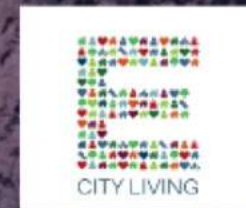


# Upscaling Passivhaus

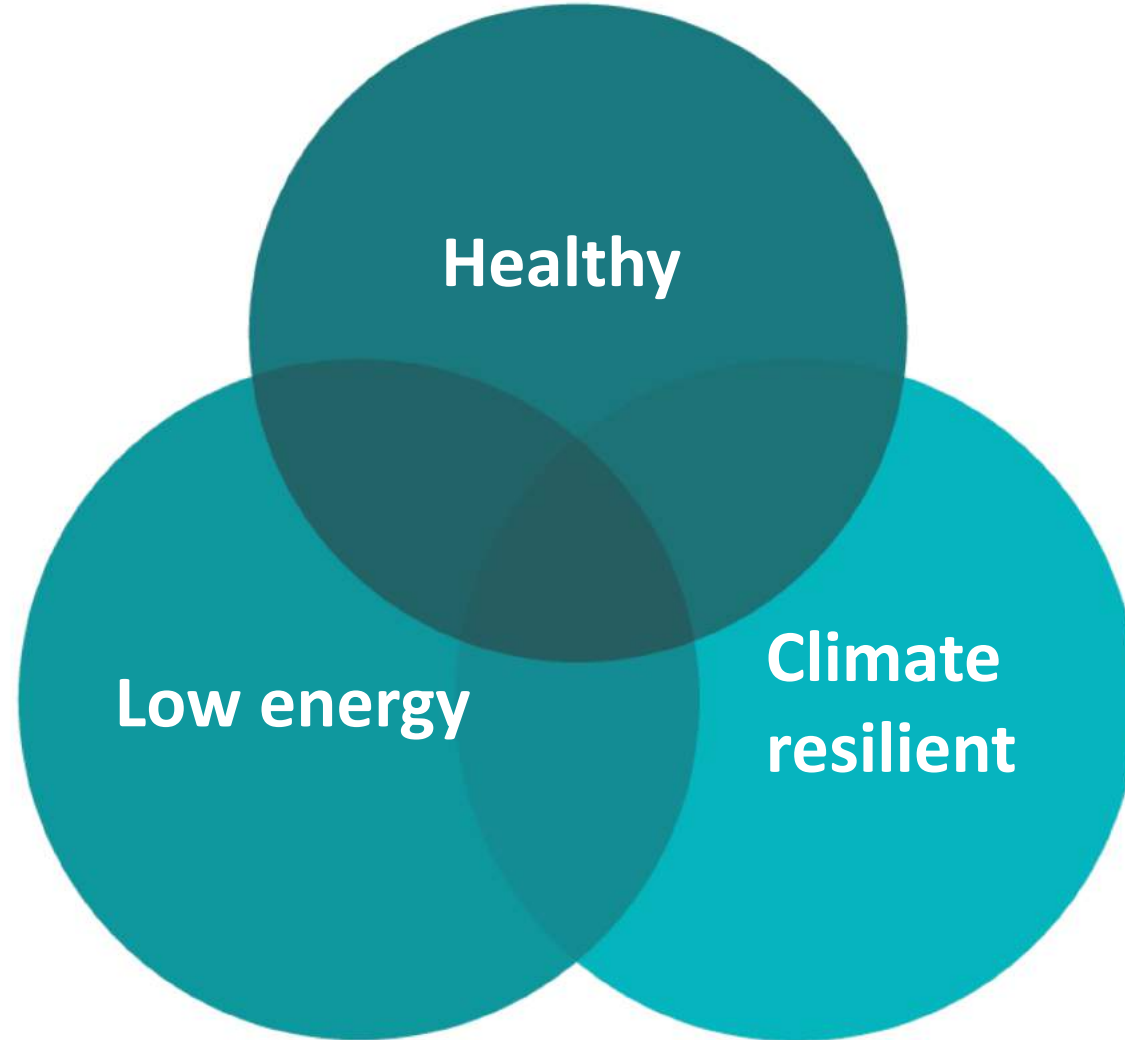
**SOUTH PASSIVE 19**  
**PACIFIC HOUSE**  
CONFERENCE & TRADE SHOW







# Triple Bottom Line Approach







"When you go to the mountains you see them and admire them. In a sense, they give you a challenge, and you try to express that challenge by climbing them."



Sir Edmund Hillary

# Passivhaus in 2019

Over 60,000 certified projects worldwide

150 UK projects certified

More than 1000 UK dwellings certified

More than 1500 units underway

Largest site underway is 345 units (apartments Agar Grove)

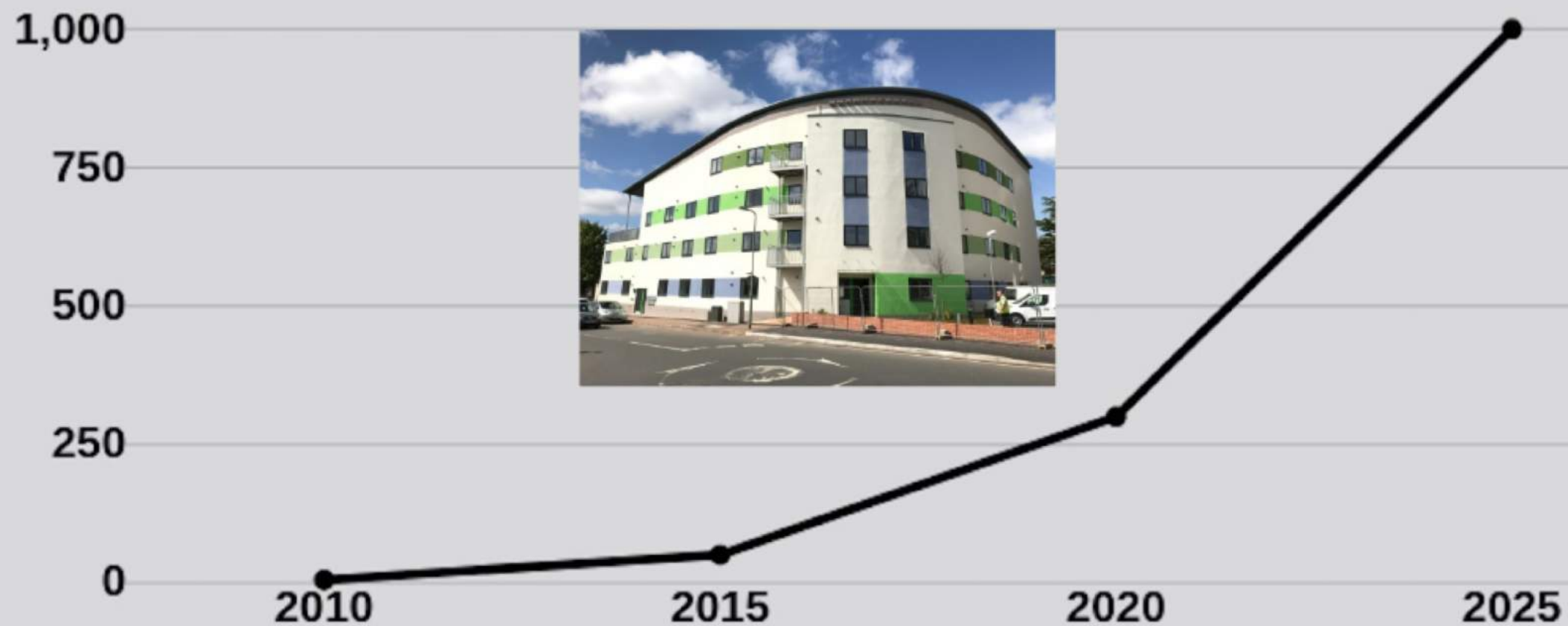
Largest complete site so far is 68 units (Saffron Acres)

Largest step-by-step retrofit is Wilmcote House (3 tower blocks)





# Exeter's Passivhaus Growth



# Rowan House. First generation Passivhaus





"I am at the start of a long journey whose  
conclusion is uncertain. I hope."

Red. The Shawshank Redemption



# Knight's Place. The UK's first multi-residential Passivhaus development





# Burberry Close, Silverberry Close, Reed Walk, Exeter. Second generation Passivhaus



# Chester Long Court. Third generation Passivhaus





# St Lloyes. UK's first Passivhaus Extra care



# St Sidwell's Point. UK's first Passivhaus leisure centre





# Exeter City Living. UK's first public and private sector developer



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Self-building



# Upscaling Passivhaus

Design

Cost

Procurement

Construction

Prefab and modularisation

Business case





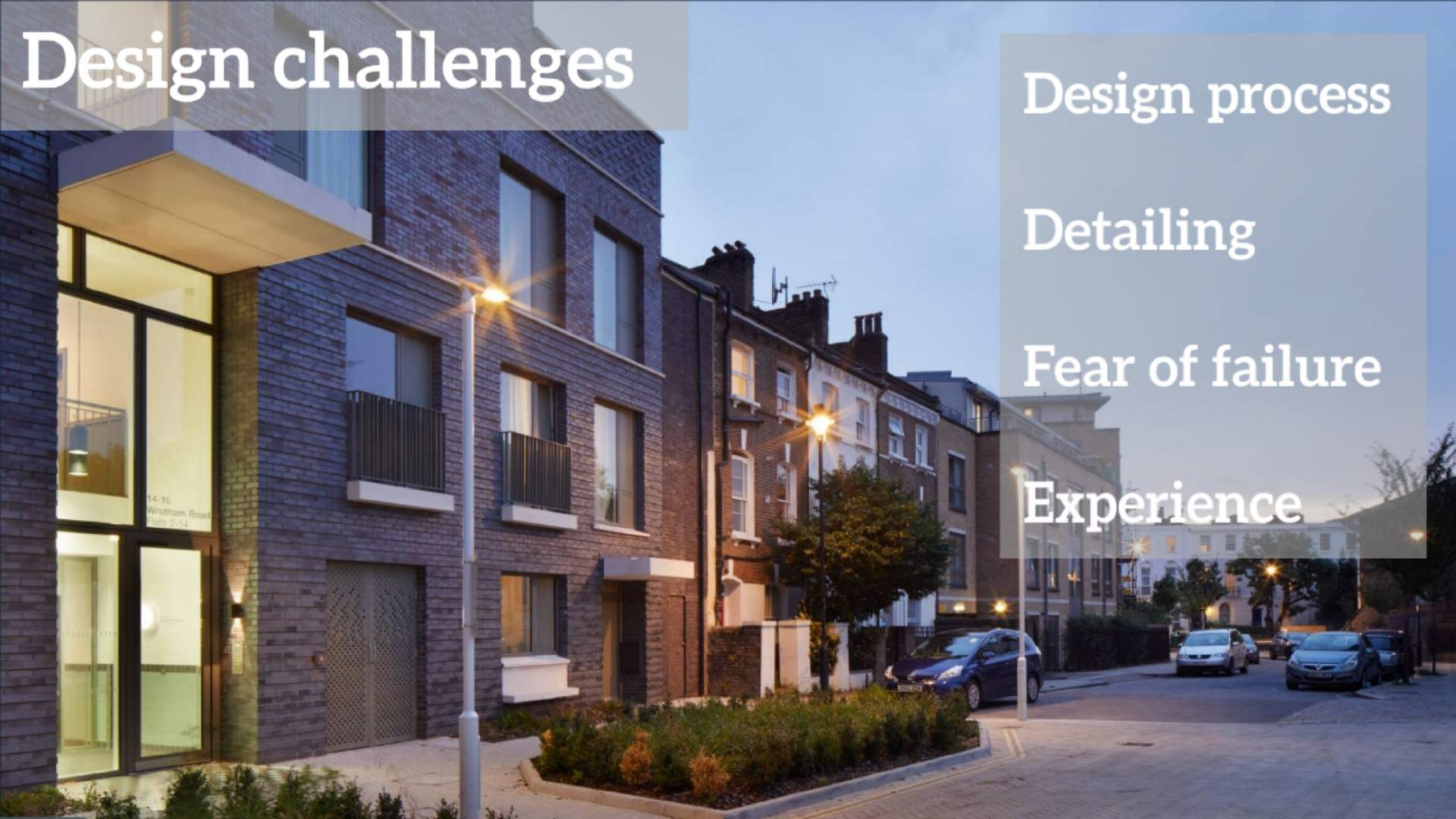
# Design challenges

Design process

Detailing

Fear of failure

Experience





Design solutions

Teamwork

Economies of scale

Form factor

Simplicity







*"Making the simple complicated is commonplace, making the complicated simple, awesomely simple, that's creativity."*

Charles Mingus



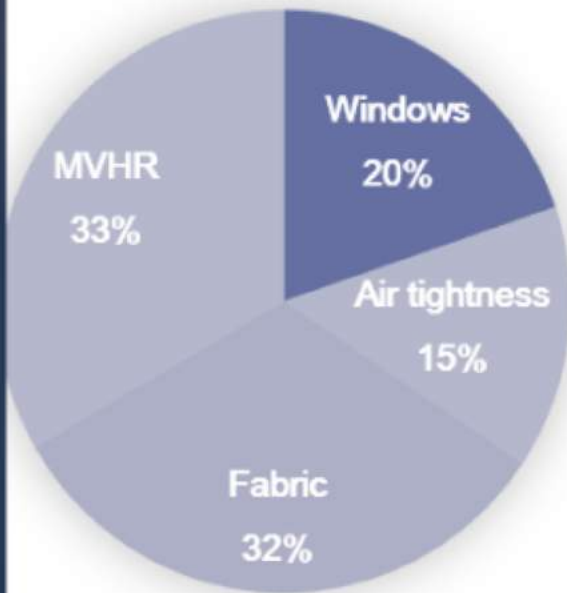


"If you think it is going to cost more, it will."

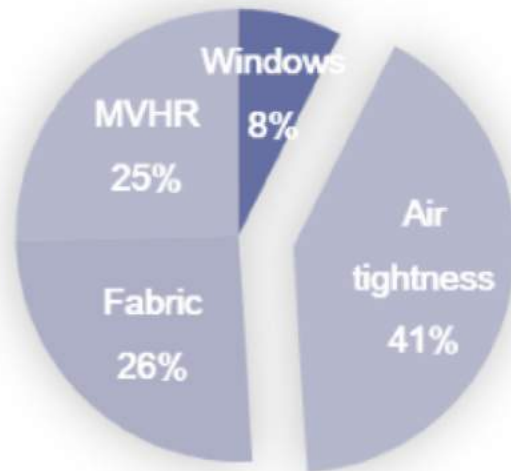
Wilkinson  
Primary School

Cost

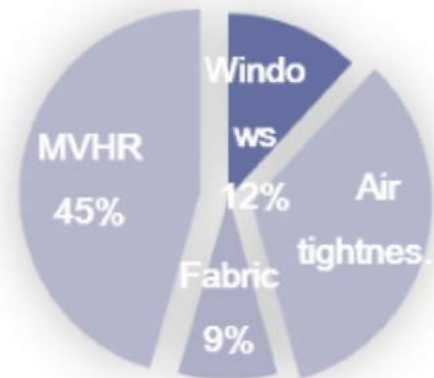
# Diminishing costs



**-50%**



**-30%**



Source: Jenkins Hansford Partnership, Exeter





Procurement

Tendering

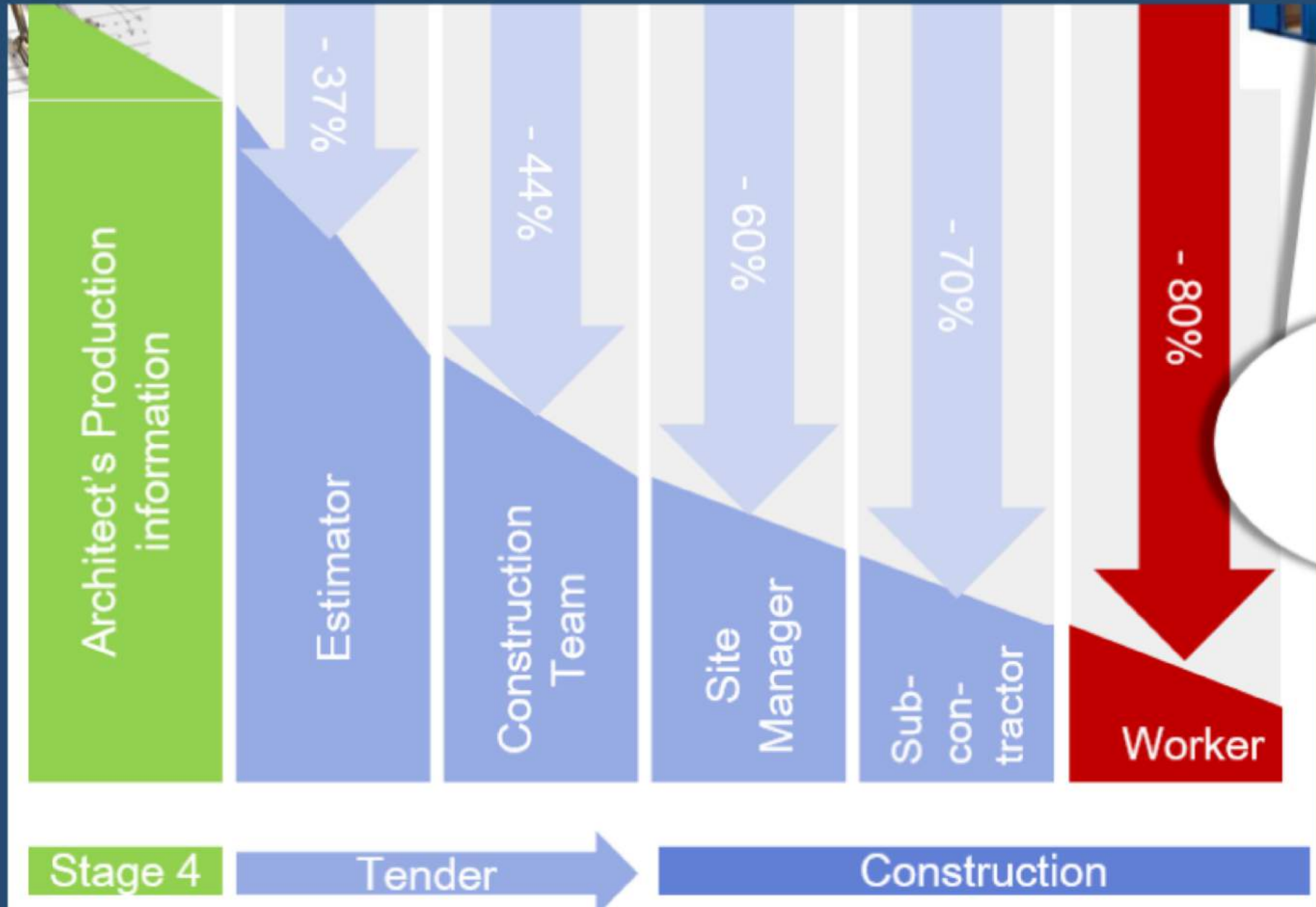
Contract

Programme

Knowledge  
transfer



# Information dissemination





Construction

Time

Repeat business

Bespoke processes



# Prefabrication and modularisation

Challenges  
Enerphit  
Scope





# Business case

Social benefits

Environmental benefits

Economic benefits



# Social benefits of Passivhaus

"It keeps me beautifully cosy in winter. When you walk in during summer, it's lovely and cool.

"My health is amazing - I don't get colds, flu or viruses.

"My bills are considerably lower. I would recommend Passivhaus to anyone."

Passivhaus tenant Rose Mason, Exeter





# Economic benefits of Passivhaus

"Quality is the best  
business plan."

Yvon Chouinard



# Environmental benefits of Passivhaus

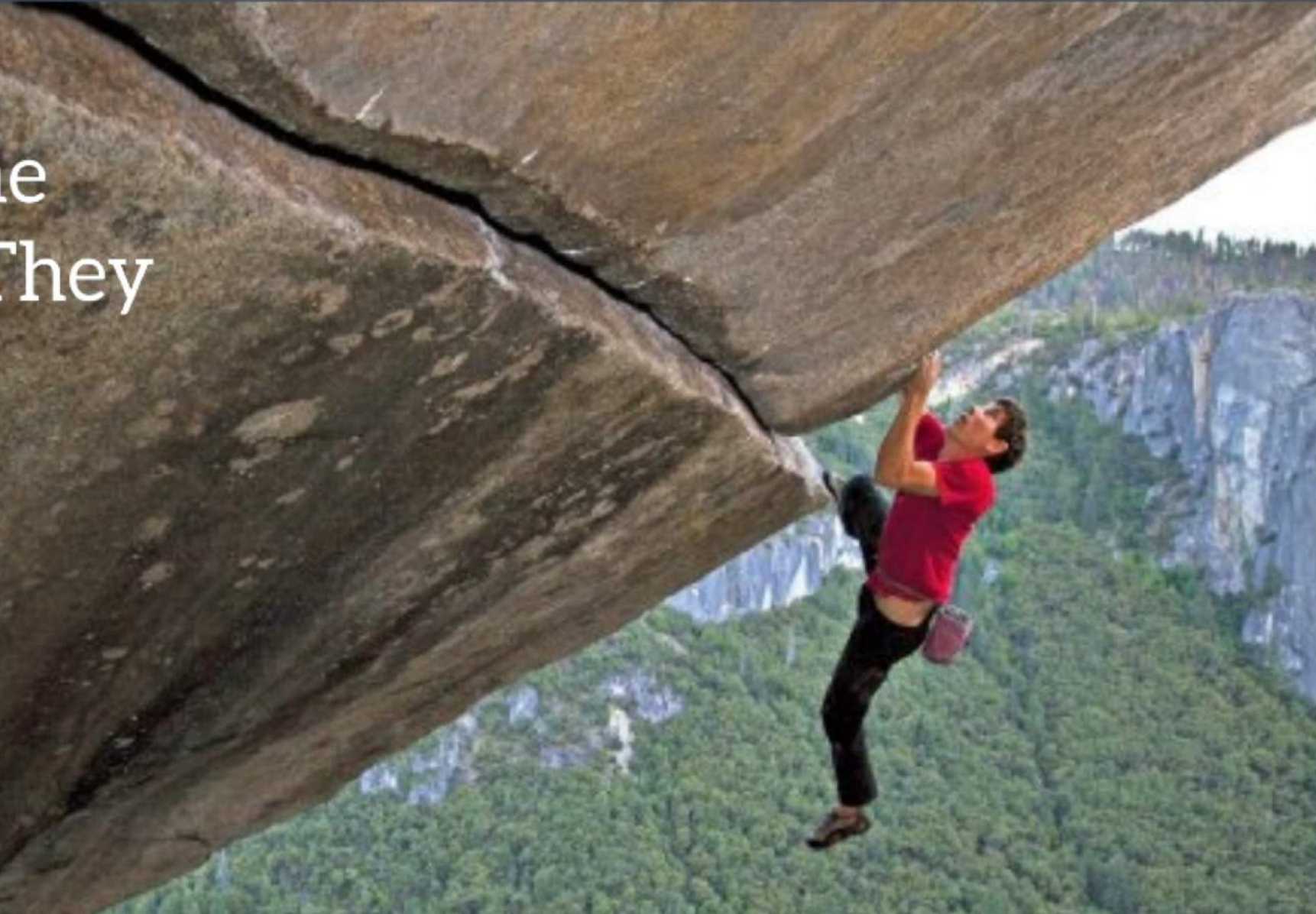




# Upscaling Passivhaus

"People do not decide to become extraordinary. They decide to accomplish extraordinary things."

Sir Edmund Hilary







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# Any Questions?

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World's tallest Passivhaus:

Bolueta Tower, Bilbao





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