

Successful delivery of Passivhaus

Jonathan Hines, Architype

Architype

- pioneering sustainable design for 30 years
- working throughout the UK from London and Hereford
- working across many sectors – education, housing, commercial, community and health
- projects ranging from £150k to £20+million
- Passivhaus now forms the majority of our work



Bushbury Hill Primary School





Oakmeadow Primary School





Swillington Primary School



Wilkinson Primary School



Chester Balmore Housing



University of East Anglia NRP Building



Herefordshire Archive and Records Office



Christ's Church Central, Sheffield



Plans - Ground Floor
1:50



One-off houses, Herefordshire



ArchiHaus - 150 Passivhaus house development, Herefordshire

Successful delivery of Passivhaus

- design
- costs
- procurement
- construction
- certification
- occupation

What is Passivhaus ?

- a rigorous **energy** standard
- a rigorous **comfort** standard
- a rigorous **quality assurance** standard

Design

- keep it simple in form
- keep it simple in detailing
- keep it simple in servicing

Design

- don't think 'boring'.....

Design

- don't think 'boring'.....

'elegant simplicity'



Design

'simplicity is the ultimate sophistication'

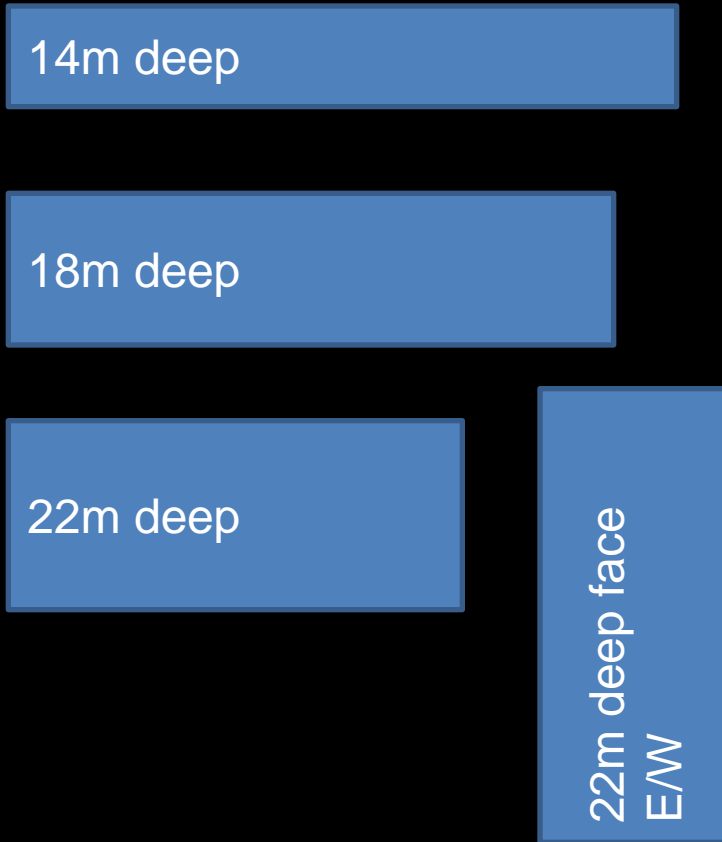


Design

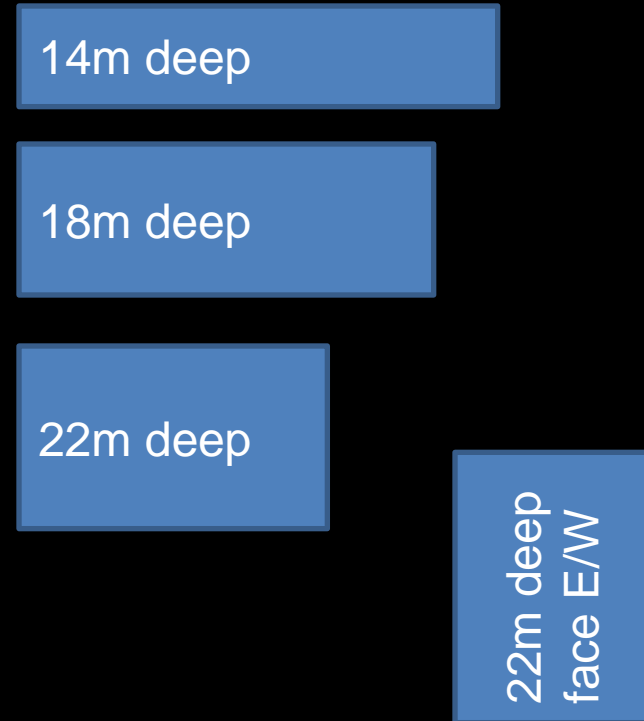
'what you put into a building makes it good, what you take out makes it great'



Simplicity of building form



Single storey

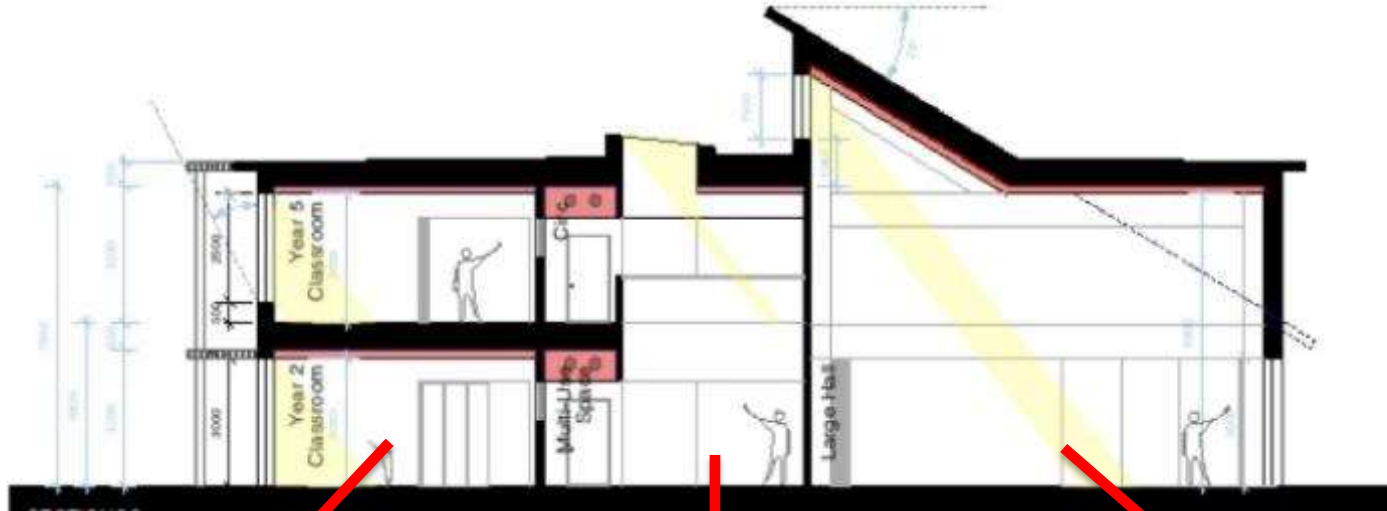


Two storey

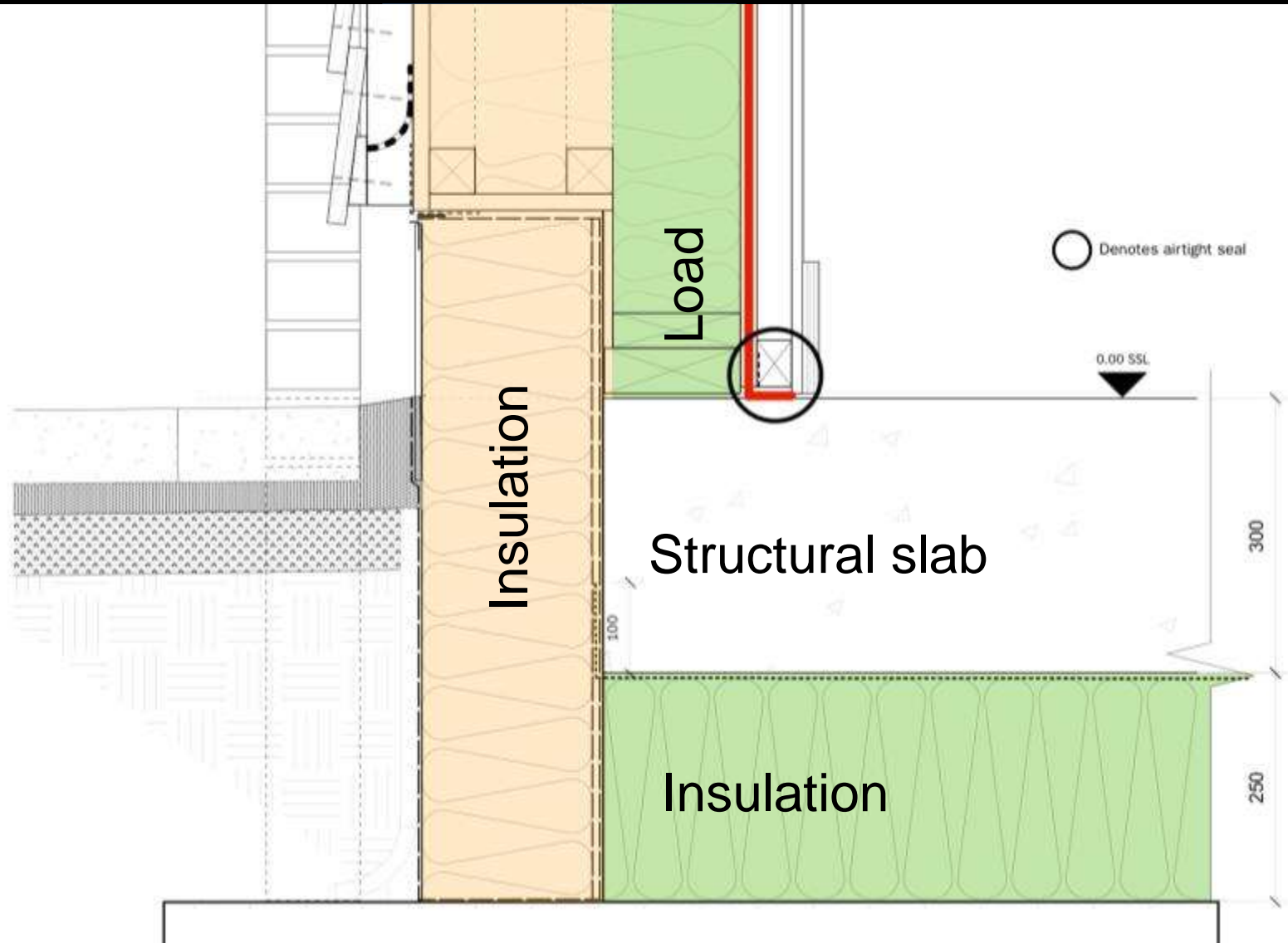
Simplicity of building form



Simplicity of building form

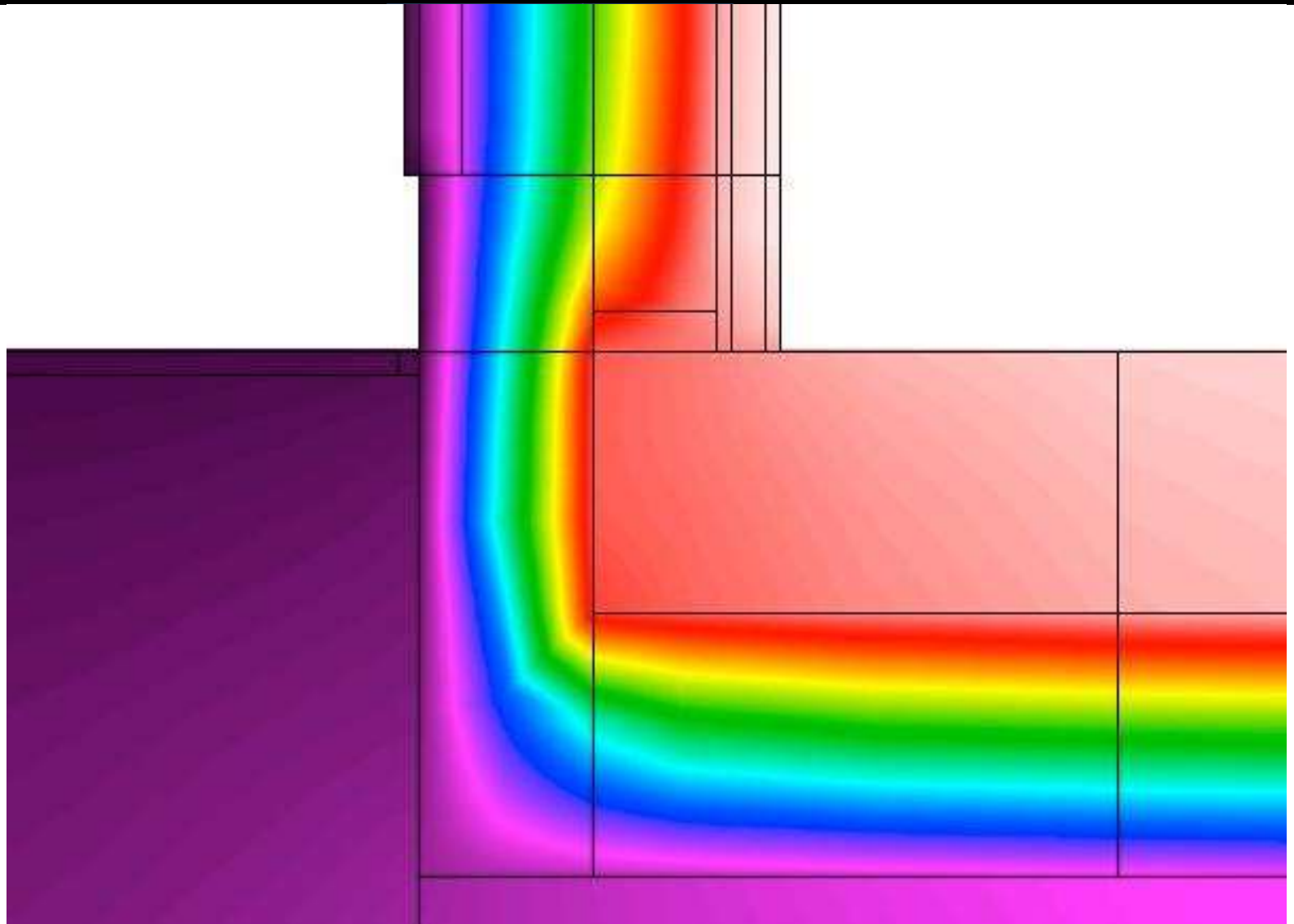


Simplicity of detailing



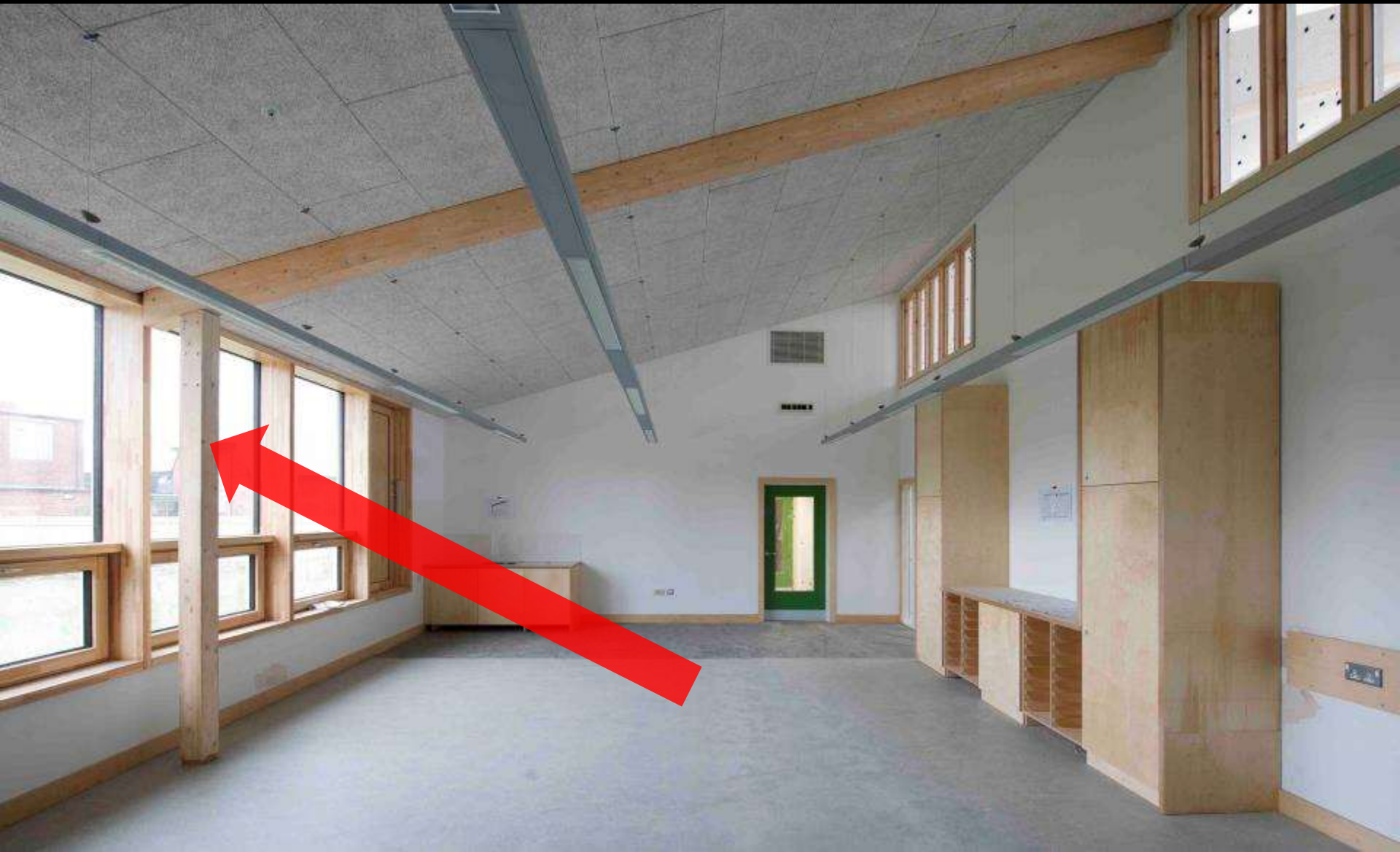
Model and test every detail.....

Simplicity of detailing



Model and test every detail.....

Simplicity of detailing



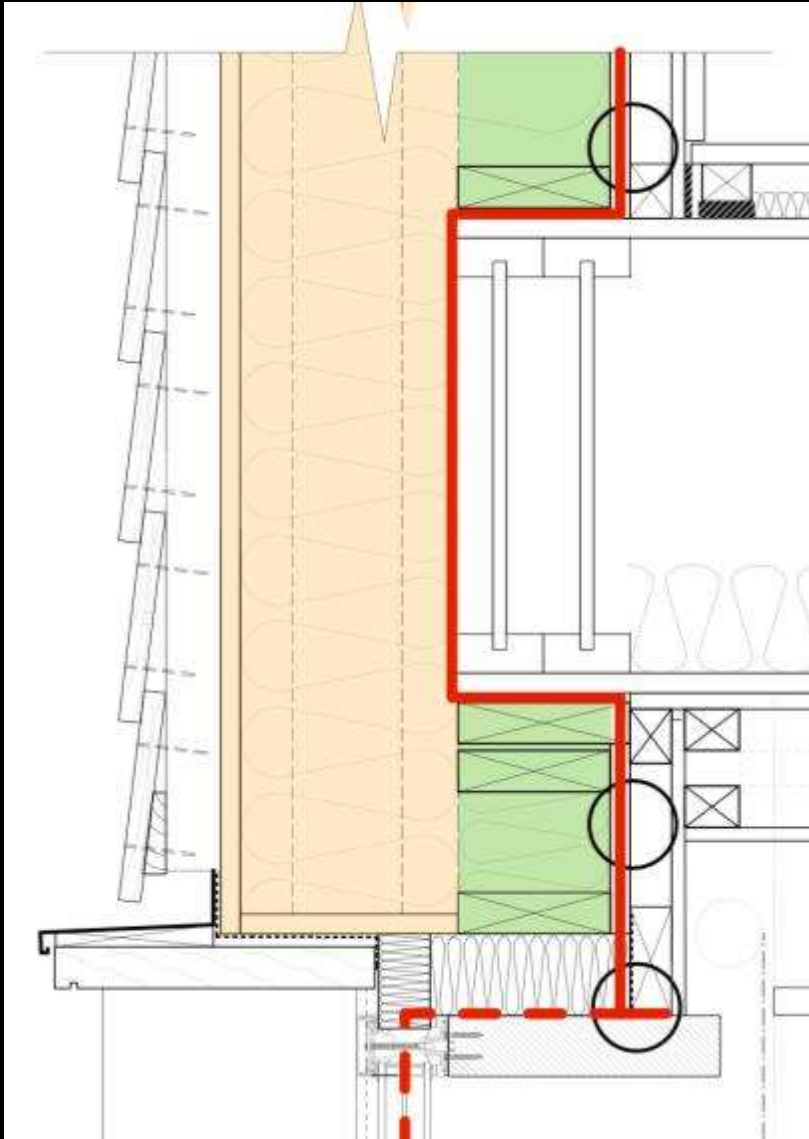
Keep structure within the thermal envelope.....

Simplicity of detailing



Or keep structure outside the thermal envelope.....

Simplicity of detailing



Design IN airtightness.....

Simplicity of detailing



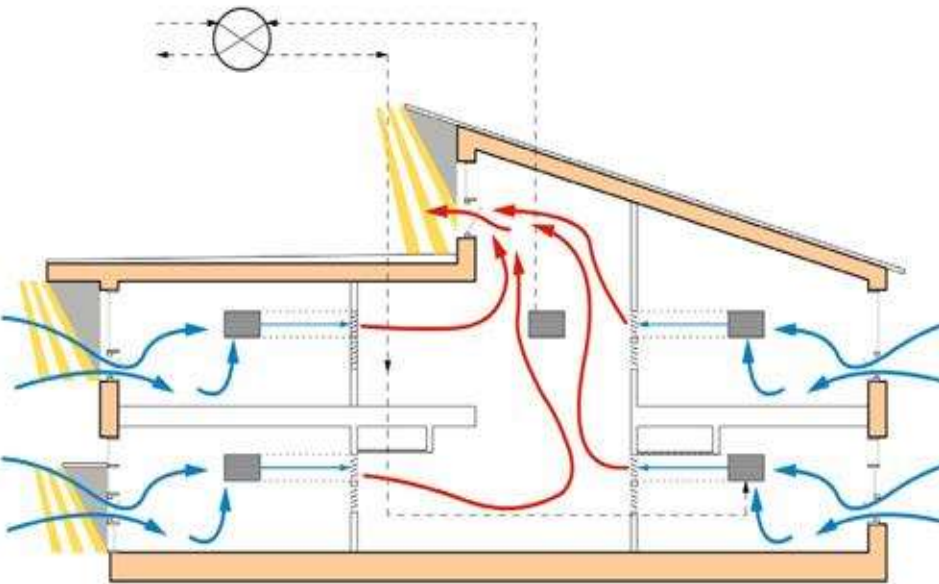
Simple efficient window arrangement



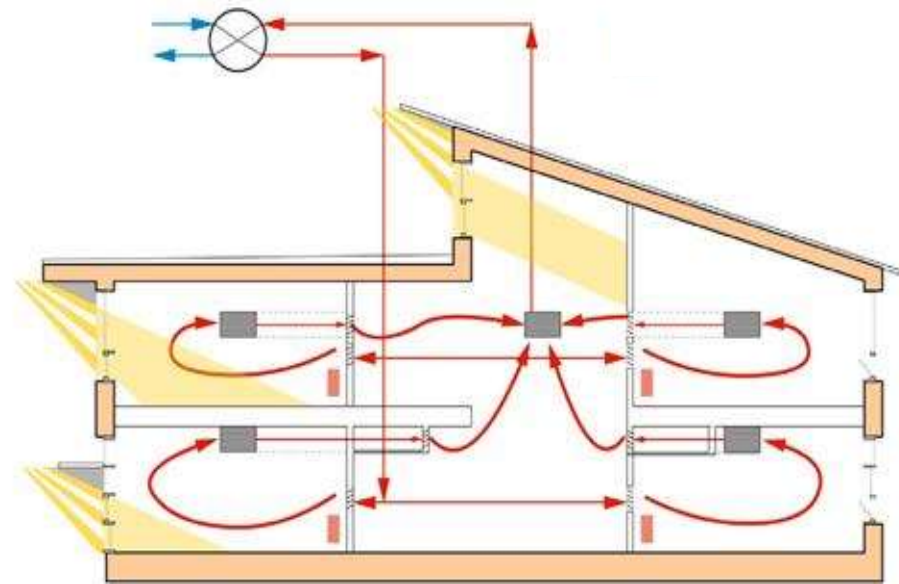
Simple secure night ventilation



Simplicity of services



Summer



Winter

Use the shape and form of the building to do the hard work

Simplicity of services



Keep duct runs simple

Design

- think..... simplicity

.....and employ the right expertise