Unit 202: Changing practices over time

# Worksheet 5: 21st-century construction methods (Tutor)

1. What could be the consequences if a horizontal DPC in a cavity wall is punctured during installation?

Rising damp could occur, leading to long-term problems in the superstructure.

1. State **two** advantages of using cavity closers at the reveals of door and window openings.

Any two of the following:

* provides effective vertical DPC
* includes insulation to prevent cold bridging
* creates an air-tight seal at the reveal
* reduces cutting of masonry since no return needs to be formed

Any other correct answers can be accepted.

1. Research online and list **three** materials that can be used for cavity wall insulation.

Any three of the following:

* polyisocyanurate foam (PIR)
* mineral fibre batts
* chopped strands of mineral fibre
* bonded polystyrene beads.

1. From your researched list, find out which insulation materials completely fill the cavity (full fill) and which materials partially fill the cavity (partial fill).

Full fill: mineral fibre batts, chopped strands of mineral fibre, bonded polystyrene beads

Partial fill: polyisocyanurate foam (PIR)

1. Modern construction methods require a building to be airtight. How is the living area ventilated?

The interior of the building is ventilated through controlled vents.

1. How is partial-fill cavity wall insulation fixed to the inner leaf?

It is secured to the inner leaf using plastic clips fixed to the wall ties.

1. When fixing cavity wall insulation in place, what would be the consequence of allowing gaps to remain between sheets of insulation?

The gaps would allow heat transfer to take place. Energy efficiency would be affected.

1. Why are the joints between rigid insulation boards taped?

To ensure airtightness is maintained.