SYSTEM ACCEPTANCE

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FP McCann
Kings Lane
Byley
Middlewich, Cheshire.
CW10 9NB

Description: FP McCann is off-site manufactured load-bearing precast cross-wall panel system for use above external ground level.

Structural Only Wall Panels - These wall panels (internal & external), will have a minimum thickness of 150mm (for perimeter walls). All wall panels will be connected together with an in-situ grouted joints incorporating 90kN loop connectors and a through joint bar.

Insulated External Sandwich Wall Panels – These generally consist of two concrete wall sections separated with insulation (thickness based on project requirements), and tied together with Thermomass Connectors, transferring loads back to the inner panel. The inner concrete panel (minimum thickness 150mm), provides the structural strength and stability of the system. The outer concrete panel (typically 115mm), is considered non-loadbearing,
The external 'finished' panel, which may consist of:
• Brick faced external concrete panel (Min 80mm in thickness). Brick finish may consist of proprietary brick slips, or cut facings from full bricks.
• Profiled Finishes from Mould, Acid Etched Concrete, Stone Faced Units, Reconstructed Stone Faced Units, Tile and brick slip faced units
Floor (roof) panels are either precast or pre-stressed concrete, supported on precast cross/spine walls. The precast structure will be finished with a roof level concrete floor/roof slab. This will provide the structural restraint to the final storey. The roof structure will be designed and installed by others

The precast concrete units are connected to form robust bespoke crosswall structures.
Each project is subject to project specific design, a 3D analysis of the scheme, to allow the review and assessment of theoretical movements, relative to construction details. Project specific assessment, with full consideration of suitability, in terms of loadings (wind/dynamic), exposure, movement, stability is required for all warranty schemes. The system to be used 500m or more from the shoreline, all projects in coastal location up to 5km from shoreline require further review on project spec.

Windows, doors and interface details with panels are not part of the system and are subject to project specific review and acceptance.

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Conditions of Acceptance:

1. Any acceptance is subject to provision of, but not limited to:
   SITE SPECIFIC DETAILS
   1.1 Structural Design Philosophy Report (to include loading, stability, disproportionate collapse, fire resistance, concrete strengths, deflection limits and statement of design life used for the design)
   1.2 SE Calculations
   1.3 SE General Arrangement Drawings and details
   1.4 Specialist precast/fabrication Drawings and details
   For
   1.5 Precast elements
   1.6 Connections, brackets and fixings
   1.7 Any supporting structure (such as a ground to first transfer RC or steel structure)
   1.8 Robustness of the cladding system should be considered in the structural design.
   60 year design life is required.
2. Where FPMcCann are providing the insulation:
   2.1. Where the building exceeds 18.0m in height and is a 'relevant' building the insulation is to be EN 13501-1 class A1 or A2-s1, d0.
   2.2. Through wall u-value calculations are to be provided for each wall type
   2.3. Through wall condensation risk calculations are to be provided for each wall type.
   2.4. Thermal analysis in accordance with BS EN ISO 6946 and condensation risk assessments in accordance with BS EN ISO 13788 should be provided. The principal designer should also assess the effects of adjacent trade interfaces, as to their effect on the thermal properties of the precast panel, e.g. glazing interfaces.
3. Window /door installation, sealing of glazed units into the FpMcCann opening, waterproofing, roofing works or other façade interfaces are outside of FpMcCann scope of works and are sole responsibility of the project designer and main contractor – Our warranty requirement is to seal all facade penetrations (flues, windows etc) with EPDM
4. We will accept the use of FpMcCann external panel, subject to two lines of defense (mastic joints) being provided against water ingress, together with appropriate drainage.
5. All panel to panel joints require additional thermal insulation in panel to panel joint for continuity.
6. FpMcCann Precast panel acceptance is based on received Sequence B testing and will be acceptable for representative project designs in 'Sheltered' and 'Moderate' exposure locations. Additional off-site/on-site testing may be required on project specific basis.
7. We will accept the use of FpMcCann panel system, subject to Freeze-Thaw testing being carried out on a site by site basis, replicating the size of the brick/brick slips proposed
8. We will accept the use of FpMcCann panel system, subject to the provision of substantiation that the panels have been designed to accommodate the building movements, including racking on a site by site basis
9. We will accept the use of FpMcCann panel system, subject to hard and soft body impact testing requirements being attained on a site by site basis

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10. That site installation of the system is carried out by the FpMcCann, or companies under the direct supervision. Where installation is carried out by third party companies' details of that company must be provided.
11. Where pre-stressed panels are used, drilling method and guidance must be sought from FPM and strictly followed to avoid structural damage.

12. Thermal movements -The relative changes in length and height due to temperature differences between the cladding, and the structure to which cladding is fixed should be assessed.
13. Project specific details (full package) to be provided and accepted prior to work commencement. Details of water ingress protection and location of ground floor panels to be provided. Bricks installed near external ground level to be suitable for sulphate and frost resistance..
14. The designer must apply the boundary and height restrictions based on the fire classification of the insulation according to national Building Regulation requirements
15. The ISO 9001 certification and FPC document is kept up to date, a copy of which must be provided upon renewal each year.
16. That periodic factory inspections are carried out by our Innovations team, the frequency of which will be agreed, based on both the quality and quantity of panels produced.
17. That panels are installed above external ground level.
18. That recycled aggregates are not used,
19. QA check sheets are provided at installation completion including verticality survey and photographic evidence for joint seals and fire stopping - 100% photographic survey record.
20. All panels to be protected from weather conditions – All to receive protection tape on panel edge
21. Balconies are outside of this acceptance
22. Deviation from the details provided and approved will result in the offer of warranty being withdrawn
23. This acceptance is for warranty purposes only. Compliance with relevant building regulations will be checked on project specific basis where applicable (fire/means of escape/sound/moisture/ energy/etc.)

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Date: 2023-12-15

Signed:

Sarah Dee Shapland

Review Date: 2024-12- 14

LABC Warranty has awarded this Document to the company named above for the product described herein. This product has been reviewed by LABC Warranty as being fit for its intended use provided it is installed, used and maintained as set

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out in the System Acceptance Document and documents provided by the product manufacturer as part of technical submittal including FPMcCann Architectural Crosswall System V1.2.5 –PG.

This LABC Warranty Acceptance does not constitute a 3rd Party Product Approval from a UKAS Accredited Testing Body or any form of Building Regulation approval. This LABC Warranty Acceptance is purely to recognize that this system/product can meet our warranty requirements and must not be considered to be anything else. *(i.e. such as a separate guarantee or warranty for the system/product in isolation)*