Sulfate attack

Mortar is susceptible to deterioration by sulfate attack, especially when masonry is at a high saturation risk and/or where S1 designated clay bricks are specified. High saturation risks include:

- Below DPC
- Areas of severe or very severe exposure to driving rain
- Parapets
- Chimney stacks
- Retaining walls

Where the mortar is at risk of sulfate attack, sulfate resisting mortar should be specified.

6.1.7 Horizontal damp proof courses (DPC)

Horizontal DPCs shall be suitable for their intended purpose and be provided to prevent moisture rising or entering the home.

- DPCs should be of a flexible material such as:
  - Bitumen based materials (BS 6398, BS EN 14967).
  - Polyethylene (BS 6515, BS EN 14909). Polyethylene DPCs should not be used as cavity trays in walls, below copings or in parapets.
  - Other Proprietary materials with an appropriate third party product conformity certificate.
- DPCs should be laid on a mortar bed and correctly lapped at junction and corners. The depth of the lap should be the same width as the DPC.
- DPCs must be located at least 150mm above the external ground level.
- Damp proof membranes should be lapped with the DPC with a minimum overlap of 100mm.
- The DPC should not bridge any cavity unless it is acting as a cavity tray where a cavity is required (e.g. over a telescopic floor vent).

Please note, for further guidance on correct selection of DPC and cavity tray materials see ‘Appendix C.’

Rendering below DPC

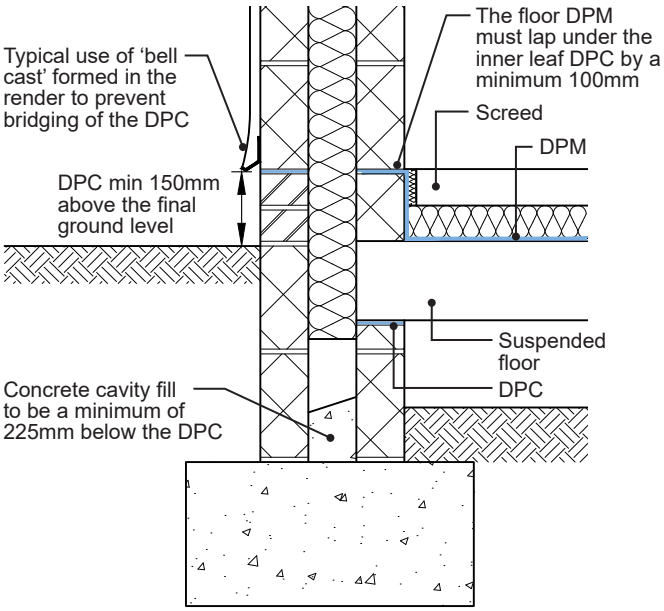
- Rendering below DPC should only be carried out using a specialist render manufacturer’s specification.
- A proprietary uPVC bead or stainless steel bead should be used above and below where the renders meet at the DPC.
- DPC should extend through the rendering system in between the bellcast beads or render stop system.
- For bellcasts, uPVC beads or stainless steel beads are acceptable.

Note: For further guidance on the application of render please see the ‘External Walls - Render’ section.

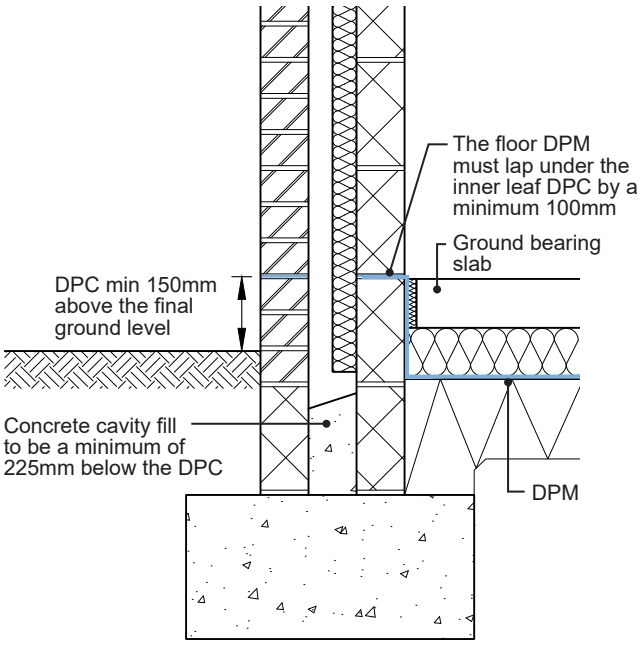
DPC and DPM arrangement

Suspended floor

Example shown with a rendered wall and beam and block floor



Ground bearing slab



Please refer to the ‘Drainage’ section for further guidance on drainage passing through external walls.