



Rewarding Learning

General Certificate of Secondary Education
Summer 2016

Centre Number

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Candidate Number

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Construction and the Built Environment

Assessment Unit 1
The Construction Industry for the 21st Century



GCB11

[GCB11]

MONDAY 13 JUNE, AFTERNOON

TIME

1 hour 30 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper.

Answer **all ten** questions.

Questions **1, 2, 3** and **9** should be answered in relation to the enclosed house drawings and specifications previously issued as Pre-Release Material.

You should not bring any of the material previously issued into this examination.

You will be provided with a clean copy of the Pre-Release Material.

INFORMATION FOR CANDIDATES

The total mark for this paper is 120.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

Quality of written communication will be assessed in Questions **7** and **9**.

A scale ruler is required.

For Examiner's use only	
Question Number	Marks
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

Total Marks	
--------------------	--



Fig. 1

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Examiner Only	
Marks	Remark

- 5 (a) Give the name for the type of pitched roof construction used on the house shown in Fig. 1.

_____ [1]

- (b) List **three** common roof coverings used to provide the waterproof covering on the type of roof shown in Fig. 1.

(i) _____ [1]

(ii) _____ [1]

(iii) _____ [1]

- (c) What is the normal spacing of truss rafters for a pitched roof as shown in Fig. 2?

_____ [1]



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Fig. 2

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(Questions continue overleaf)



Fig. 5

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- 8 (a) What is the correct name given to the type of structure shown in Fig. 5? Your answer should include the material from which the frame is made.

_____ [2]

- (b) What is the correct name given to the horizontal members in this type of structure?

_____ [1]

- (c) What is the correct name given to the vertical members in this type of structure?

_____ [1]

- (d) How are connections made to structural elements prior to the structure arriving on site?

_____ [1]

- (e) How are connections made between structural elements when they arrive on site?

_____ [1]



Fig. 6

© Chief Examiner

Examiner Only	
Marks	Remark

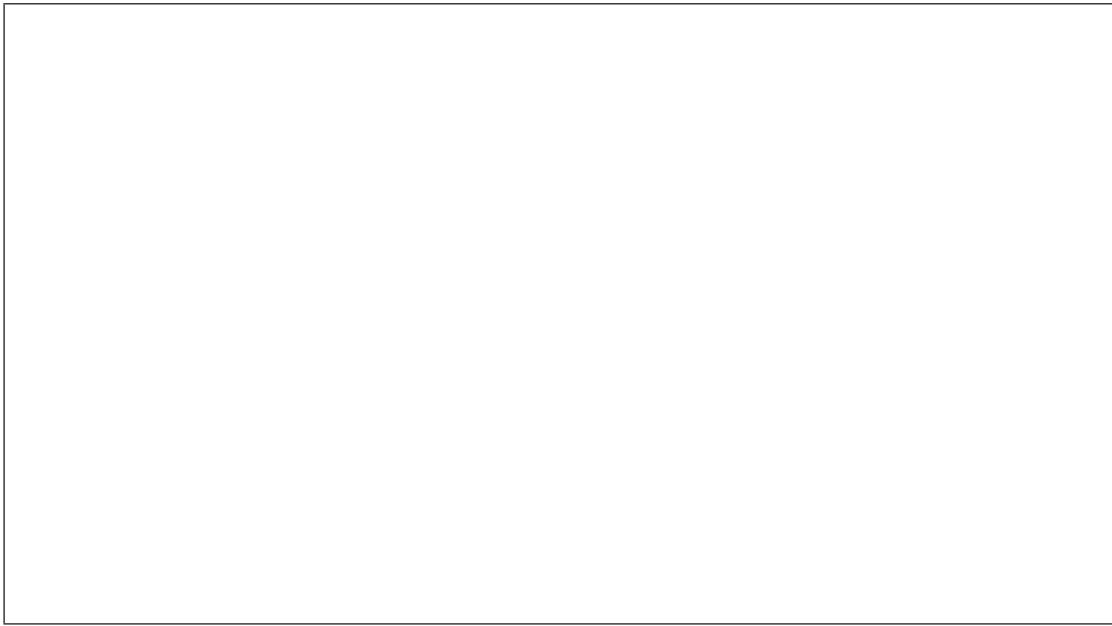
- (f) **Fig. 6** shows an alternative material in use to make a structure. Give the name of the material being used to make the frame.

_____ [2]

- (g) Make a sketch in the box below to show how the material used in **Fig. 5** can be joined to a concrete pad foundation.

[6]

(h) Make a sketch in the box below to show how the horizontal and vertical members of the material used in **Fig. 5** can be joined together on site.



[6]

Examiner Only	
Marks	Remark

THIS IS THE END OF THE QUESTION PAPER

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General Certificate of Secondary Education
Summer 2016

Construction and the Built Environment

Pre-Release Material
EXAMINATION COPY

Assessment Unit 1
The Construction Industry for the 21st Century

[GCB11]

MONDAY 13 JUNE, AFTERNOON



GCB11

You must use **this** clean copy of the Pre-Release Material in the examination and **not** your own annotated copy.

NOTE: Students will require the use of a scale ruler during the examination.

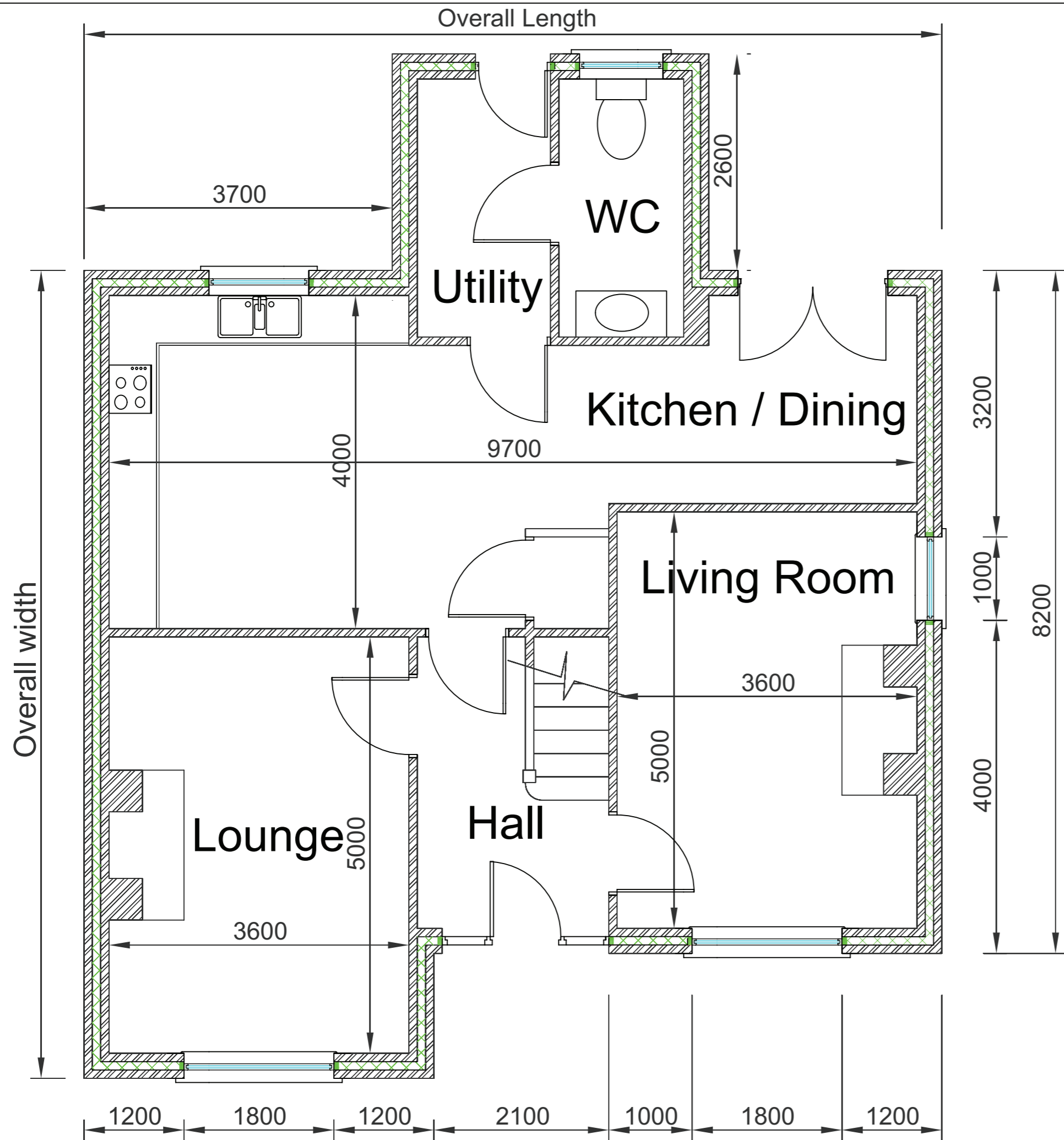
Construction and the Built Environment

Introduction

A copy of the Pre-Release Material for this examination is included in this paper and three associated drawings.

The materials contain drawings and specifications relating to a house which is to be constructed locally. This house forms part of a mixed use development constructed from facing brickwork. The site currently employs 25 people.

NOTE Students will require the use of a scale ruler during the examination.



GCSE Construction and the Built Environment

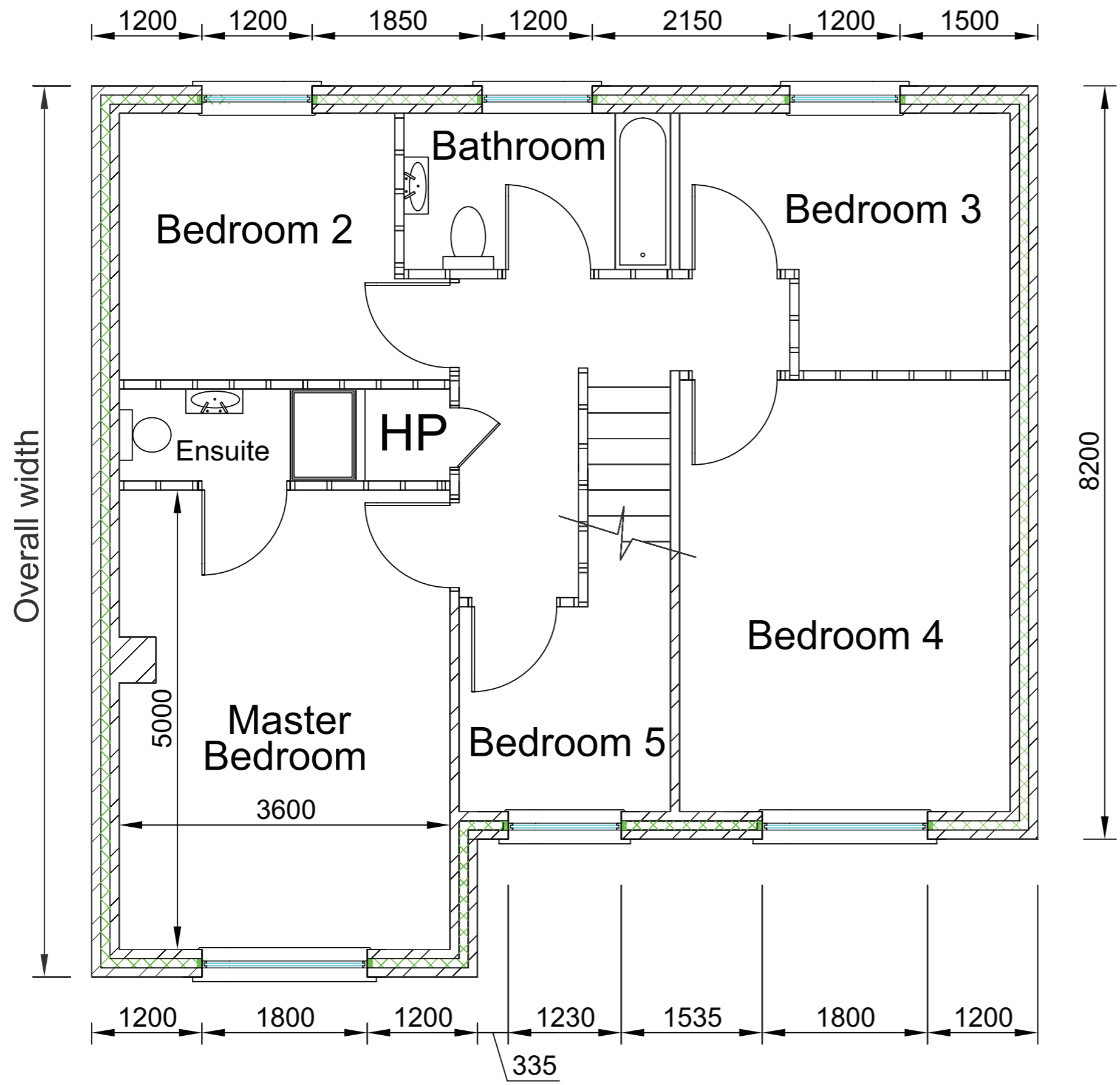
Ground Floor Plan View Drawing No 1

Unit 1

Pre-release material

January 2016 - Summer 2016

SCALE: 1: 50



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First Floor Plan View Drawing No 2

Unit 1

Pre-release material

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SCALE: 1: 50



Specification

**Grey concrete interlocking roof tiles.
White powder coated aluminium
gutter.**

**White uPVC fascia and barge board.
White uPVC windows and front door.
Precast concrete window sills.
Precast concrete chimney coping.**

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Front Elevation Drawing No 3

Unit 1

Pre-release material

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SCALE: 1: 50

