

# Typical Schedule of Contents for System Manual

## Concrete Cross-Wall

### 1.0 Scope and limitations of the system

- Description of system and the scope of offsite produced elements
- Intended use and limits of application (storey height, dimensions, building type and shape etc.)
- Confirmation of the parties that have responsibility for design and coordination of the system and who has overall responsibility for the delivery of the home.

### 2.0 Specification of key components

Specification of all key components that are critical to the performance of the system such as the:

- Precast concrete elements
- Insulation materials
- Thermal connectors
- Sealants
- Connecting elements
- Cladding components
- Fire stops and cavity barriers
- Integrated components such as windows and services.

### 3.0 Design details

Localised detailing of typical connections including:

- Panel to panel
- Panel to podium
- Panel to intermediate floor and roof
- Openings and penetrations through system
- Typical junctions showing location of cavity barriers and fire stops.

### 4.0 Evaluation of critical performance

- Structure and stability*
  - Outline design philosophy that demonstrates the structural principles of the system
  - Clarification that design is carried out by a suitably qualified person in accordance with NHBC standards
  - Provide details of fixing points for transportation and temporary works.
- Behaviour in relation to fire, supported by statement of design philosophy and test data.*
  - Clear reference to who is responsible for supplying and installing cavity barriers and fire stops in all areas
  - Relevant test data for panel.
- Resistance to moisture*
  - Condensation risk analysis and thermal modelling at critical junctions<sup>1</sup>.
  - Reports issued by UKAS accredited test body to demonstrate building envelope function in line with CWCT test sequence B
  - Precast concrete cladding designed in accordance with recommendations in BS 8297:2000 Code of practice for Design and installation of non-loadbearing precast concrete cladding.

- Resistance to the passage of sound*

- Clarification on how sound resistance is to be achieved.
- Energy efficiency*
    - Certification or calculation that demonstrates the thermal performance of the system including thermal transmittance (psi-values) for typical junctions.
  - Durability of materials*
    - Supporting certification for materials with confirmation that they are designed and installed in full compliance with certification.
  - Compliance with Building Regulations*
    - Demonstrate compliance with the relevant Building Regulations where not covered elsewhere in the manual.

### 5.0 QMS and FPC measures

- Declaration of performance that the sandwich panels are CE marked in accordance with:
- BS EN 13369:2013 Common rules for precast concrete products
- BS EN 14992:2007+A1:2012 Precast concrete products; Wall elements.
- BS EN 13670:2009 Execution of concrete structures.
- List of onsite checks during delivery and erection of units, including:
  - Details of the pre-start inspection process
  - Delivery, handling and storage methods
  - Outline process of the installation by manufacturers approved / trained installers
  - Supervision and sign-off process prior to handover back to principal contractor
  - Installation checklist, tolerances, fixings, sealing, etc.

<sup>1</sup> Analysis in accordance with BS EN 13788 (Glaser method) using boundary conditions of >60% internal RH at 21°C, and external temperature of -2°C will be acceptable.