

Large Scale Quality delivery - Dos & don'ts

Helen Brown

Head of Building Physics

Encraft



securing your energy future



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For general enquiries telephone 01926 312159 or email enquiries@encraft.co.uk



archie.corliss@encraft.co.uk
Consultant



helen.brown@encraft.co.uk
Head of Building
Physics



paul.jennings@encraft.co.uk
Senior Consultant
ATT



steven.coulsting@encraft.co.uk
Senior Consultant



adam.moring@encraft.co.uk
Consultant ATT



alex.baines@encraft.co.uk
Regional Director -
London



linda.forbes@encraft.co.uk
Innovation Projects
Manager



sarah.price@encraft.co.uk
Senior Consultant



Encraft Large Scale Passivhaus delivery onsite



68 affordable homes aim for #Passivhaus at #Saffron Acres snip.ly/t4lzm #housing #MVHR #ventilation #Passivehouse



RETWEETS 9
LIKES 4



Challenges and successes
specific to this site

- Multiple fabric specs
- Timing of air tightness tests
- OSB3 boards not air tight
- Learning from previous site (Town Street)
- Build system has been evolved/adapted for PH
- Overall site very well managed

Encraft Large Scale Passivhaus delivery on site

CSA **GSA**
@GSA_Architects



 Follow

#GSA associate @johnpratley will be leading tours at Wilmcote House, Portsmouth for #InternationalPassivhausOpenDays gsa-studios.com/news



RETWEETS 3
LIKES 2

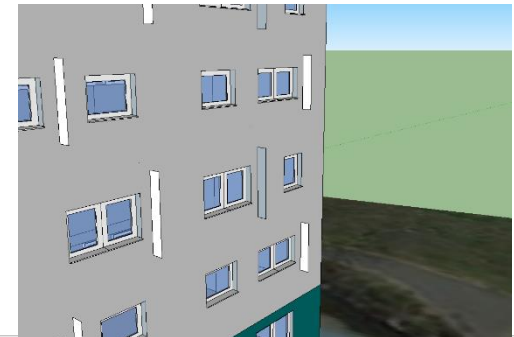
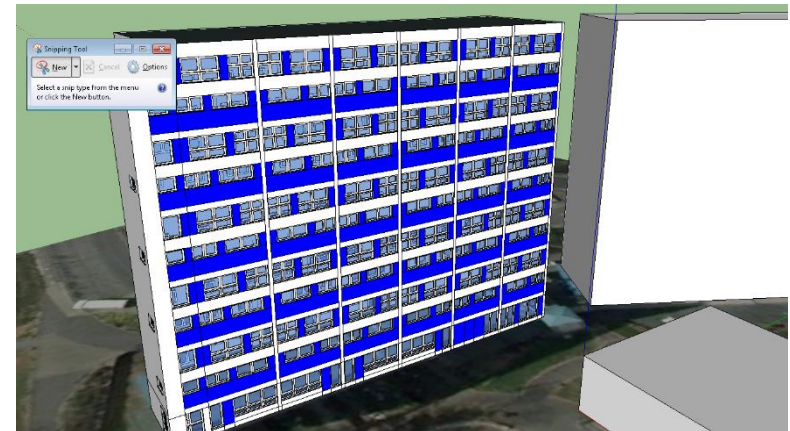
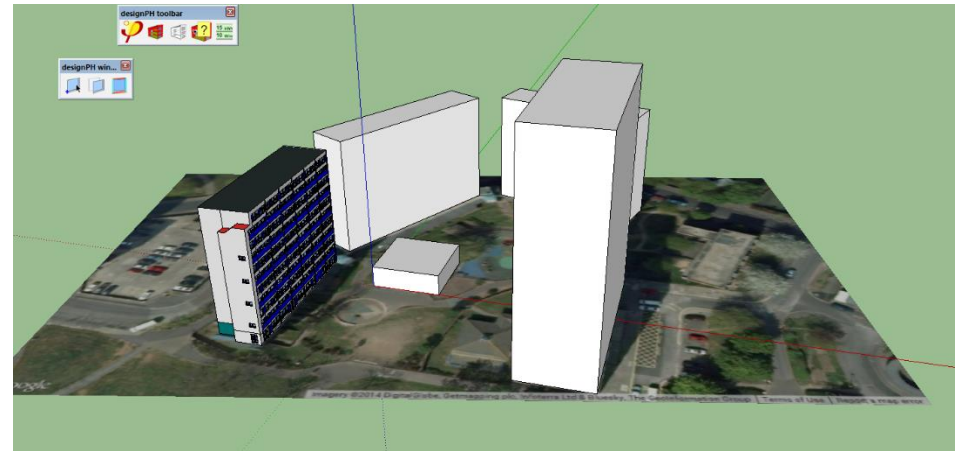


Challenges and successes specific to this site

- Subcontractor changes
- Site teams not following architect's drawings
- CDP/non-CDP contract split
- Repeat training provided
- Language barrier onsite
- Air leakage through risers
- Programme pressures
- Complexity
- Tenants in situ

Carry out a detailed Design Stage Assessment at pre- construction stage

- KISS design principles adopted
- Thermal bridges modelled & in PHPP
- MVHR additional vent sheet complete
- Heat distribution & storage fully detailed in PHPP
- Fully detailed air tightness strategy including testing regime
- Overheating risk analysis



Take advice from experienced and Certified Passivhaus consultants/designers

- Adopt Passivhaus early
- Workshops to develop design details in a collaborative environment
- Fit for purpose and hands-on Passivhaus training for site teams
- Follow the construction issue drawings onsite, check changes
- Designers should visit site regularly



For a list of Certified Passivhaus consultants/designers, visit <http://www.passivhausplaner.eu/>



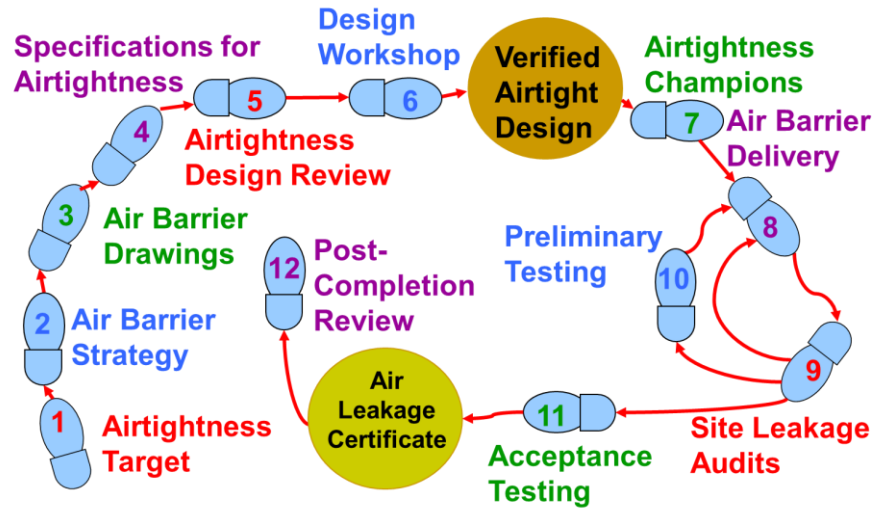
Do



Pay special attention to challenge of achieving air tightness

- Air tightness target, strategy & testing regime clearly documented
- Sequencing notes for key details
- Sufficient time on programme
- Interim air tightness tests whilst air barrier is still accessible
- Appoint an air tightness champion
- Use Encraft Leakchecker fan

Use the Encraft 12 Steps to Air Tightness



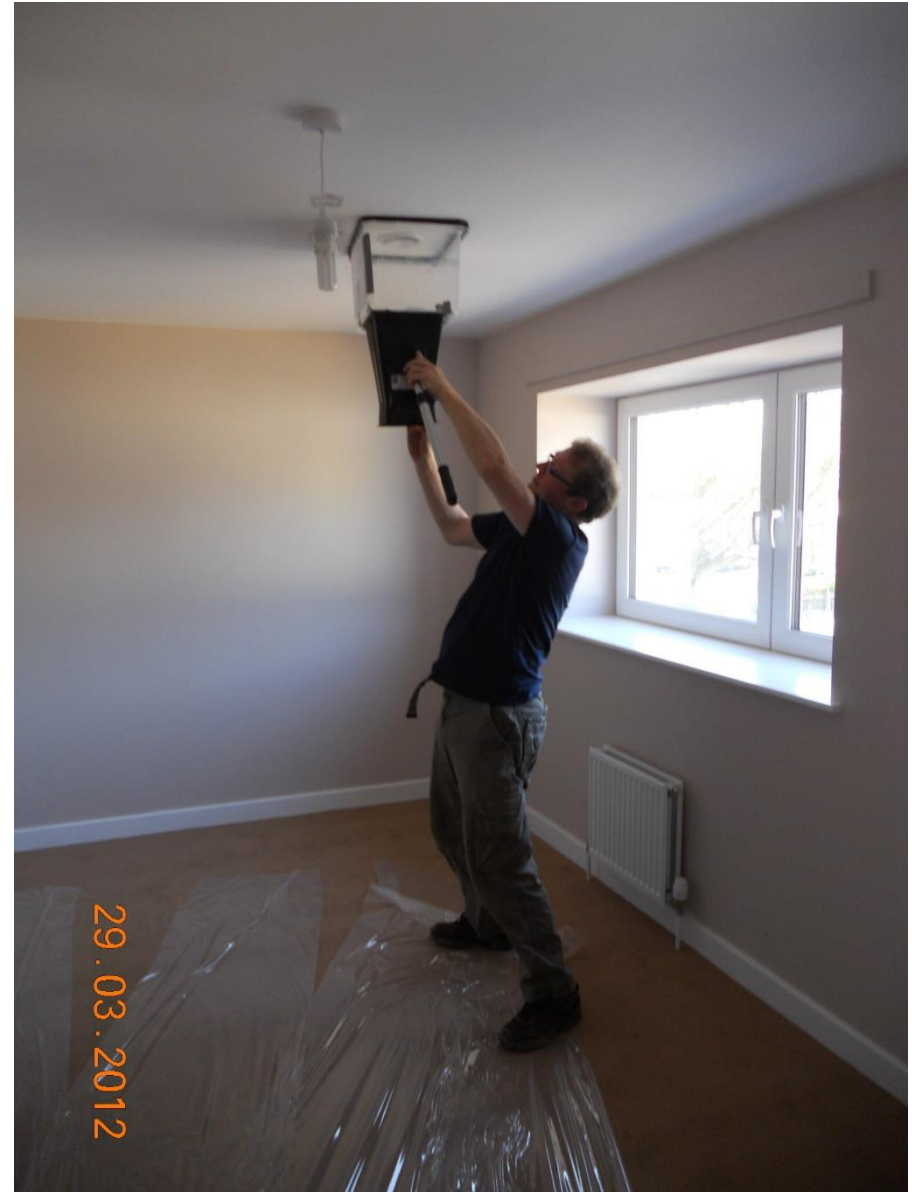
Encourage no-blame culture onsite, everyone is responsible for quality

- Consider appointing champions in a few different specialist areas
- Champions are the first point of contact for reporting issues
- Use checklists and require photographic evidence & sign-off before work is covered over
- Use Encraft Leakchecker fan



Pay special attention to design, installation and commissioning of building services

- KISS but fully detail the duct & pipe layouts & spec
- Check changes made onsite do not affect performance
- List of penetrations through air barrier
- Interim commissioning (e.g. duct air leakage) while accessible
- Appoint efficient services champion



Do

Learn from others and share experiences, join the Passivhaus Trust

- Help to promote the Passivhaus standard in the UK
- Influence policy-makers, developers, clients and other key players
- Network with leading Passivhaus experts, practitioners and academics
- Access the latest technical information and experience



Do

Stay positive and set high aspirations, people will rise to the challenge, take pride and enjoy their work more!

**Correction does much,
but encouragement
does more.**

Johann Wolfgang von Goethe

Discipline Is The Bridge
Between Goals And
Accomplishment.

If the plan doesn't work,
change the plan
but never the goal

IT ALWAYS
SEEMS
IMPOSSIBLE
UNTIL
IT'S DONE.
-NELSON MANDELA

**Once you replace
negative thoughts
with positive ones,
you'll start having
positive results.**



Willie Nelson
www.geckoandfly.com

"A GOAL
WITHOUT
A PLAN
IS JUST
A WISH"