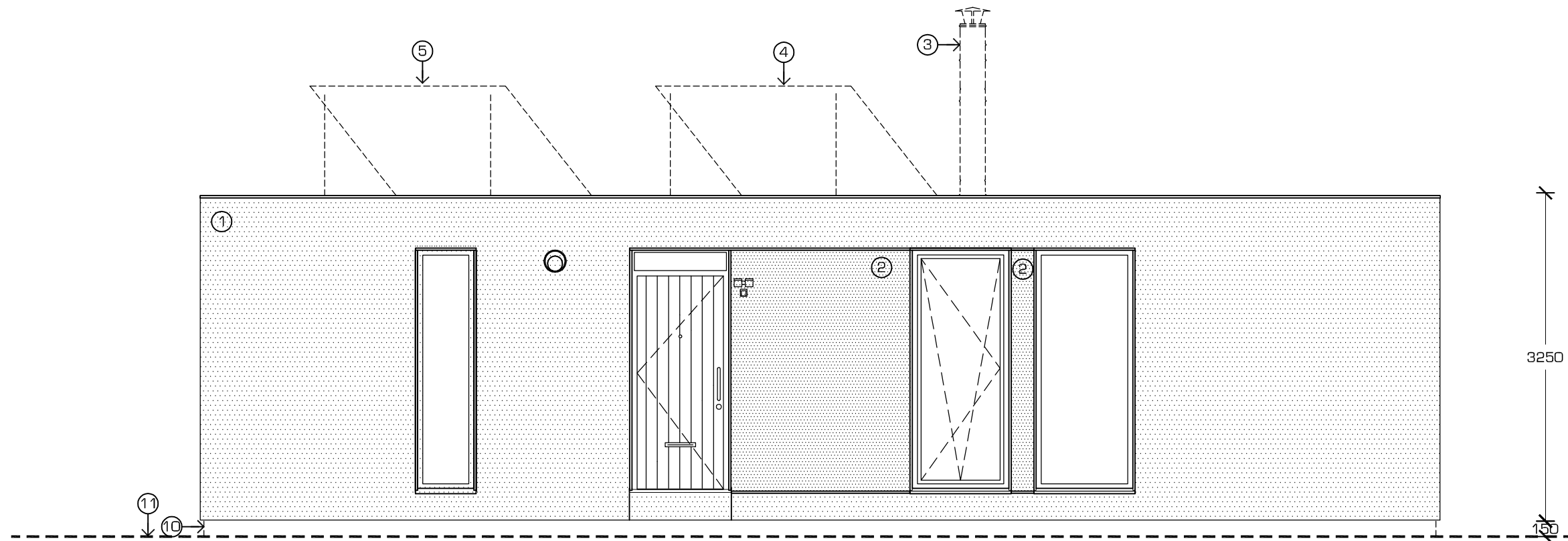
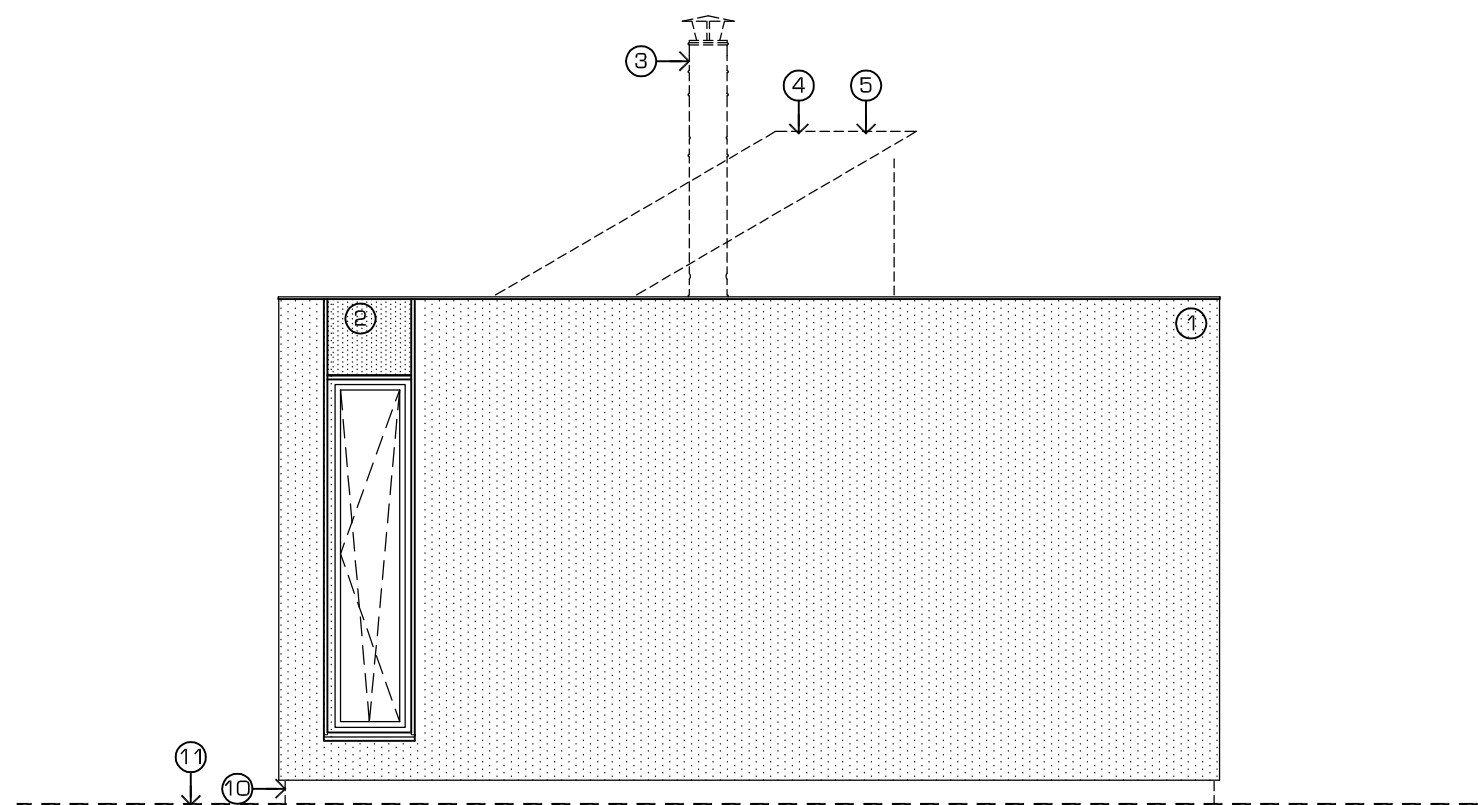




**O1 FRONT ELEVATION**  
SCALE 1:50@A3



**O2 RIGHT ELEVATION**  
SCALE 1:50@A3

REFER TO QUOTATION  
DOCUMENT FOR SELECTED  
OPTIONAL ITEMS

- ① MAIN CLADDING
- ② SECONDARY CLADDING
- ③ STOVE FLUE
- ④ SOLAR THERMAL SYSTEM (POSITION MAY VARY)
- ⑤ PHOTOVOLTAIC SYSTEM (POSITION MAY VARY)

REFER TO REQUIREMENTS  
DOCUMENT

- ⑩ FOUNDATIONS
- ⑪ ASSUMED GROUND LEVEL

REFER TO SPECIFICATION  
DOCUMENT FOR GENERAL  
DIMENSIONAL TOLERANCES AND  
MATERIALS

building type:

**BUDE**

building version:

**v4 inclusive**

building no:

**114/house1**

client:

**MAWGAN PORTH**

date:

**21.01.09**

referenced from drawing no./rev.:

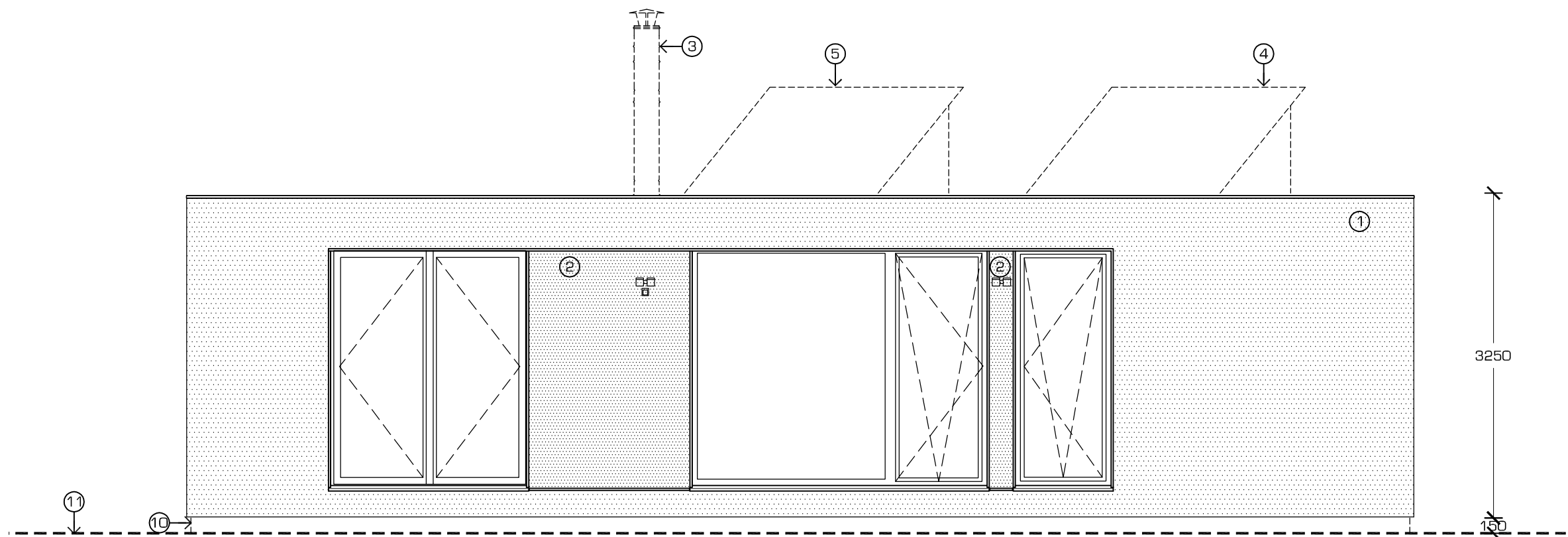
**C9B-V4incl-EL01/rev.I2**



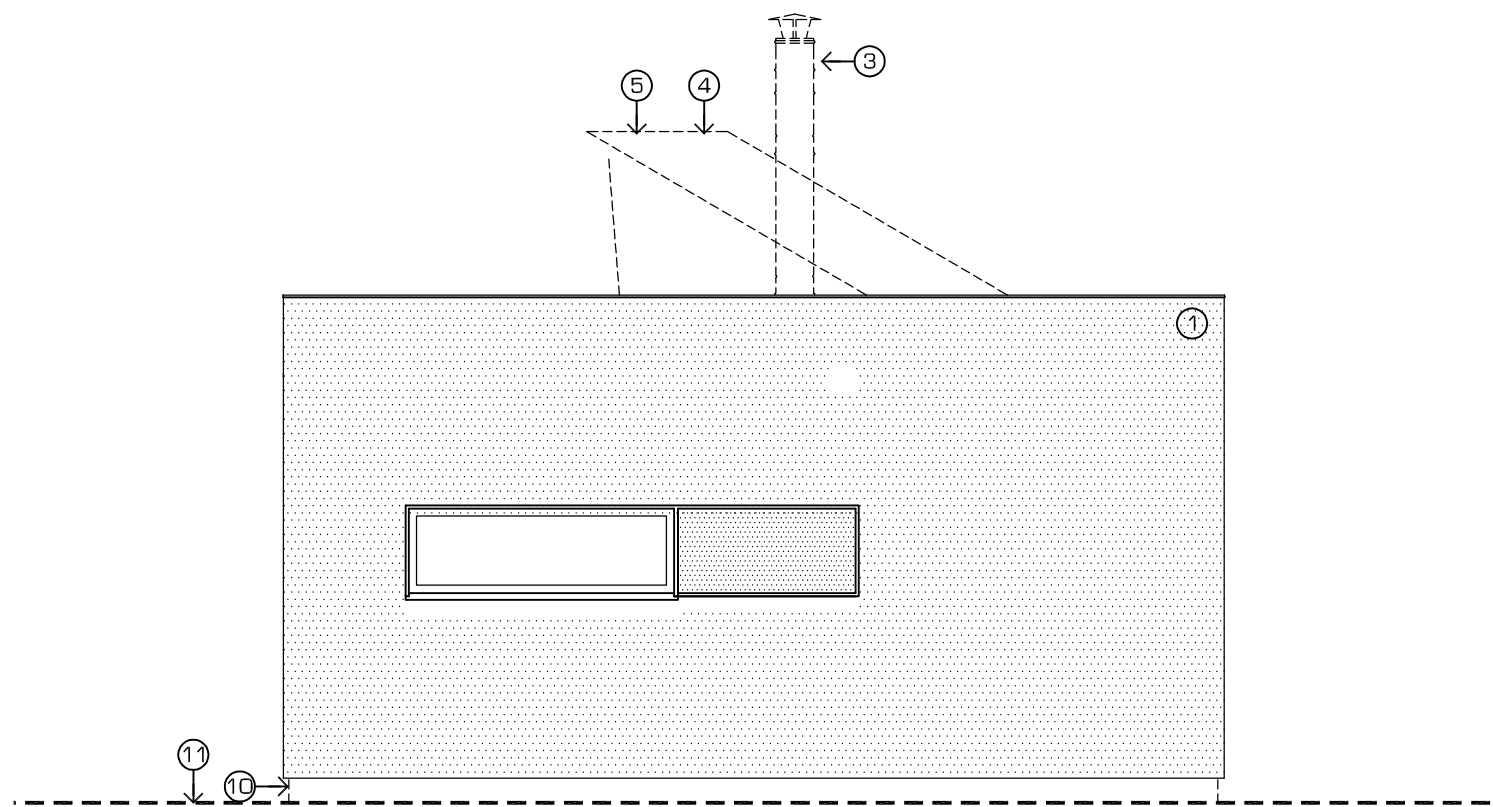
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**O1 REAR ELEVATION**  
SCALE 1:50@A3



**O2 LEFT ELEVATION**  
SCALE 1:50@A3

REFER TO QUOTATION  
DOCUMENT FOR SELECTED  
OPTIONAL ITEMS

- ① MAIN CLADDING
- ② SECONDARY CLADDING
- ③ STOVE FLUE
- ④ SOLAR THERMAL SYSTEM (POSITION MAY VARY)
- ⑤ PHOTOVOLTAIC SYSTEM (POSITION MAY VARY)

REFER TO REQUIREMENTS  
DOCUMENT

- ⑩ FOUNDATIONS
- ⑪ ASSUMED GROUND LEVEL

REFER TO SPECIFICATION  
DOCUMENT FOR GENERAL  
DIMENSIONAL TOLERANCES AND  
MATERIALS

building type:

**BUDE**

building version:

**v4 incl**

building no:

**114/house1**

client:

**MAWGAN PORTH**

date:

**21.01.09**

referenced from drawing no./rev.:

**C9B-V4incl-EL02/rev.l2**



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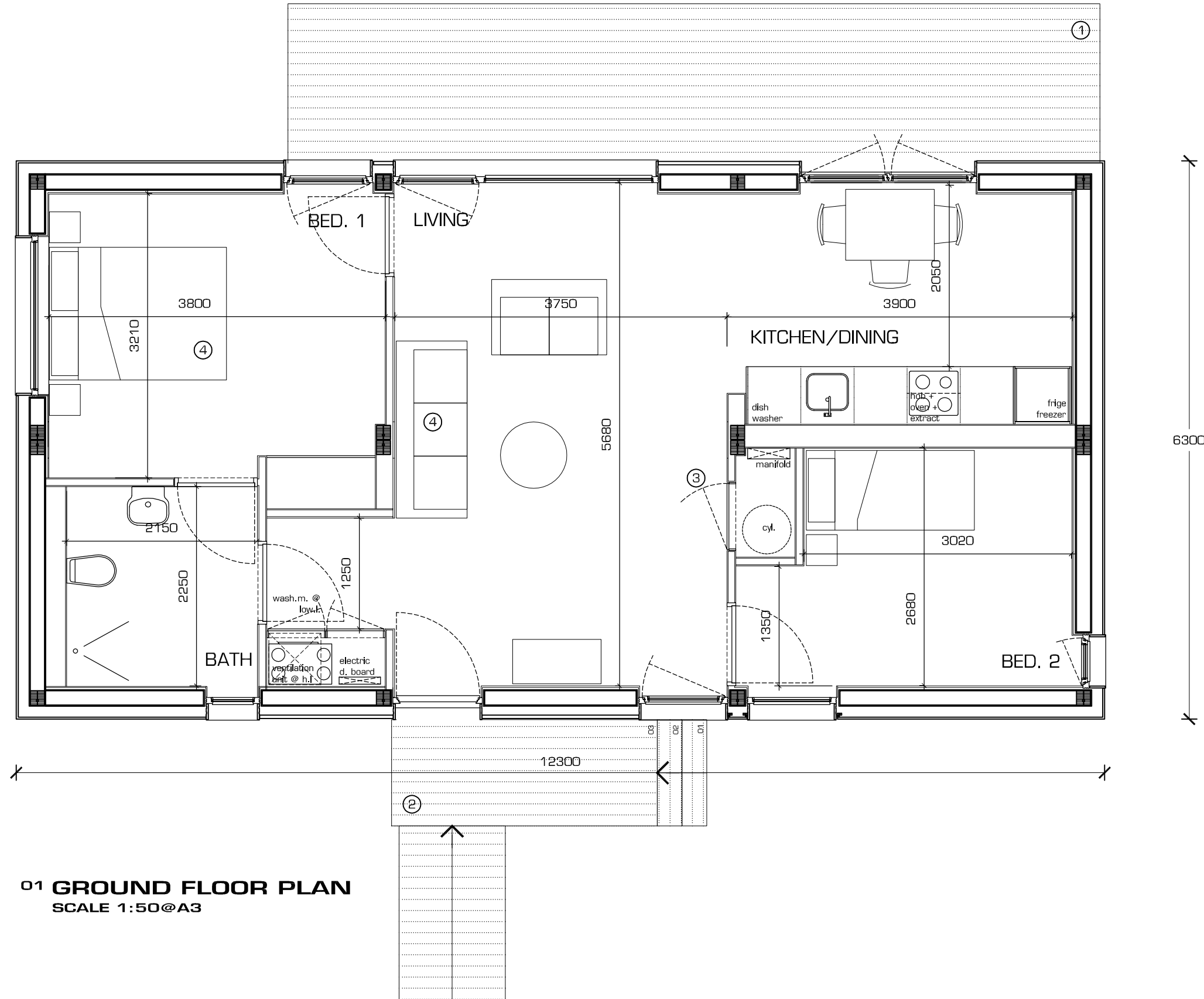
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REFER TO QUOTATION  
DOCUMENT FOR SELECTED  
OPTIONAL ITEMS:

- ① REAR DECK
- ② FRONT DECK
- ③ STOVE + FLUE
- ④ FURNITURE PACK

REFER TO SPECIFICATION  
DOCUMENT FOR GENERAL  
DIMENSIONAL TOLERANCES AND  
MATERIALS



01 **GROUND FLOOR PLAN**  
SCALE 1:50@A3

building type:

**BUDE**

building version:

**v4 inclusive**

building no:

**114/house1**

client:

**MAWGAN PORTH**

date:

**21.01.09**

referenced from drawing no./rev.:

**C9B-V4incl-GA00/rev.I3**



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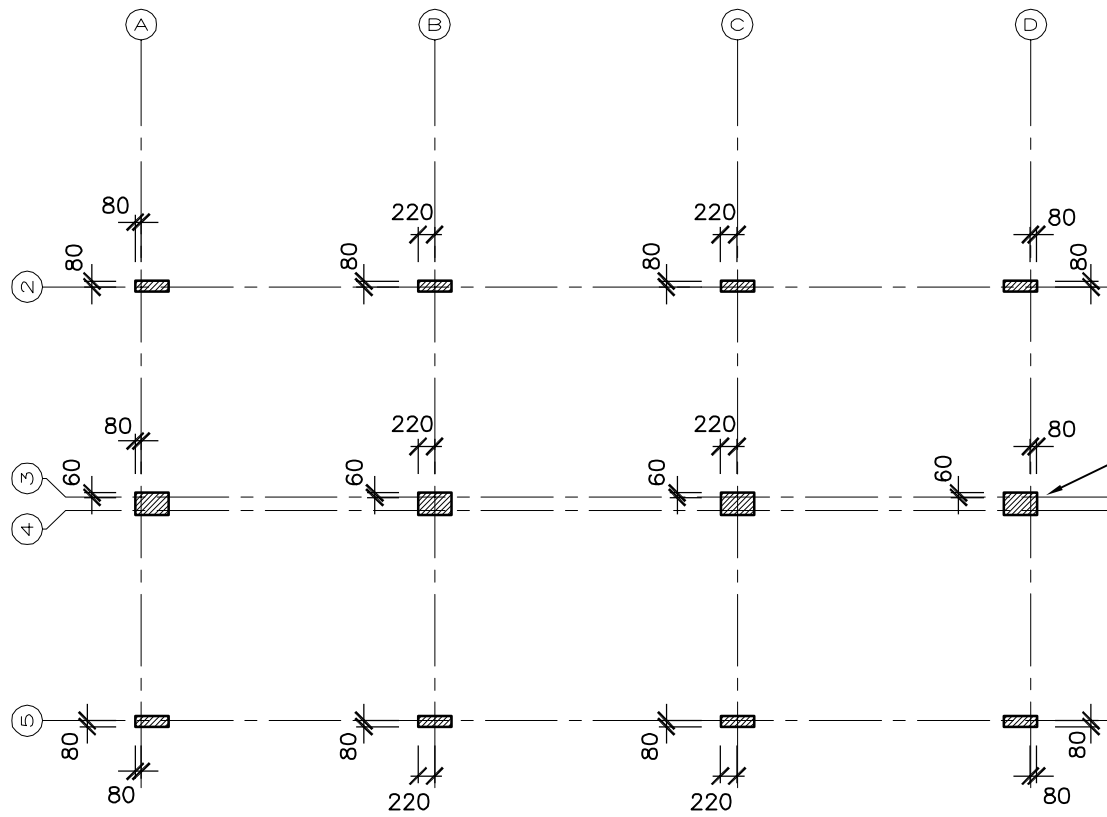
# CONSTRUCTION



## NOTES

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- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS AND THE CORRECT SETTING OUT ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE USED  
**DO NOT SCALE : IF IN DOUBT ASK**  
DIMENSIONS SHOULD NOT BE TAKEN ELECTRONICALLY
- ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH THE CURRENT BRITISH STANDARDS AND CODES OF PRACTICE

FOR GENERAL SETTING OUT REFER TO THE ARCHITECTS DRAWINGS



AT JOINT IN BUILDING PROVIDE 2No HOLDING DOWN STRAPS, ONE PER SECTION, BOTH ENDS

AT CORNERS OF BUILDING PROVIDE A STRAP ON BOTH THE END AND THE SIDE OF THE BUILDING

30x5 STAINLESS STEEL STRAP WITH 200mm Lg LEG PROJECTING BELOW FLOOR DECK RING BEAM, BENT UP UNDER DURING TRANSPORTATION

30x5 EXTENSION TO STRAP BOLTED TO PROJECTING END FROM BUILDING WITH 2No M10 STAINLESS STEEL BOLTS. TO BE SUPPLIED BY CONTRACTOR AND FITTED ONCE BUILDING IS IN PLACE STRAP TO BE PLUGGED AND SCREWED SIDE OF BLOCKWORK AND ANCHORED DOWN TO TOP OF FOUNDATION

BUDE UNIT BY CLOUD NINE

DPC BY CONTRACTOR TO PROTECT GLULAM BEAMS AGAINST GROUND MOISTURE

SUPPORTING FOUNDATION BY CONTRACTOR

## TYPICAL HOLDING DOWN STRAP DETAIL

1:10

HOLDING DOWN STRAPS TO BE PROVIDED AT ALL PERIMETER GRID POSITIONS WITH 2No AT CORNERS

## LAYOUT SHOWING SETTING OUT OF MINIMUM BEARING AREAS

1:100

SUMMARY OF MINIMUM BEARING AREAS BETWEEN GLULAM BEAMS AND SUPPORTING STRUCTURE

| HORIZONTAL GRID |         |         |         |         |
|-----------------|---------|---------|---------|---------|
|                 | A       | B       | C       | D       |
| 2               | 140x440 | 140x440 | 140x440 | 140x440 |
| 3/4             | 290x440 | 290x440 | 290x440 | 290x440 |
| 5               | 140x440 | 140x440 | 140x440 | 140x440 |

VERTICAL GRID

SUMMARY OF FOUNDATION LOADS (SINGLE STOREY)

| HORIZONTAL GRID |      |      |      |      |
|-----------------|------|------|------|------|
|                 | A    | B    | C    | D    |
| 2               | 30kN | 50kN | 50kN | 30kN |
| 3               | 30kN | 45kN | 45kN | 30kN |
| 4               | 30kN | 45kN | 45kN | 30kN |
| 5               | 30kN | 50kN | 50kN | 30kN |

VERTICAL GRID

## NOTES

PLEASE REFER TO THE 'LOADINGS AND FOUNDATION REQUIREMENTS' CONTAINED WITHIN THE DOCUMENTATION.

FOUNDATION TOLERANCES  
LATERALLY THE SUPPORTING STRUCTURES SHOULD NOT BE GREATER THAN  $\pm 20$ mm OUT OF POSITION.

VERTICALLY THE TOPS OF THE SUPPORTING STRUCTURES SHOULD NOT BE MORE THAN  $\pm 5$ mm OUT OF LEVEL

|                                                                                                   |          |                         |          |        |
|---------------------------------------------------------------------------------------------------|----------|-------------------------|----------|--------|
| A                                                                                                 | 02.02.09 | ISSUED FOR CONSTRUCTION | AA       | op     |
| DATE                                                                                              | REVISION | SUMMARY                 | BY       | CHK    |
| <b>JOB TITLE:</b><br>CLOUD 9<br>ECO HOMES<br>BUDE V.4                                             |          |                         |          |        |
| <b>CLIENT:</b><br>CLOUD 9                                                                         |          |                         |          |        |
| <b>DETAIL:</b><br>FOUNDATION LOADS<br>AND BEARING AREAS                                           |          |                         |          |        |
| <b>DRN. BY:</b> A. Ashman                                                                         |          |                         |          |        |
| DATE:                                                                                             | JAN' 09  | SCALE:                  | AS NOTED |        |
| JOB NO:                                                                                           | 07078    | DRAWING No:             | 55       | REV: A |
|                                                                                                   |          |                         |          |        |
| Boscawen House · Chapel Hill · Truro · Cornwall<br>TR1 3BN<br>Tel. 01872 260962 Fax. 01872 260963 |          |                         |          |        |

|     |          |                                                    |       |         |
|-----|----------|----------------------------------------------------|-------|---------|
| C1  | 20.02.09 | Penetration 1,1aS6 moved, Issued for construction. | Ig    | ds      |
| I2  | 21.01.09 | Penetration 4S3 moved,                             | Ig    | ds      |
| I1  | 05.01.09 | Issued for information.                            | LG    | DS      |
| rev | date     | description                                        | drawn | checked |



|     |          |                                                    |       |         |
|-----|----------|----------------------------------------------------|-------|---------|
| C1  | 20.02.09 | Penetration 1,1aS6 moved, Issued for construction. | Ig    | ds      |
| I2  | 21.01.09 | Penetration 4S3 moved,                             | Ig    | ds      |
| I1  | 05.01.09 | Issued for information.                            | LG    | DS      |
| rev | date     | description                                        | drawn | checked |

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F +44 020 8986 8555  
[www.usearchitects.com](http://www.usearchitects.com)

on behalf of:

**CONSTRUCTION ISSUE**

cloud nine  
low carbon living

Project C9-BUDE v.4

|           |                                            |
|-----------|--------------------------------------------|
| DWG Title | UK SITE SERVICES<br>CONNECTION REQUIRMENTS |
|-----------|--------------------------------------------|



Scale

1:50 @ A3

do not scale the drawing

|          |    |
|----------|----|
| DWG Size | A3 |
|----------|----|

|  |          |                 |      |
|--|----------|-----------------|------|
|  | Date     | JANUARY.2009    |      |
|  | DWG No.  | C9B-v4-ME-UK-00 |      |
|  | Revision | C1              |      |
|  | DWG File | C9B-v4_ME-uk-00 | 0220 |

|     |          |                                                    |       |         |
|-----|----------|----------------------------------------------------|-------|---------|
| C1  | 20.02.09 | Penetration 1,1aS6 moved, Issued for construction. | Ig    | ds      |
| I2  | 21.01.09 | Penetration 4S3 moved,                             | Ig    | ds      |
| I1  | 05.01.09 | Issued for information.                            | LG    | DS      |
| rev | date     | description                                        | drawn | checked |

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on behalf of:

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low carbon living

Project C9-BUDE v.4

|           |                                            |
|-----------|--------------------------------------------|
| DWG Title | UK SITE SERVICES<br>CONNECTION REQUIRMENTS |
|-----------|--------------------------------------------|



Scale

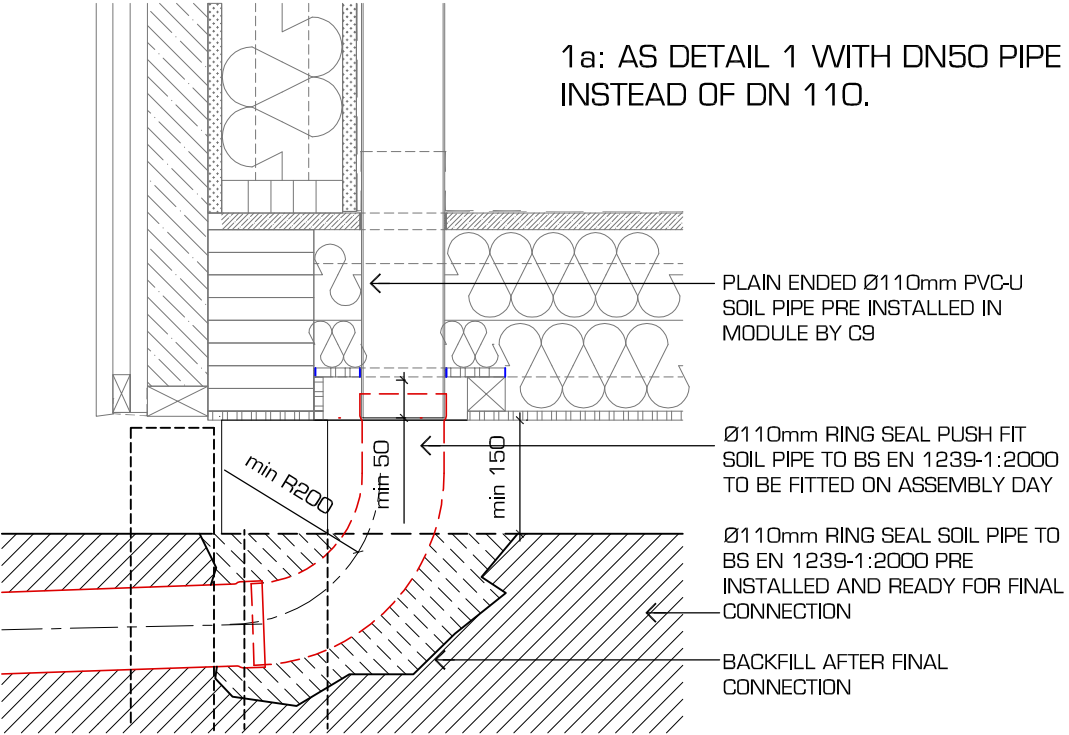
1:50 @ A3

do not scale the drawing

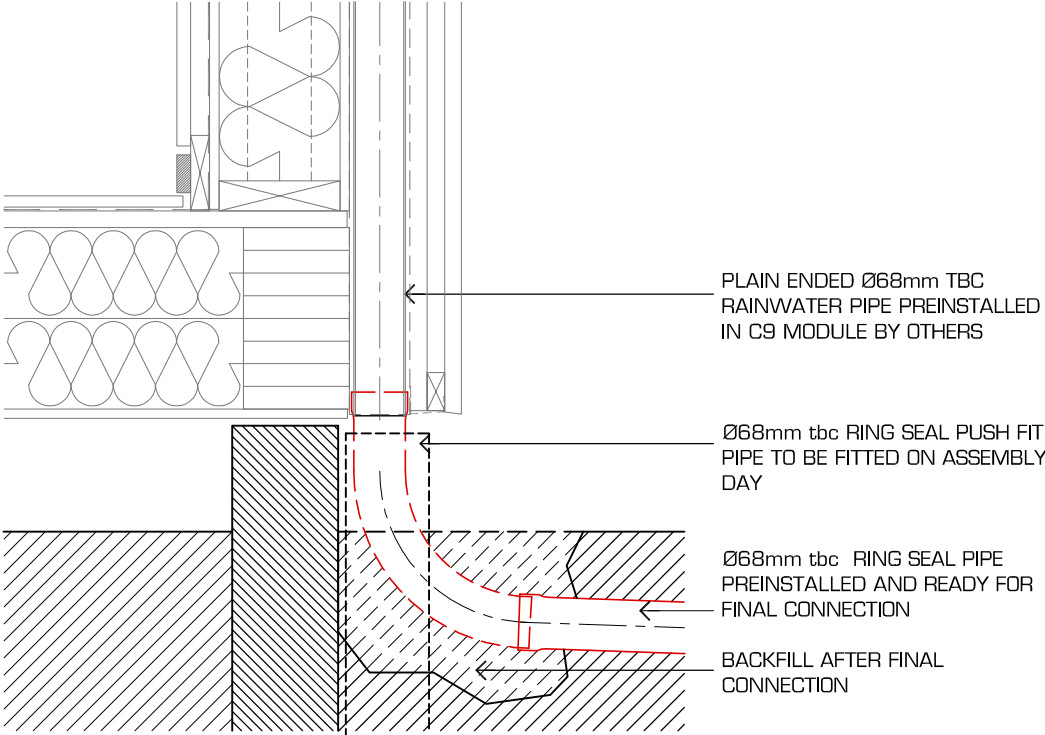
|          |    |
|----------|----|
| DWG Size | A3 |
|----------|----|

|  |          |                 |      |
|--|----------|-----------------|------|
|  | Date     | JANUARY.2009    |      |
|  | DWG No.  | C9B-v4-ME-UK-00 |      |
|  | Revision | C1              |      |
|  | DWG File | C9B-v4_ME-uk-00 | 0220 |

1. SOIL STACK CONNECTION DETAILS



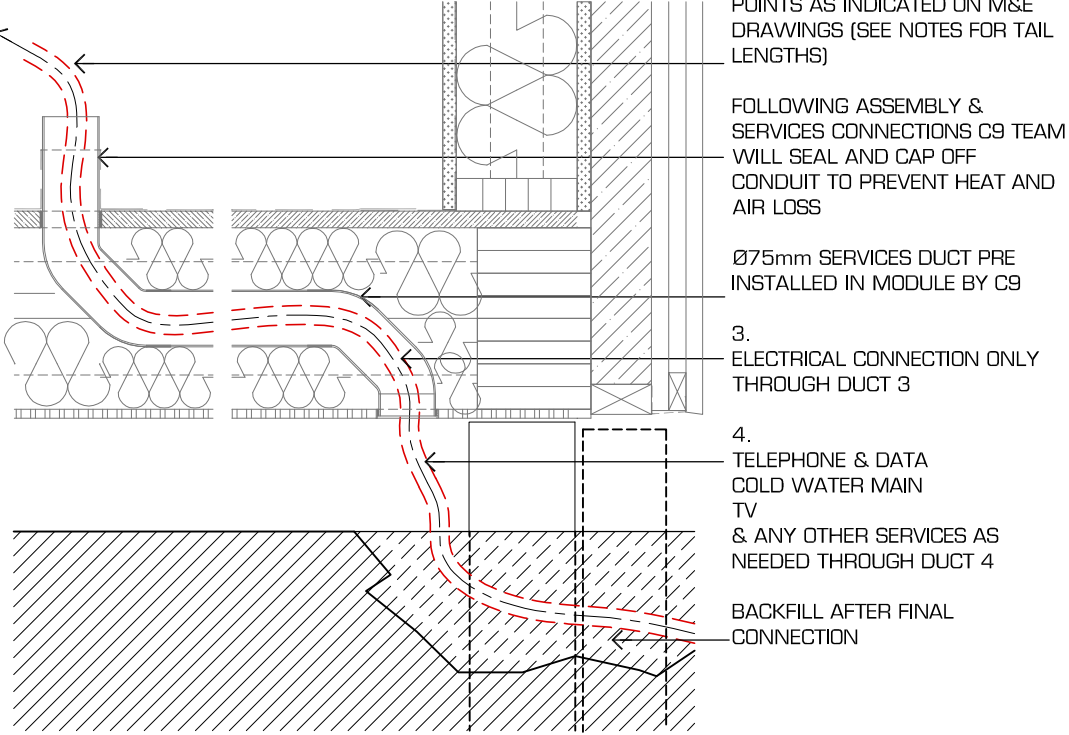
2. RAINWATER OUTLETS CONNECTION DETAILS



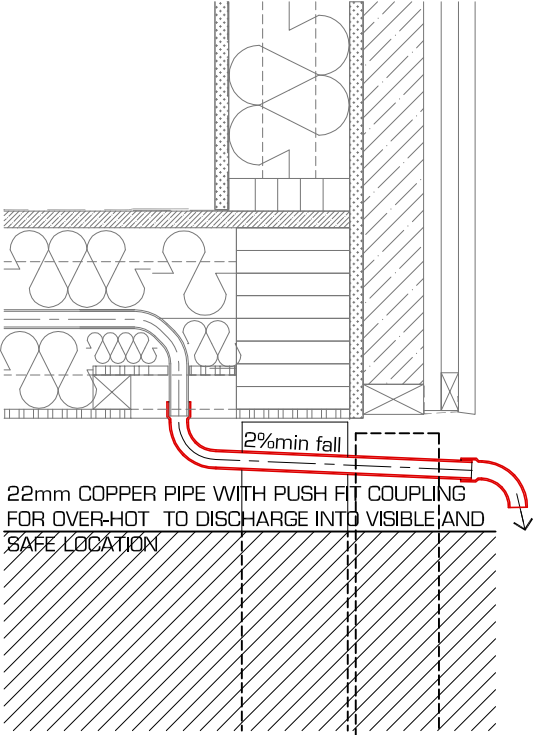
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NOTES:  
TAIL LENGHTS - BUDE v.4  
3. MAIN ELECTRICAL SUPPLY - MIN. 2lm  
4. TV - MIN. 2.0lm  
TELEPHONE & DATA - MIN. 2.0lm  
COLD WATER SUPPLY - 2.5lm  
RAINWATER HARVESTING OPTION - CONSULT C9  
OTHER - CONSULT C9

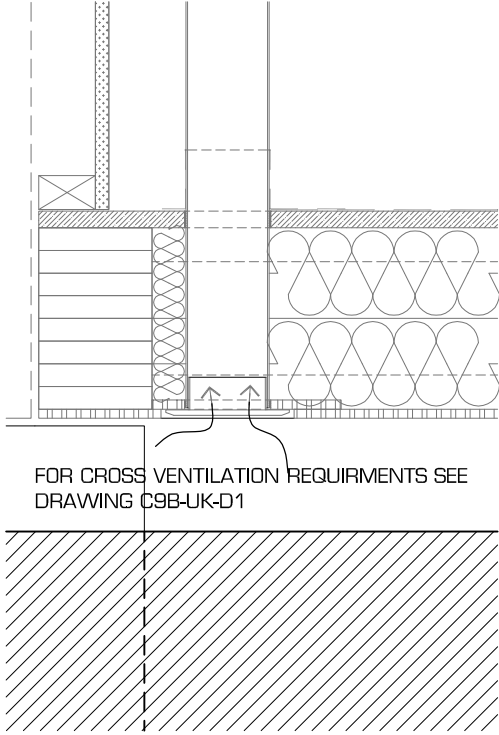
3,4. INCOMING SERVICES CONNECTION DETAILS



5. CYLINDER'S OVERFLOW PIPE



6. OPTIONAL STOVE'S AIR INTAKE

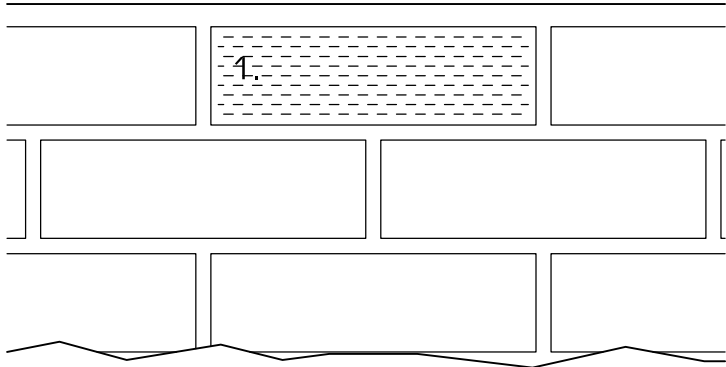


FOR SETTING OUT OF CONNECTIONS NO. 1-6 SEE DRAWING C9-V3-ME-UK-00  
TO BE READ IN CONJUNCTION WITH REQUIRMENTS DOCUMENT AND ATTACHEMENTS

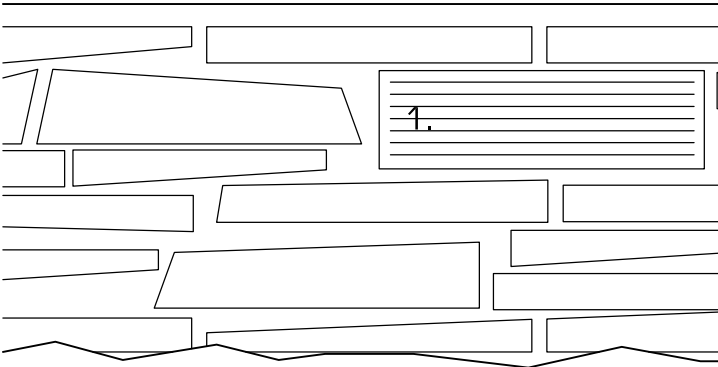
01 SERVICES CONNECTIONS 1-6 DETAILS  
SCALE 1:10@A3

|                                                                                                                                                                                                                                                       |          |                                         |       |         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------------|-------|---------|
| C1                                                                                                                                                                                                                                                    | 20.02.09 | Issued for construction,                | lg    | ds      |
| rev                                                                                                                                                                                                                                                   | date     | description                             | drawn | checked |
| <div><div>USE Architects</div><div>on behalf of:<div>cloud nine</div><div>low carbon living</div></div><div>Temple Works<br/>Brett Road<br/>London E8 1JR</div><div>T +44 020 8986 8111<br/>F +44 020 8986 8555<br/>www.usearchitects.com</div></div> |          |                                         |       |         |
| Project                                                                                                                                                                                                                                               |          | C9-BUDE v.4                             |       |         |
| DWG Title                                                                                                                                                                                                                                             |          | UK SITE SERVICES CONNECTION REQUIRMENTS |       |         |
| Scale                                                                                                                                                                                                                                                 |          | 1:10 @ A3<br>do not scale the drawing   |       |         |
| DWG Size                                                                                                                                                                                                                                              |          | A3                                      |       |         |
| Date                                                                                                                                                                                                                                                  |          | Sept.2008                               |       |         |
| DWG No.                                                                                                                                                                                                                                               |          | C9B-V4-ME-UK-D1                         |       |         |
| Revision                                                                                                                                                                                                                                              |          | c1                                      |       |         |
| DWG File                                                                                                                                                                                                                                              |          | C9B-V4-ME-uk-D1                         |       |         |
|                                                                                                                                                                                                                                                       |          | 0220                                    |       |         |

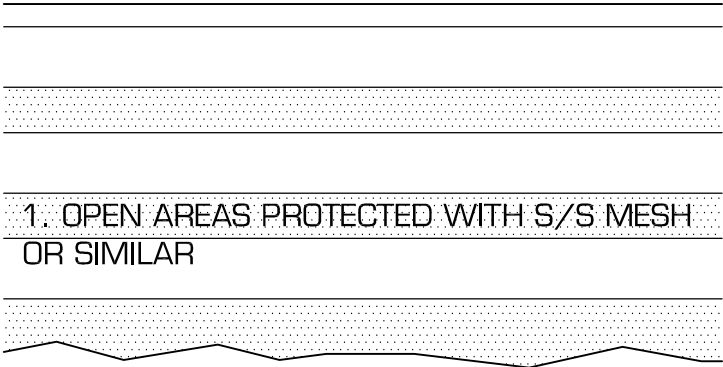
a) ENGINEERED BRICKS



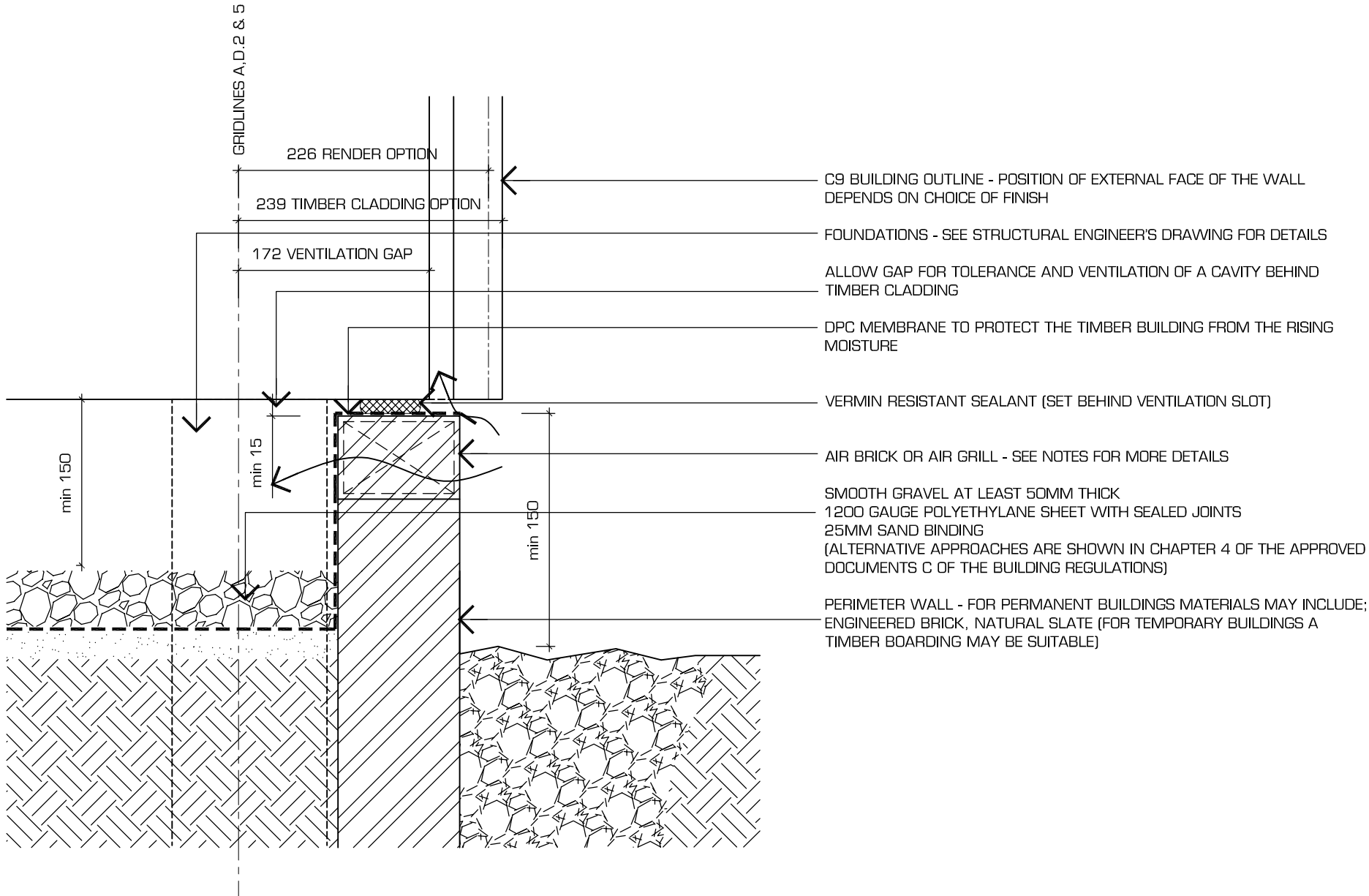
b) NATURAL SLATE OR SIMILAR



c) LOUVRED TOMBER PLANKS



**02 PERIMETER WALL ELEVATION**  
SCALE 1:5@A3



**01 GROUND COVER & PERIMETER WALL DETAILS**  
SCALE 1:5@A3

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General Notes:  
Any inconsistencies must be reported back to architect prior to commencement of construction.

UK1 Denotes items to be installed during site assembly process.

1.  
MINIMUM TOTAL FREE AREA OF AIR BRICKES/LOUVRES @ EACH LONG SIDE OF THE BUILDING:

BUDE V.0 / V.1 / V.2 / V.4 > 38800mm  
BUDE V.3 > 41900mm

THIS IS AN EQUIVALENT OF 1 STANDARD CLAY/PLASTIC AIR BRICK OR 9x3" S/S LOUVRES (MIN. 6500mm² OF FREE AREA) PER EACH STARTED 2 RUNNING METERS OF THE WALL

IF CIRCULAR PIPES ARE USED THEY NEED TO BE MINIMUM Ø100mm

2.  
LEAVE OPEN SECTIONS OF PERIMETER WALL TO ALLOW FOR CONNECTION OF INCOMING SERVICES & DRAINAGE ON THE ASSEMBLY DAY - CONSULT C9 TO DISCUSS DETAILS

|    |          |                          |    |    |
|----|----------|--------------------------|----|----|
| C1 | 20.02.09 | Issued for construction. | lg | ds |
| I1 | 19.09.08 | Issued for information   | lg | ds |

| rev                                                                              | date     | description                                                         | drawn | checked |
|----------------------------------------------------------------------------------|----------|---------------------------------------------------------------------|-------|---------|
| <b>USE Architects</b><br>on behalf of:<br><b>cloud nine</b><br>low carbon living |          |                                                                     |       |         |
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| Project                                                                          |          | C9-BUDE v.0                                                         |       |         |
| DWG Title                                                                        |          | UK SITE - GROUND COVER REQUIRMENTS                                  |       |         |
| Scale                                                                            |          | 1:5 @ A3<br>do not scale the drawing                                |       |         |
| DWG Size                                                                         |          | A3                                                                  |       |         |
|                                                                                  | Date     | SEPT. 2008                                                          |       |         |
|                                                                                  | DWG No.  | C9B-UK-D1                                                           |       |         |
|                                                                                  | Revision | C1                                                                  |       |         |
|                                                                                  | DWG File | C9B-uk-D1                                                           |       |         |
|                                                                                  |          | 0220                                                                |       |         |

# BUDE V.4 HOUSE TYPE

## LOADINGS AND FOUNDATION REQUIREMENTS

---

### 1. WIND LOADS

This house type has been designed to BS 6399-2.

Design parameters have been used to cover all but the most exposed or elevated sites in England and Wales. The following design pressures have been utilised.

- Maximum net pressure / suction on any wall =  $2.295\text{kN/m}^2$  (234 kg/m<sup>2</sup>)
- Maximum net lateral wind load on building =  $1.683\text{kN/m}^2$  (172kg/m<sup>2</sup>)

Reference should be made to the Designers for individual sites where very exposed conditions mean that the above parameters might be exceeded.

### 2. SNOW LOADS

The roof to the unit has been designed for a live load of  $1.5\text{kN/m}^2$ . This covers all normal snow loadings. If it is considered that exceptional drifted snow loads are possible, reference should be made to the Designers.

### 3. FLOOR LOADS

The internal floor to the unit has been designed for a maximum live load of  $2.5\text{kN/m}^2$ .

### 4. FOUNDATION LOADS

Foundation loads are shown on the attached drawing 07078/32. The loads stated are characteristic (unfactored).

### 5. FOUNDATION DESIGN

Foundation design and construction is the responsibility of the Purchaser. It has been assumed that foundations will be designed by a suitably qualified Structural Engineer, to resist the stated loadings, in accordance with the latest revision of BS8004 or the equivalent Eurocode. The superstructure design has assumed that long-term relative foundation settlements will not exceed  $L/500$ , where L is the distance between any two foundations.