



CHAPTER 11

TIMBER FRAME BUILDING



Timber Frame

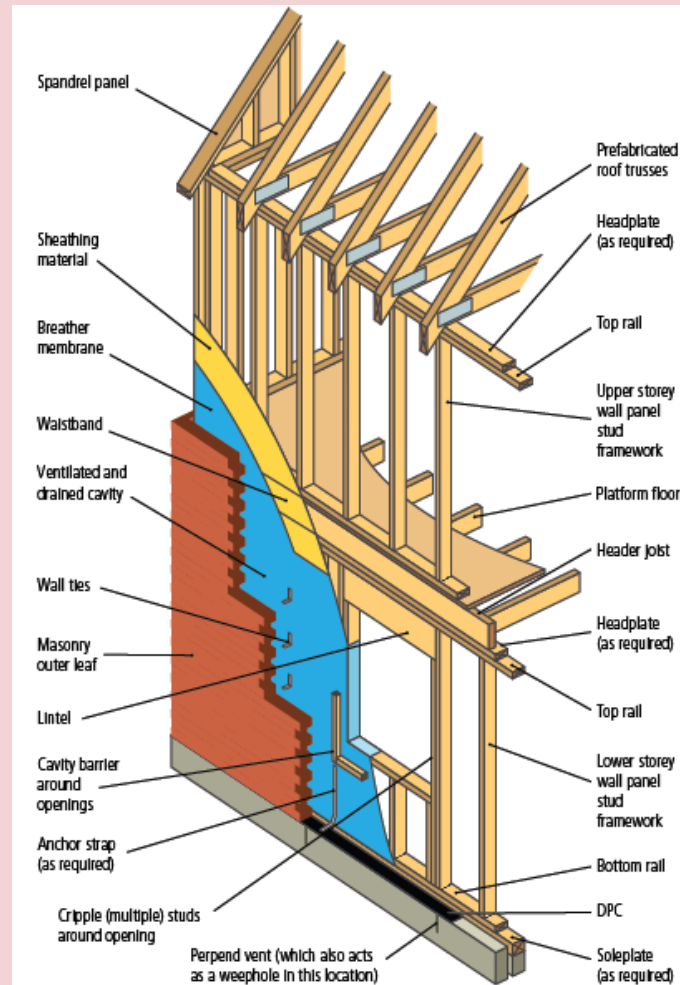
- Internal structure
- Prebuilt sections

Advantages

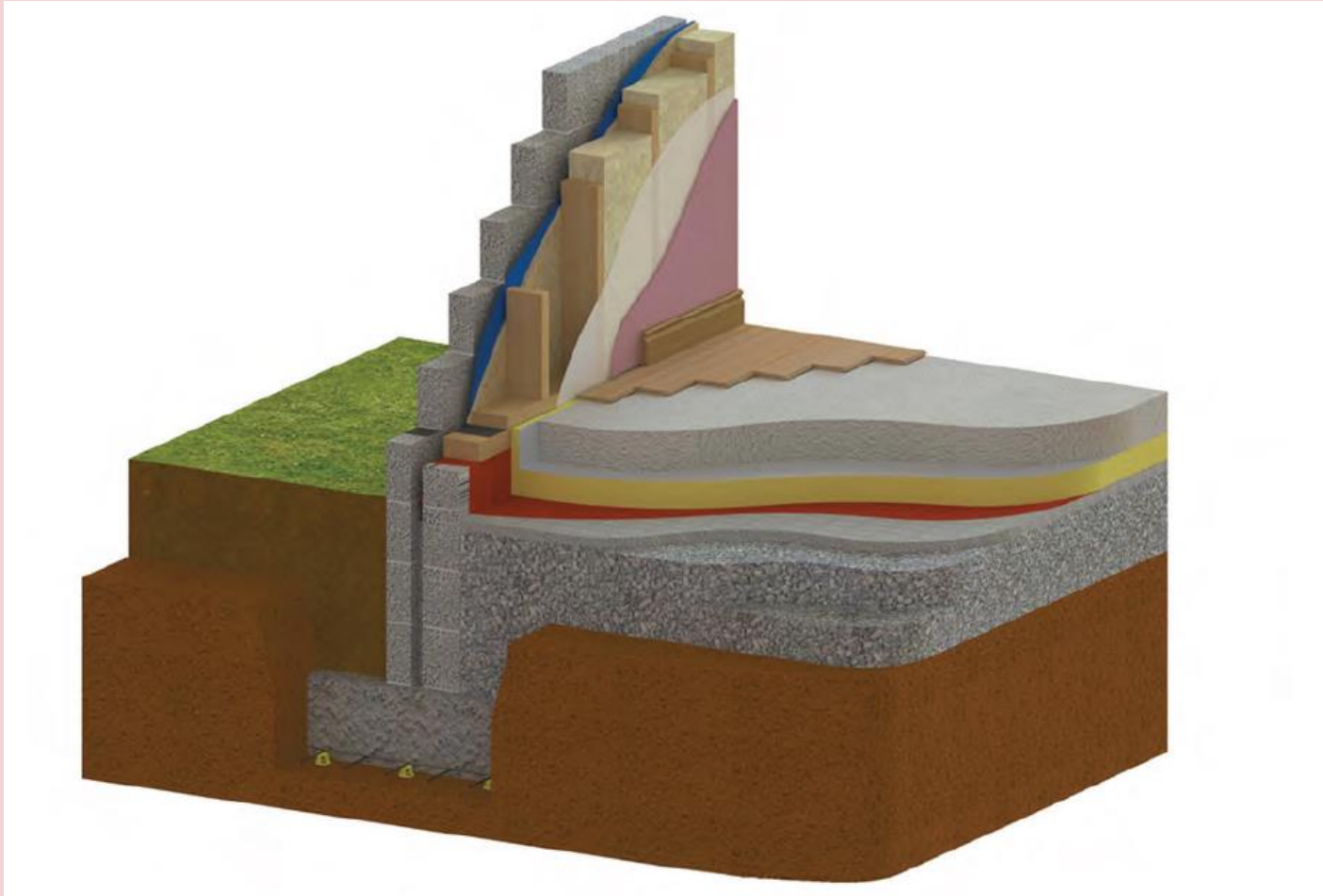
- Quicker
- More accurate measurement



Main Elements of Timber Frame

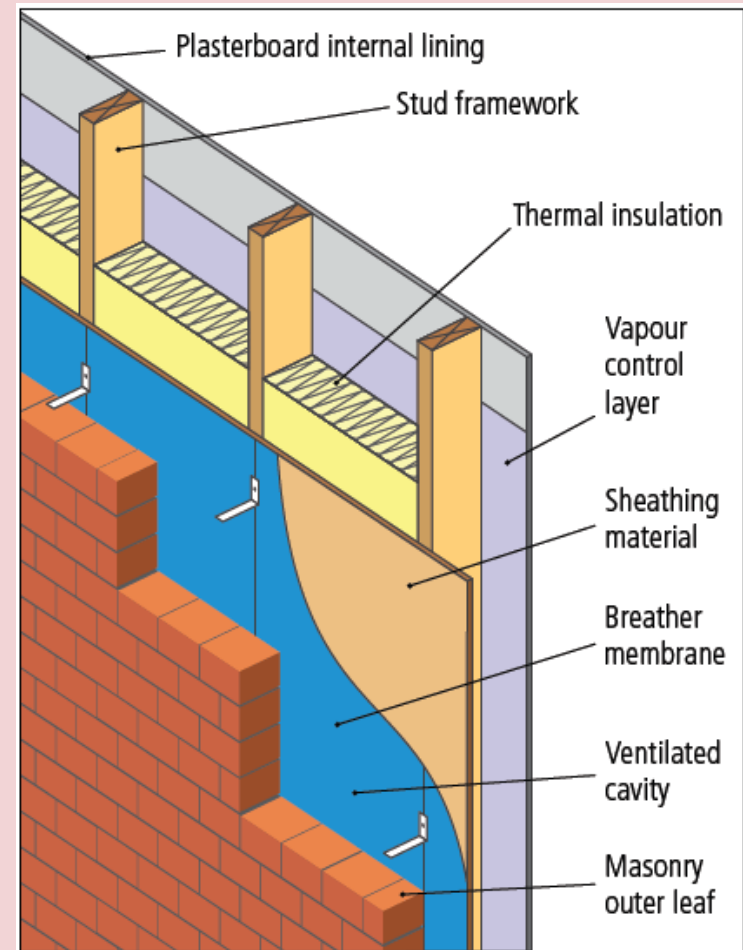


Timber Frame Foundations



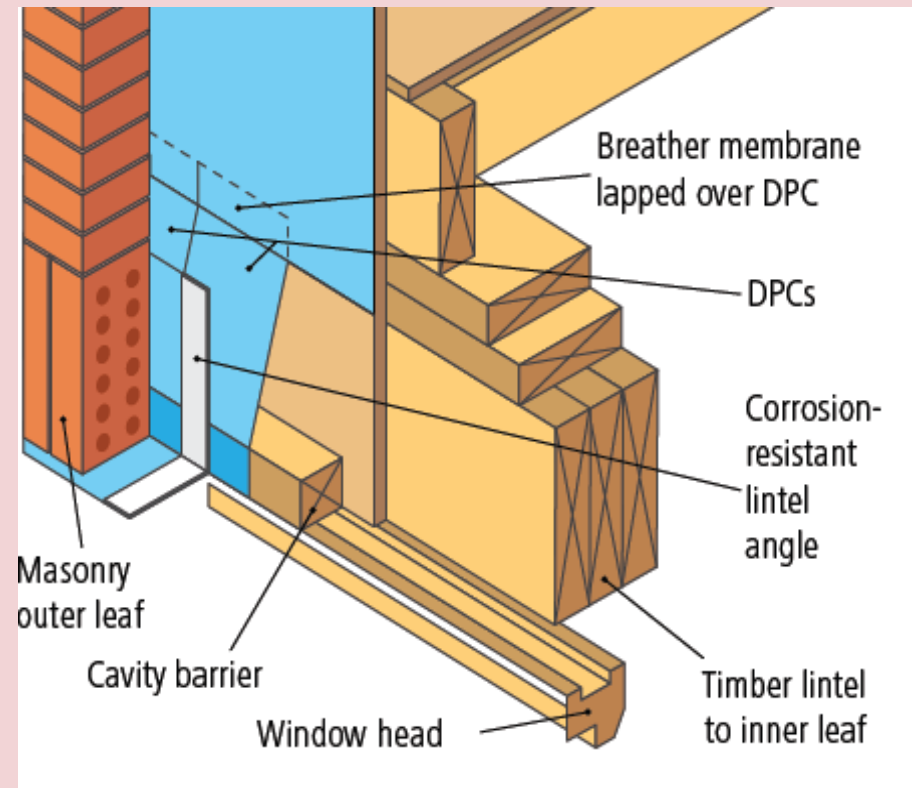
Timber Frame Panels

1. Plasterboard
2. Vapour membrane
3. Timber stud
4. Insulation
5. Plywood
6. Breather membrane



Timber Frame and External Envelope

- Wall ties bind the two leaves of the wall
- Openings in the frame require a lintel to bridge the gap
- A cavity closer is also required



Timber Frame Properties

- Heats up quickly
 - Insulation is within panel so heat is not lost in panel but returned to the room.
- Cools down quickly
- Concrete takes more energy to heat up but retains heat as a heat sink.
- Fire is a hazard
 - To combat this, plaster is fixed to the inner leaf.
- Fire barriers in the cavity at important places
 - Between party walls
 - External walls
 - Around eaves and opes



Party Wall

