

# Innovative Approaches to Housing Delivery:

Offsite Construction – the Swan Way

# John Synnuck

## Chief Executive, Swan Housing Association

Swan is opening its own factory to build up to 400 homes a year using CLT Modular Construction.



First, 570 homes for Beechwood, a £300m regeneration of failing 60's Radburn Estate in Essex.



Next, we will deliver modular apartments and houses as part of our retail led regeneration of Laindon Shopping Centre in Essex.

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# In a nutshell...

Swan has invested £3m in its own factory producing CLT modular homes.

Initial 100 homes a year for our 570 home scheme at Beechwood Village.

Swan's construction team will deliver the on-site element.

4 additional schemes, over 900 homes in blocks up to 12 storey are in design.

Pilot houses are almost complete, full production imminent.

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# Why do it ourselves?

- We are "vertically integrated" – we control the whole process from acquisition, through construction and into management/sale.
- Constrained labour market, rising costs, increased complexity and quality concerns = increased risk.
- We are commercial – manufacturing homes will improve efficiency and could add to our commercial offer.



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# Effect on Housing Delivery

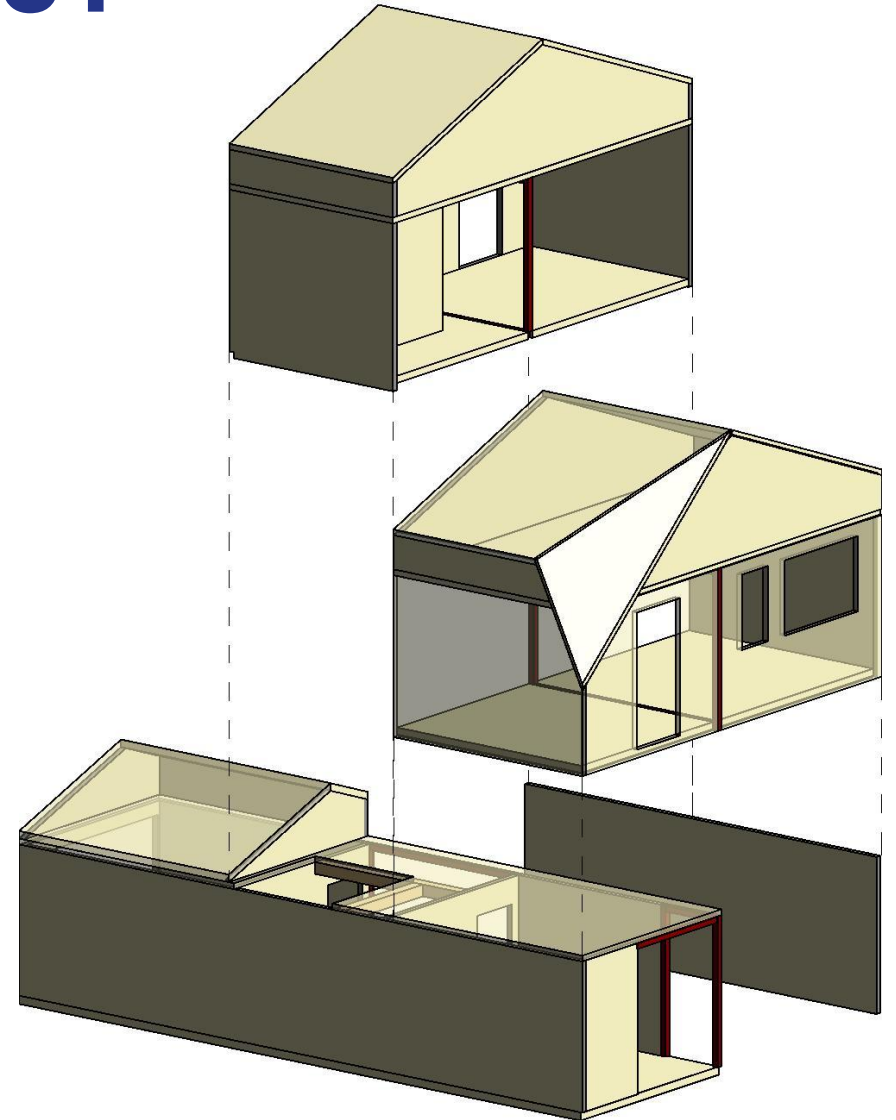
- **Capacity** - Initially 8 homes a month with potential to deliver 30 homes
- **Speed** - 50% of traditional construction time
- **Quality** - Reduced defects
- **Environment** - Highly sustainable (CLT sustainable and homes energy efficient)
- **Customer Choice**
- **Cost** - 10% + reduction in cost



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# Why Volumetric?

- Concentrates construction activities in controlled environment
- Minimises time on site
- Geographically close to sites



# Why CLT?

- Structurally can produce units from 1 to 12 floors
- Minimal requirements for other materials
- Easily machinable, large scale product
- Thermally and acoustically efficient
- Highly sustainable



# The Future

- Off site manufacture will be the default choice for our development programme
- Factory in full production mode by the end of the year, pilot homes completed in October
- Potential for supplying to partners – from late 2018
- Considering satellite factories for large projects



Webb's Industrial Estate, Waltham Forest



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Transformation  
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