

Product Placement

Westlab advises that compliant product placement is a mandatory requirement of, and addressed in AS2243.9:2009:

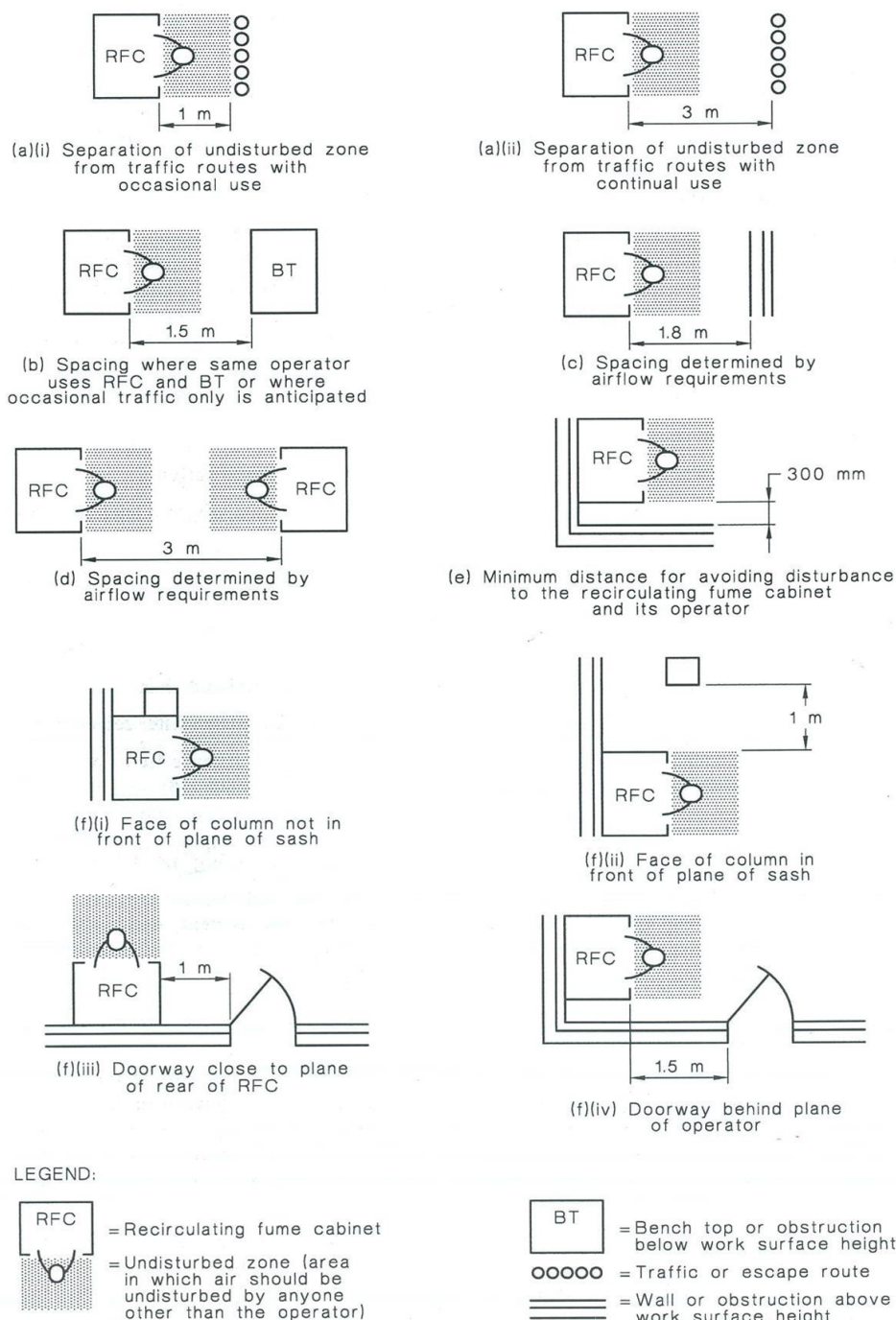


FIGURE 2 SPACINGS THAT AVOID UNDUE DISTURBANCE OF AIRFLOW

See over...

5.1 SITING

5.1.1 General

Recirculating fume cabinets shall be sited in areas that allow for safe and effective operation. Recirculating fume cabinets, including portable and trolley mounted cabinets, shall be sited in accordance with Clause 5.1.2 because airflow disturbances from traffic routes and other air handling devices can have adverse effects on fume containment.

Environmental factors that can affect the efficiency of filtration and retention of absorbed fumes, such as temperature and relative humidity, should also be considered when siting a recirculating fume cabinet. The intended use of the cabinet, both tasks and frequency, should also be considered to ensure ongoing safe operation. The limitations of use outlined in Clause 2.2 shall be considered before using the cabinet.

5.1.2 Avoiding airflow disturbances to the recirculating fume cabinet

5.1.2.1 Traffic routes

The distance from the working aperture to any traffic route shall be at least 1 m, so as to preserve a zone undisturbed by anyone other than the operator (see Figure 2(a)). Where the traffic route within the laboratory is in continual use, the minimum distance shall be 3 m.

NOTE: Pedestrian traffic in front of the recirculating fume cabinet can generate turbulent eddies with air speeds greater than 2 m/s.

5.1.2.2 Opposing bench tops

The distance between the working aperture and any opposing bench or other obstruction at or below work surface height shall be at least 1.5 m (see Figure 2(b)) where there is only one operator in the area or where occasional traffic only is anticipated.

5.1.2.3 Opposing walls, other obstructions and other operators

There shall be no opposing wall, other major obstruction likely to significantly affect the airflow or opposing bench used by another operator, within 1.8 m of the working aperture (see Figure 2(c)).

5.1.2.4 Other recirculating fume cabinets or fume extraction equipment

No fume cabinet shall be sited in a position where it is likely to affect, or be affected by, the airflow into another recirculating fume cabinet or other fume extraction equipment. There are no restrictions regarding the positioning of recirculating fume cabinets side by side, or back to back. The distance between working apertures of opposing recirculating fume cabinets (or fume cupboards) shall not be less than 3 m (see Figure 2(d)).

5.1.2.5 Air supply registers

The cross-draughts from room air supply registers shall be less than 0.1 m/s at the face of the recirculating fume cabinet. If no satisfactory alternative site exists, the supply register should be modified to reduce the cross-draughts.

5.1.2.6 Architectural obstacles

Recirculating fume cabinets should not be positioned with either side closer than 300 mm to a wall or similar smooth obstruction that extends past the line of the face of the fume cabinet (see Figure 2(e)).

Obstructions likely to create eddies in the air-stream flowing into the working aperture of the recirculating fume cabinet, e.g. architectural columns, should be at least 1 m to the side of the fume cabinet, if in front of the plane of the face (see Figures 2(f)(i) and 2(f)(ii)).

No doorway should be within 1.5 m of the face or within 1 m of the side of the recirculating fume cabinet. Direction of door opening should be in accordance with Figures 2(f)(iii) and 2(f)(iv).

5.1.3 Exits and escape routes

The possibility of a fire or explosion occurring in a recirculating fume cabinet should always be considered. A recirculating fume cabinet shall not be sited in a position which requires evacuating personnel to pass close to the cabinet. Adequate safe escape routes shall be provided.

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