



Certificate No: EW128A



This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

Built Offsite Ltd Volumetric Building System

Description of Product

Built Offsite Volumetric Building System is permanent modular buildings for use as schools, offices, commercial accommodation and healthcare buildings.



Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Health, Hygiene and Environmental
- Safety in Use
- Protection against noise
- Energy Economy and heat retention
- Durability serviceability and identification

Validity

This certificate was first issued on 14th June 2011 and is valid until 14th June 2019

Issue Dated 28th April 2016

Scope of Registration

Permanent modular buildings for use as schools, offices, commercial accommodation and healthcare buildings. Each application needs to be considered for site specific conditions.

Conditions of Certificate

The below to be site specific and checked on each application:

Part A

Foundations – The foundation details shall include the following:

1. A fully dimensioned layout of the foundations indicating the centreline of the floor beams about the centreline of the footings. Sections through the wall/foundation interface confirming all sizes, depths etc.
2. Soil Investigation Report, this might be waived in some cases if there is one available from adjacent previous or future development.
3. A layout of all existing services in the vicinity of the proposed building.
4. Specification for the concrete.

Part B

Means of escape – travel distances are dependent on building configuration and classroom layout.

Staircase capacity and discounting of stair – dependent on number of pupils/staff, etc.

Emergency lighting – to be checked with each application.

Exit signage – to be checked with each application.

Space separation and unprotected areas – dependent on siting of building.

Access and facilities for the fire service – dependent on siting of building.

Part C

Site preparation and resistance to contaminants – dependent on each particular site.

Subsoil drainage – dependent on each particular site.

Part E

1. The upper limit performance figure for most types of room is 35dB.

This relates to external noise from road traffic, rail, air, etc and any plant the school operates.

The above is to be checked on a case by case basis.

Where buildings include the following rooms:

Ensemble room

Performance/recital room

Recording studio

Large lecture rooms (more than 50 people)

Classrooms used by hearing impaired pupils

Drama studios

Then data to be submitted on a project by project basis showing indoor ambient noise level does not exceed 30dB for the above rooms.

2. Attenuation requirements of airborne sound through walls and floors vary depending on activity noise in source room and noise tolerance in receiving room. Choice of partition used to be checked with every partnering application.

3. Any partitions with glazing to be assessed on project by project basis. Rw rating of doorset to be assessed on project by projects basis

4. Data to be submitted on a project specific basis.

Where buildings include the following rooms:

- Music classroom
- Small practise/group room
- Ensemble room
- Performance/recital room
- Recording studio

Control room for recording

Large lecture rooms (more than 50 people)

Classrooms used by hearing impaired pupils

Drama studios

Then designs to be assessed on a project by project basis showing SPL in above rooms does not exceed 55dB.

5. The reverberation requirements for most rooms will be achieved with a Tmf of 0.6 seconds or less.

If registered detail approval required then data to show Tmf in typical class rooms does not exceed 0.6 seconds.

Where buildings include the following rooms:

Ensemble room

Performance/recital room

Recording studio

Control room for recording

Classrooms used by hearing impaired pupils

Assembly halls and multipurpose spaces

Then data to be submitted on a project by project basis showing Tmf in above rooms is in accordance with table 1.5 in BB93.

7. Any open-plan teaching and study spaces to be assessed on a project by project basis to ensure STI (speech transmission index) is between 0.6 and 1.0.

Intermittent air extraction – dependent on each building, whether it has cooking facilities, toilet provision, etc.

Part G

Requirements G1 to G6 – applicable requirements dependent on facilities being provided to each individual building e.g. food preparation areas, toilet provision, etc.

Part H

Above ground drainage – information relating to number of rainwater pipes for each building size and specification for traps and pipes needed for facilities such sinks, toilets, etc. to be dealt with on case by case basis as per the technical file.

Below ground drainage – dependent on site and any existing drainage provision on site.

Building over sewers – dependent on existing drainage on site.

Solid waste storage – dependent on management of school.

Requirements J1 to J4 – only applicable were combustion appliances are proposed. If proposed, then will form part of partnering application.

Part L

Criterion 1 – Individual TER calculations required for each building.

Criterion 2 - Information relating to system efficiencies for fixed building services such as heating, lighting, etc dependent on systems chosen for individual building type.

Criterion 4 – Commissioning of building services and air leakage testing of any ductwork to be checked on each partnering application if applicable. BER calculations required for each individual building. BER to be equal to or less than TER. Buildings over 500m² require pressure testing.

Criterion 5 - Information relating to fixed building services, their operation and maintenance dependent on building services installed within each individual building. EPC required.

Corridors, passage ways, lobbies – dependent on layout within each building.

Part N

Manifestation – all glazed screens/doors ordered/installed etc have suitable manifestation. To be assessed on project by project basis.

Part P

Electrical installation – certificate for design, installation, inspection and testing unique to each building to be produced by qualified and competent electrical contractor.

LABC consider that, Built Offsite Ltd Volumetric Building System, will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;



The Building Regulations 2010 (as amended) England & Wales

Regulation 7	Materials and workmanship
Note:	The system is acceptable.
AD A	Structure
Note:	Subject to limitations detailed above in conditions section.
AD B	Fire Safety
Note:	Subject to limitations detailed above in conditions section.
AD C	Site preparation and resistance to contaminants and moisture
Note:	Subject to limitations detailed above in conditions section.
AD E	Resistance to the Passage of Sound
Note:	Subject to limitations detailed above in conditions section.
AD F	Ventilation
Note:	Subject to limitations detailed above in conditions section.
AD K	Protection from Falling, Collision and Impact
Note:	Subject to limitations detailed above in conditions section.
AD M	Access and Use of Buildings
Note:	Subject to limitations detailed above in conditions section.
AD N	Glazing
Note:	Subject to limitations detailed above in conditions section.



The Building Regulations 2010 (as amended) England

AD L2A	Conservation of fuel and power
Note:	Subject to limitations detailed above in conditions section.



The Building Regulations 2010 (as amended) Wales

AD L	Conservation of fuel and power
Note:	Subject to limitations detailed above in conditions section.



The Building (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the product in Scotland it will require an additional assessment under the Scottish Building Regulations and accordingly you should contact the LABSS STAS Administrator at www.labss.org

Non-Regulatory Information



LABC Warranty

The use of the Built Offsite Ltd Volumetric Building System has not been assessed to meet the requirements of the LABC Warranty Technical Manual. If you would like to discuss a specific use please make an enquiry to technical.services@labcwarranty.co.uk

Supporting Documentation

10316 – Built Offsite Module Technical Manual – V4

Built Offsite Statement of Processes to LABC dated 21.01.2011

Menzies Partners Analysis of Fire Related Items on behalf of Lewisham Building Control

Built Offsite RD Table

Lewisham Building Control Letter to Registered Details Manager explaining Limitations to Volumetric Building System (RD128) dated 21.04.2011 - ref: RD/11/BOS

Appendix A – Structural Calculations

A1 – Annotated wind map

A2 – Bankside Channel System S280 properties & capabilities

A3 – Bankside Channel System S280 properties & capabilities

A4 – Module up to 3.2 x 9.6m – single and 2 storey

A5 – Module up to 3.2 x 12m – single and 2 storey

A6 – Module up to 3.6 x 12m – 2 storey – with stair openings

A7 – Internal Racking Panel (Supplement)

Appendix B – Fire – surface spread data B1 - Plasterboard

B2 - Flooring

B3 – Carpet

B4 – Armstrong Fine Fissured Ceiling Tiles

B11 – Plastisol

B20 - Firestone roofing

Appendix C – Fire performance

C1 - FISEC Report No. 1175 Issue 2 – Wall Assembly

C2 - Knauf Drywall fire assessment of non-load bearing partition systems

C3 - FISEC Report No. 1174 Issue 1 – Floor Assembly

C4 – Extract from ASFP Yellow Book - Knauf Fire Board as Column Casing

Appendix E – Sound

E4 – Armstrong Ceiling tile – reverberation sound attenuation tables

Appendix F – Ventilation Calculation

F1 – Typical ventilation calculation

Appendix G – Thermal Calculations

G1 - External Walls

G2 – Floors

G3 – Roofs – un-compressed insulation

G4 – Roofs – compressed insulation

G5 - Smart Systems - Aluminium door U Value table

G12 – FDE Polyurethane Filled Door

G13 – FDM Mineral Wool Filled Door

Appendix J – O&M

Manual and Product Data

J10 - Standard window with integral roller shutter

J12 - Formation Carpet Tile Tech Info

Appendix K - Access Statement

K1 –Typical Access Statement

Appendix L - Site Waste Management Plan

L1 –Typical Site Waste Management Plan

Appendix M – MPBA Code of practice

M1 – Loading & Unloading of Re-locatable Portable Accommodation & Storage Units

Built Offsite Ltd Drawings:

FAD 01 Section Through 2.6 Int Mod,

FAD 02 Section through width 3.2 Int Mod,

FAD 03 Section Through Width 3.2 Gable Mod,

FAD 04 Section Through Width 2.6 Gable,

FAD 09 Section Through High End Detail,

FAD 13 Cedar Cladding Details,

FAD 14 Section Through Low End Detail,

FAD 21 Vertical Section Through Length Mod,

FAD 23 Plan on Inter Mod Joint,

FAD 24 Plan on corner gable detail,

FAD 25 Module to Module wall joint details,

FAD 26 Roof and ceiling joint detail,

FAD 27 Floor to Floor Detail,

FAD 28 Vertical section thro 2 storey length,

FAD 29 Section Building length 2 Storey,

FAD 30 External Access Ramp,

FAD 31 Access Steps,

FAD 32 External Staircase Part K,

FAD 33 External Staircase With Landing Part M,

FAD 34 Typical Rain Water Good Detail,

FAD 35 Section across module widths,

FAD 36 2 Storey Ground to First Interface,

FAD 37 Section on Head to Head,

FAD 38 Head to Head roof detail,

FAD 39 Internal Corner Post Cladding,

FAD 40 Detail at Corner post roof level,

FAD 41 Vertical Section Through Head to Head,

FAD 42 2 storey Holding Down Detail,

FAD 43 External Steel Door Detail,

FAD44 External Window Glazing and Control Detail,

FAD 50 Section Through Stair Opening & Short Wall,

FAD 51 Section Through Stair Opening & Long Wall,

FAD 52 Ground Floor Plan Section Through Stair,

FAD 53 Level External Ground Door Threshold - Short Wall,

FAD 54 Level External Ground Door Threshold - Long Wall,

FAD 55 Level External Ground - Short Wall,

FAD 56 Level External Ground - Long Wall,

FAD 57 Level Access Door Threshold - Short Wall,

FAD 58 Level Access Door Threshold - Long Wall,

FAD 59 Std. External Ground Level - Short Wall, FAD 60 Std. External Ground Level - Long Wall, CDY 01 Internal Partition Walls

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