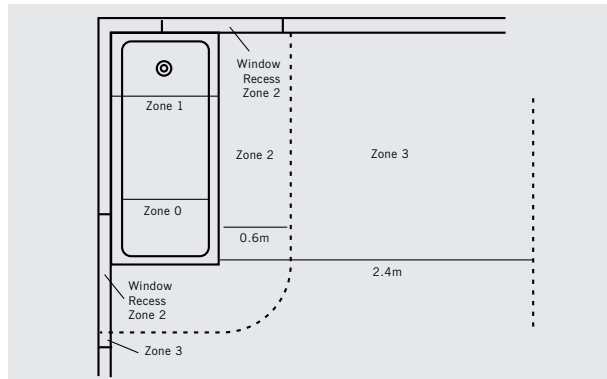
Examples of Zone Dimensions

Bath Tub

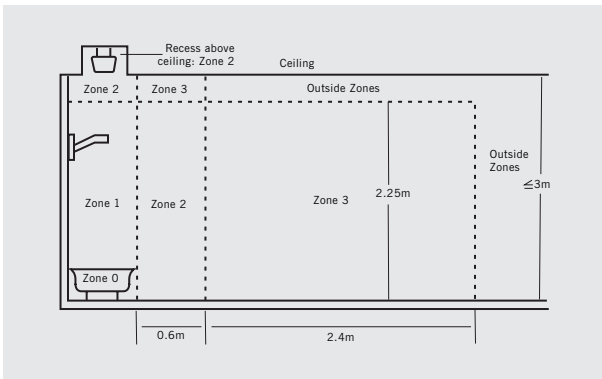


Plan view examples of Zone Dimensions

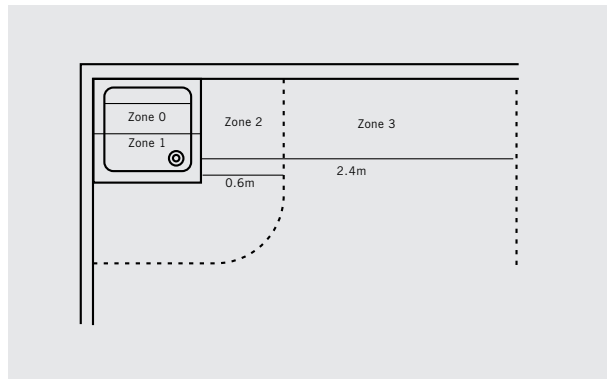
Bath Tub



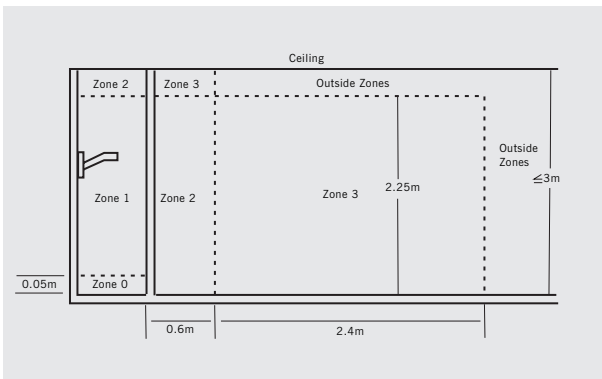
Shower basin



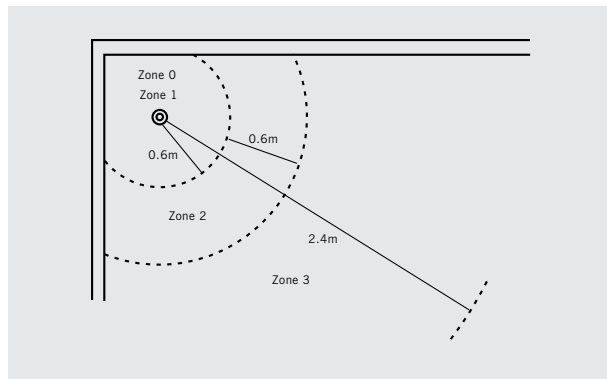
Shower basin



Shower without basin but with fixed partition



Shower without basin but with fixed partition



Select Bathroom and Shower Fans – IPX4 Rated

Pages 28–35

Elite Bathroom Fans – IPX4 Rated

Pages 36–41

Affresco Bathroom Fans – IPX4 Rated

Pages 42–43