Resisting Rainwater Penetration

Summary

Last updated: January 2023

01
Assess the severity of exposure to wind driven rain. The UK West coast is generally windier and wetter.

02
Assess the relative exposure of the project. Free standing wall and parapets will be most severely exposed.

03
The water absorption of a brick has relatively little impact on the rainwater penetration.

04
Stronger mortars will generally reduce the amount of rainwater penetration.

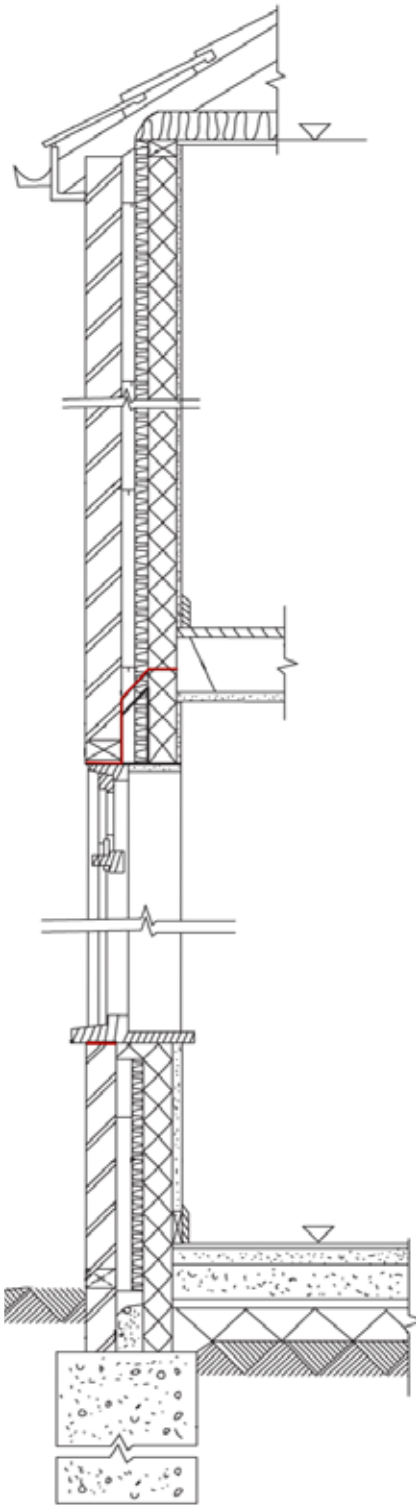
05
Well tooled mortar joints will reduce the amount of water penetration. Bucket handle and weather struck are the most effective.

06
Wider cavity will reduce the amount of water penetration.

07
A section of clear cavity, rather than fully filled insulation, will reduce the amount of water penetration.

08
Keeping the cavity clear of mortar drops will prevent creating a bridge for moisure.

09
Roof flashing should be installed in the mortar joint, underneath the cavity tray.



10
Overhanging copings will reduce the extent to which brickwork becomes saturated.

11
Fully filled mortar joints will reduce the amount of water penetration.

12
Cavity trays should include stops ends and weep vents.

13
Continuous cavity trays should be installed immediately above openings.

14
Larger areas of metal or glass can concentrate rainwater into brickwork, if there is no drip detail installed.

15
Cavity trays should be included under all sill, copings and cappings.

16
Half brick thick single skin walls, such as those used for garages, will let water through during prolonged wind driven rain.

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