

## ModernaHus

29 September 2010



## Modern Methods of Construction (MMC)

We have been actively involved in MMC thinking for a number of years:

- Building Information Modelling (BIM)
  - 12 areas
- Offsite fabrication
  - precast concrete, M&E assemblies, cladding, bridges and gantries, steel decking
- Logistics management
  - consolidation centres, city centre construction
- Modular construction
  - prisons, gantries, M&E assemblies, residential
- Fabrication facilities
  - Doncaster and Slough



- 1. Context
- 2. The platform
- 3. Key challenges
- 4. Approach
- 5. Vision

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## Context

- Residential
- The Nordic countries
- Programme, quality, sustainability
- Skanska Communities
- ModernaHus (M2)
- Low Rise (S1)



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# Construction spectrum



Traditional Components Elements Product



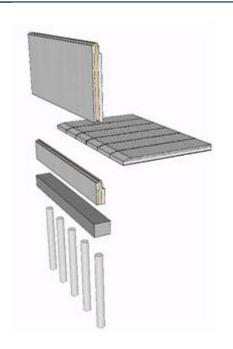


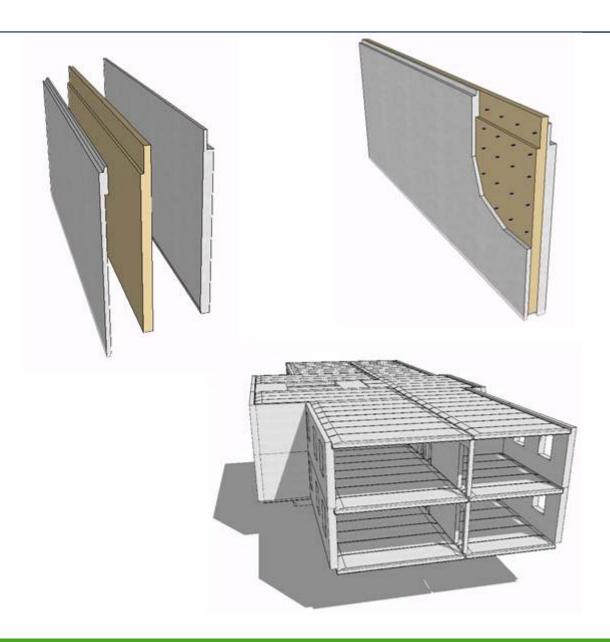


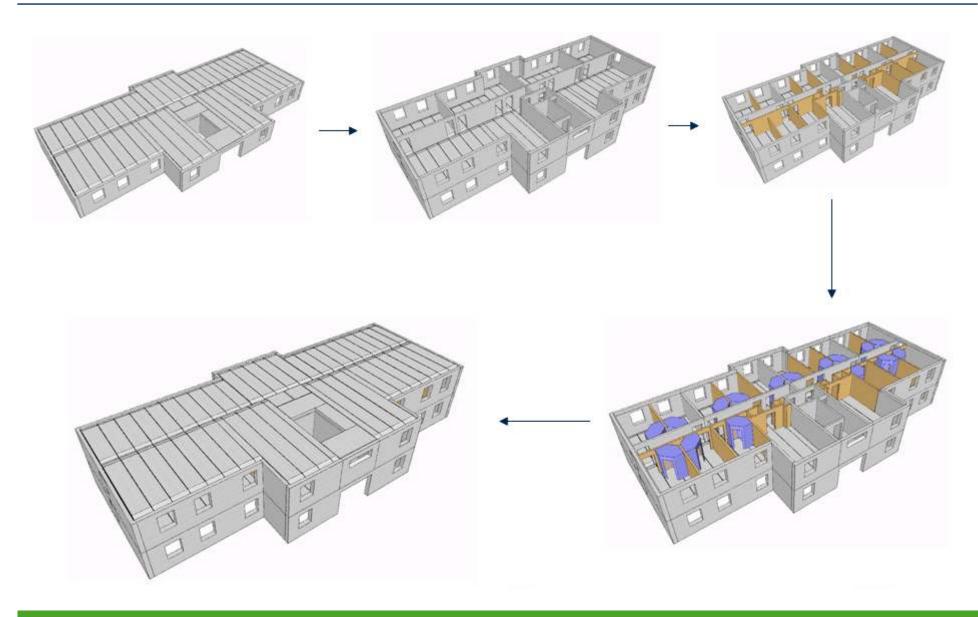


# Key drivers

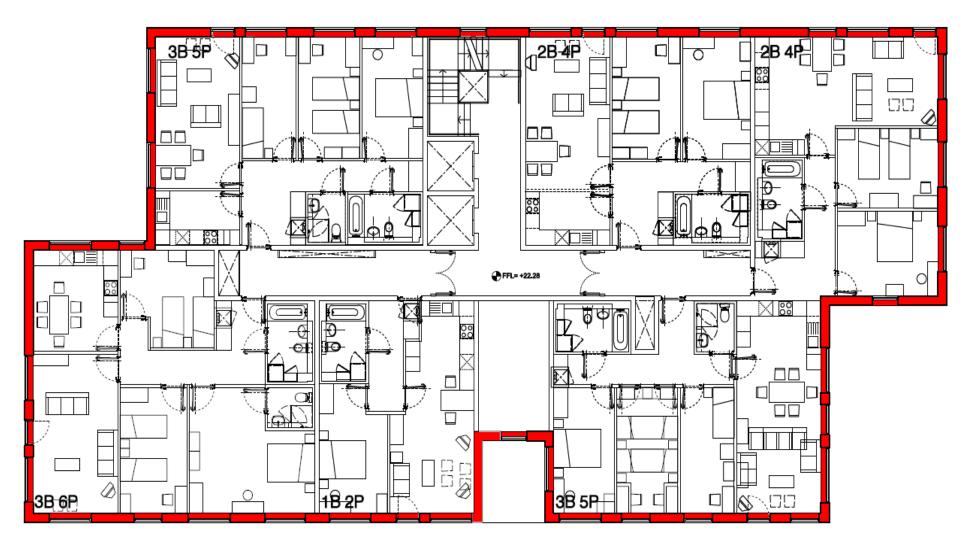
- Cost
- Programme
- Quality
- Health & Safety
- Sustainability



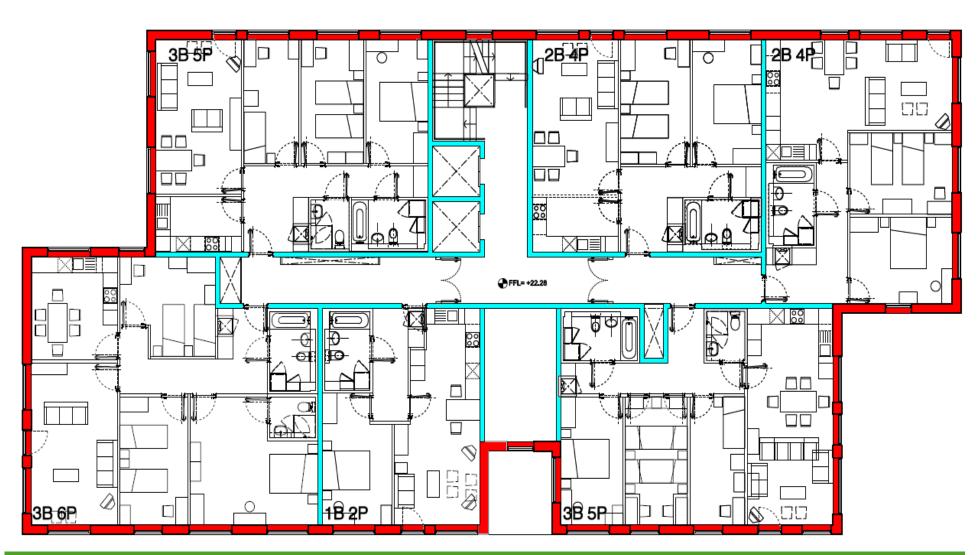




## **External Walls: 17 Panels**



## Internal Walls: 19 Panels



# Prefabricated pods: 9 pods



# Stairs & precast slabs: 10 pieces



# Hollowcore: 56 panels



## Prefabricated risers: 3 no.

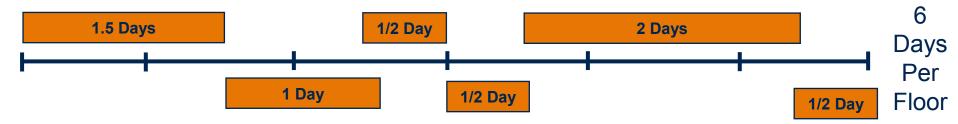




















# Same Platform, different buildings Flexibility and Standardisation at the same time



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## Challenges

## to MMC

- Technology
- Regulations and guidelines
- Culture and behaviour
- Example, prefabricated bathroom pod v traditional

Programme	+
Quality	+
H&S	+
Sustainability	+
Cost	-



Coordination	"All need to be managed to get the benefit"
Management	
Procurement & logistics	
Design	
Risk	

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## Approach

to MMC

- Design manual
- Building information Modelling (BIM)
- Supply chain
- Culture and behaviour
- Client

## The difference that makes difference

It is all in the process



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## Vision

- Sustainability
- Health & Safety
- Quality
- Programme
- Cost







