

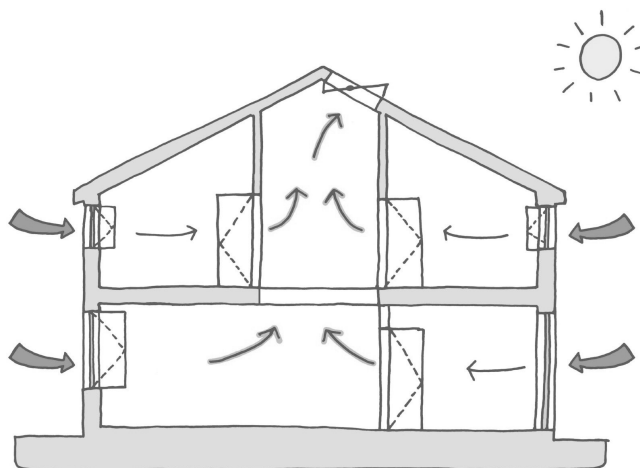
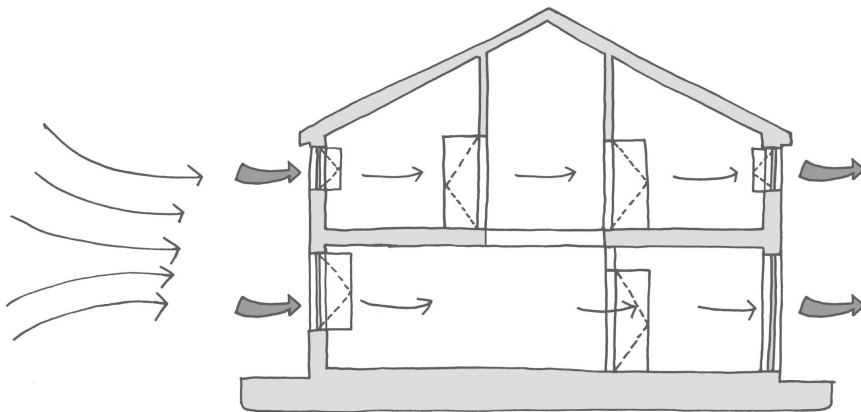
CONSTRUCTION TECHNOLOGY

Chapter 26: Ventilation

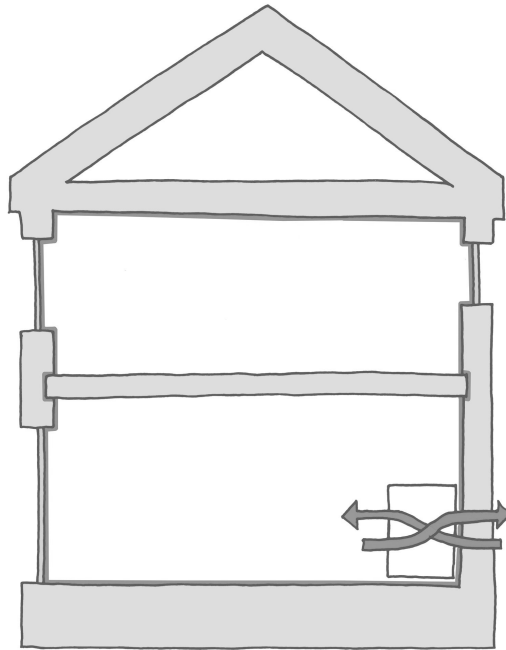
1. Ventilation is the term used to describe...

2. Outline the two approaches to ventilation:

3. Annotate the sketch shown:



4. Annotate and colour the sketch and explain the concept of controlled ventilation and mechanical ventilation.



5. State the functions of ventilation.

6. Outline the factors that determine air quality:

7. What are the minimum ventilation requirements (TGD F) for a...

kitchen:

bathroom:

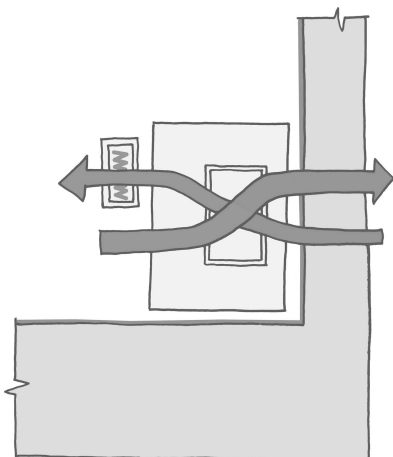
8. What are the three criteria for the air supply system in a Passivhaus?

9. What are the minimum ventilation (extract) requirements (Passivhaus) for a...

kitchen:

bathroom:

10. Annotate the sketch shown, and explain two ways in which heat is added to the incoming air.



11. Explain why it is important for a MHRV system to be balanced.

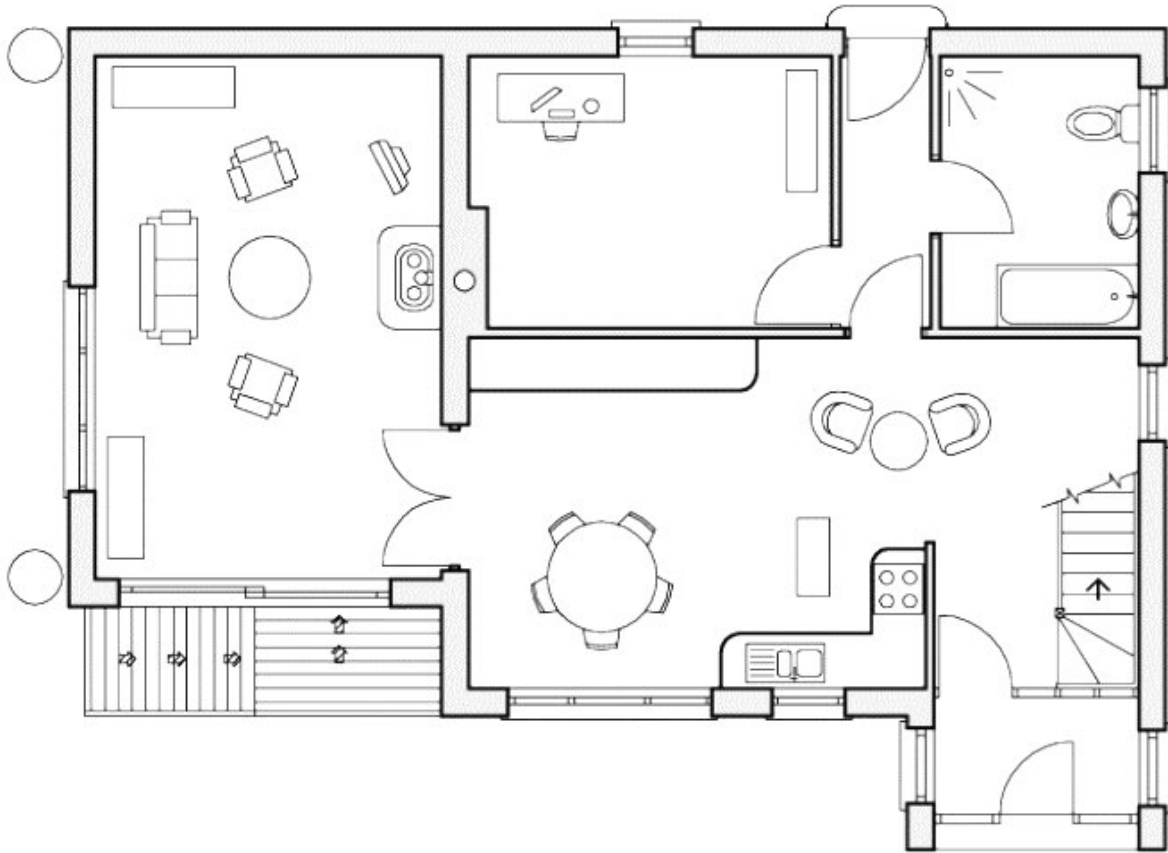
12. Explain, using notes and a neat annotated sketch, how the heat exchange takes place in a MHRV unit.

13. Explain, using notes and a neat annotated sketch, how summer bypass mode works..

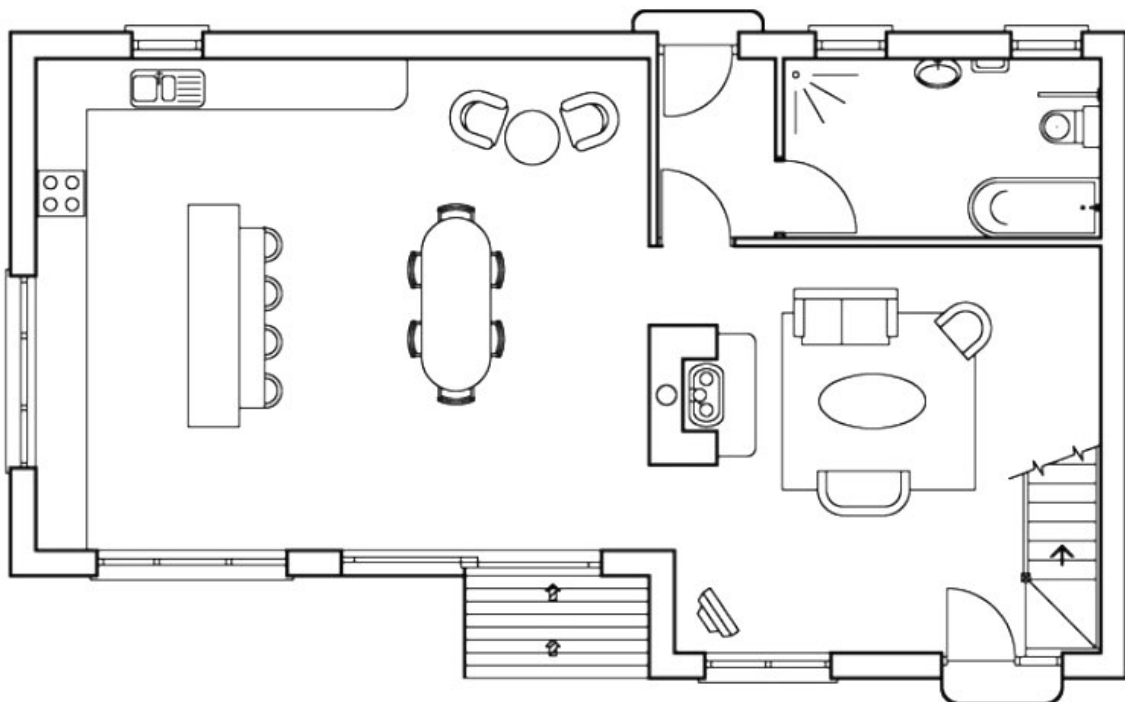
14. Explain, using notes and a neat annotated sketch, how and why the Coanda Effect is used.

15. Outline the guidelines for optimisation of the installation and performance of a MHRV system.

16. Indicate on the floorplan shown, the design layout for a MHRV system. Indicate the location of the MHRV unit, whether each space is being supplied to or extracted from and the direction of airflow in all ducts. (Hint: see legend on p.317 for colours/ symbols.)



17. Indicate on the floorplan shown, the design layout for a MHRV system. Indicate the location of the MHRV unit, whether each space is being supplied to or extracted from and the direction of airflow in all ducts.



18. Outline the guidelines for the maintenance of a MHRV system.

19. State and explain any three benefits of a MHRV system?

20. State and explain any three Passivhaus criteria for a MHRV system?
