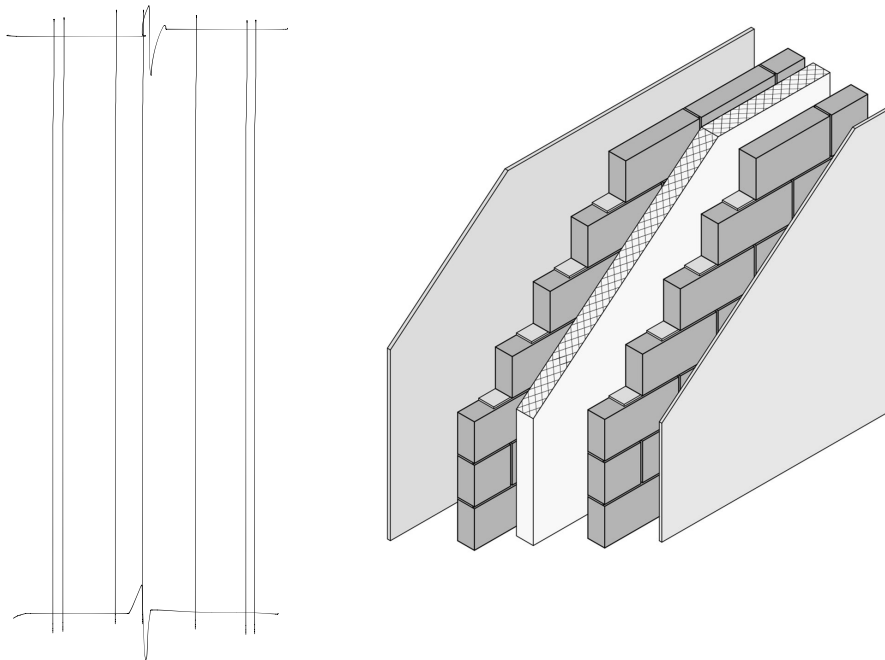


Chapter 15: Walls

1. What are the primary functions of the external walls of a dwelling?

2. Complete the sketch, label and dimension each component of the traditional concrete cavity wall shown below:



3. What is the function of the following components of the wall shown above?

• render:

• outer leaf:

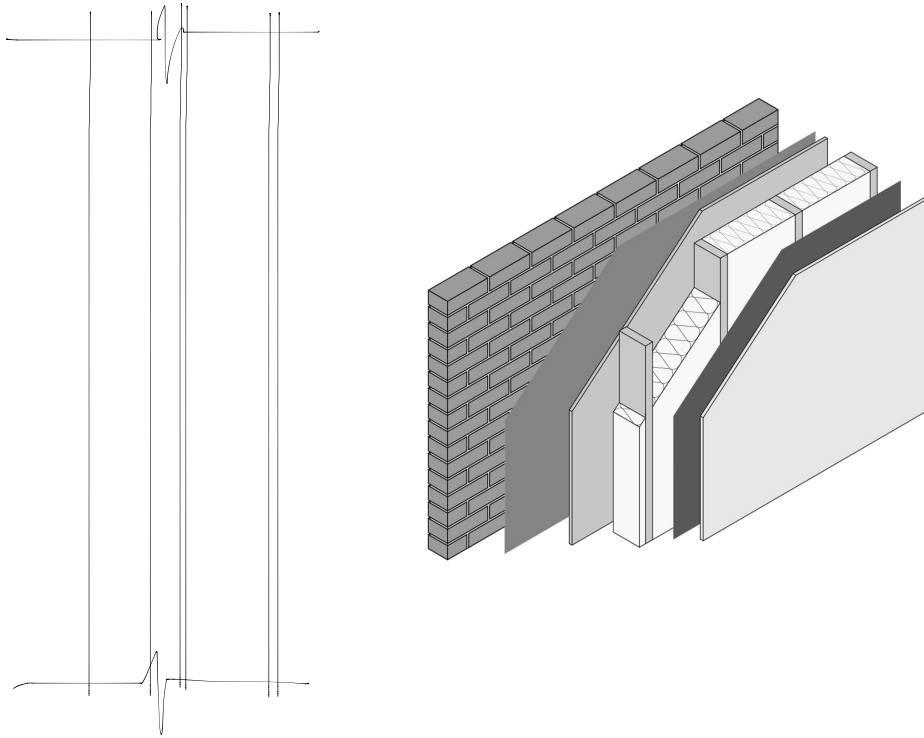
• wall tie:

• insulation:

• inner leaf:

• inner leaf:

4. Complete the sketch, label and dimension each component of the traditional timber frame cavity wall shown below:



5. What is the function of the following components of the wall shown above?

• breather membrane:

• timber frame structure:

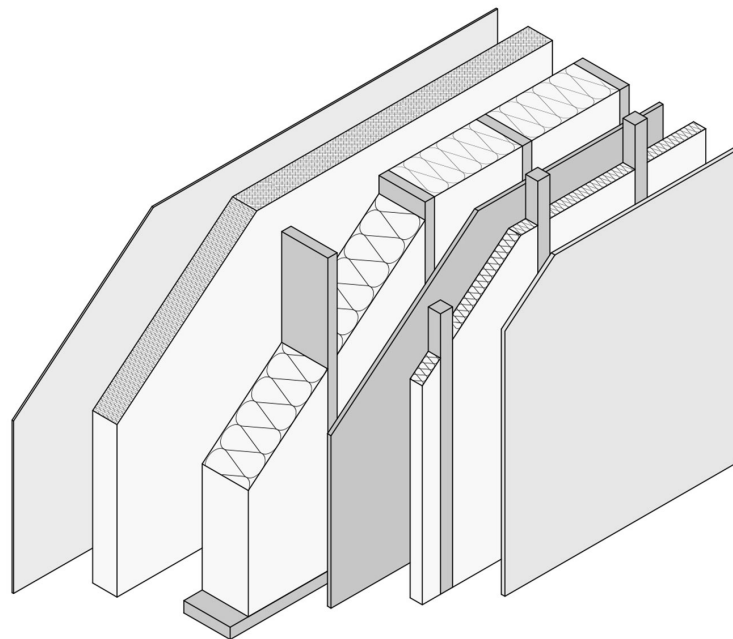
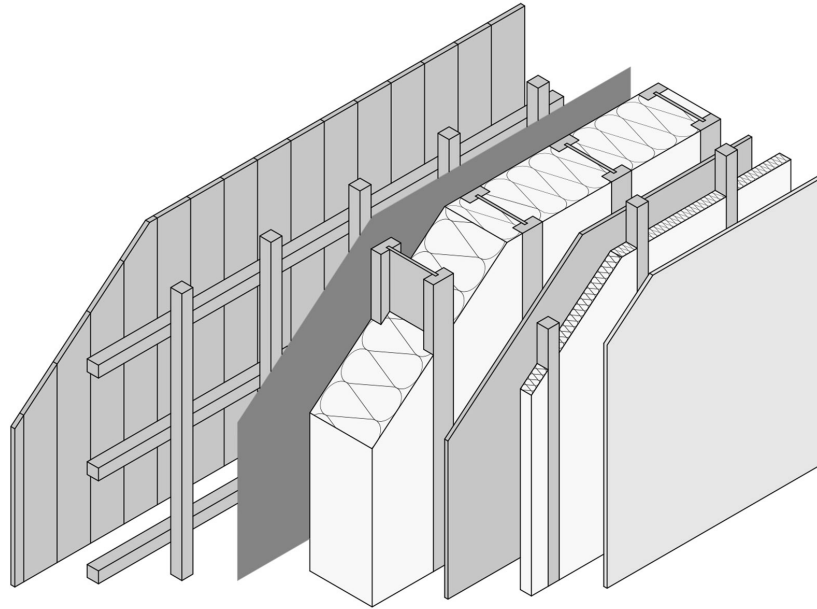
• AVCL:

• plasterboard:

6. Explain, using a neat annotated sketch, the need for low conductivity wall ties in a wide cavity passivhaus wall.

7. Generate a neat cross sectional sketch of a concrete external wall designed to meet the Passivhaus standard. Label and dimension the parts.

8. Label and explain the function of each of the components shown in the timber frame walls below.



9. Outline, using a neat annotated sketch, the procedure for applying a render to a concrete blockwork wall.

10. Outline, using a neat annotated sketch, one method for plastering a plasterboard stud wall.