

Gaps around windows

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Question

What is the maximum gap between frame and masonry that should be permitted for sealant around windows and doors?

Considerations

- BS 8213-4 'Windows and doors – Code of practice for the survey and installation of windows and external doorsets' gives guidance on the installation of windows and doors.
- A gap is required around a window and door to allow for thermal movement and this will vary depending on the frame material.
- A seal is required around frames to provide an effective weatherproofing/airtightness.

Answer

The following table shows the BS 8213-4 recommended gaps around window/door frames of different materials:

Material	Recommended gap per side in millimetres for structural openings		
	< 1.5m	1.5 to 3.0m	3.0m to 4.5m
PVC-U white	5	5	7.5
PVC-U non-white	7.5	7.5	11
Timber	5	5	5
Steel	4	5	6
Aluminium	5	5	7.5
GRP	2.5	5	7.5

Notwithstanding the above table NHBC accepts a maximum gap for application of a sealant not exceed 10mm for openings up to 3.0m wide and 15mm for wider openings. Gaps 5mm wide or more should have a backing strip to the sealant and the depth of sealant should be at least 5mm.

Where frames are tight to the opening, such as with a checked reveal or the joint width is less than 5mm, the sealant should form a fillet with an overlap of 6mm to non porous surfaces and 10mm to porous surfaces.



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