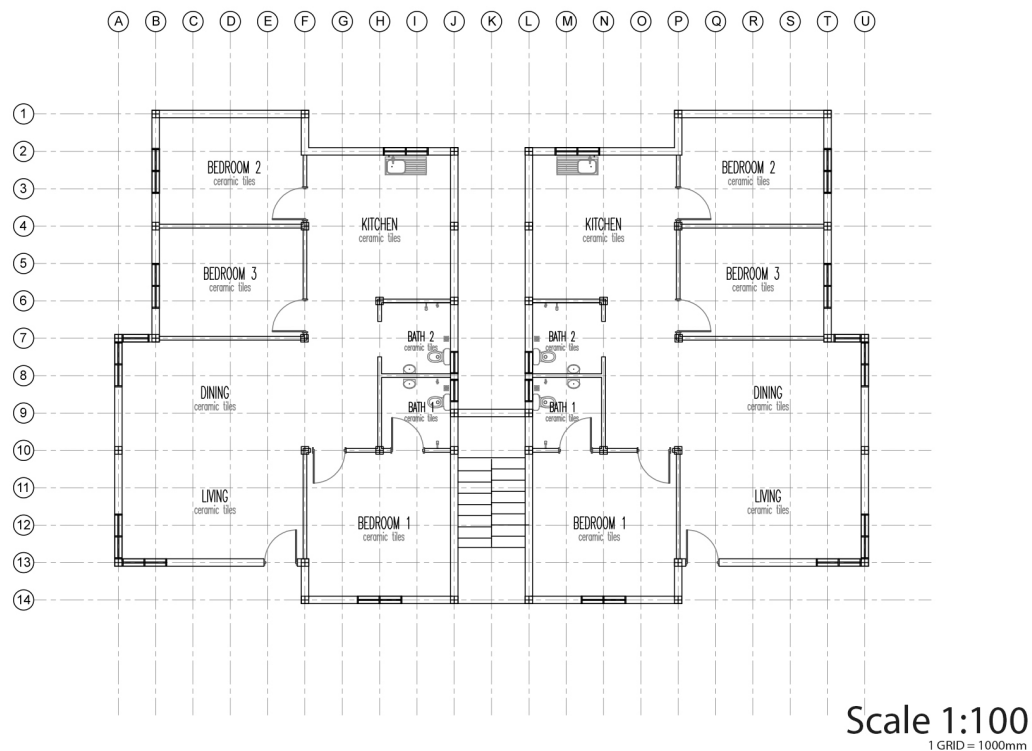


# IBS Score



## 1. Construction Area

I.	Ground Floor Construction Area	=	140m <sup>2</sup>
II.	First Floor Construction Area	=	140m <sup>2</sup>
III.	Second Floor Construction Area	=	140m <sup>2</sup>

## 2. Structural Systems

- I. Columns: Precast hollow rectangular steel columns
- II. Beams: Precast steel I-beams & C-beams
- III. Floor Slabs: Prefabricated concrete half slabs
- IV. Roof Truss: Prefabricated steel roof trusses

## 3. Wall Systems

- I. External: Prefabricated cross-laminated timber (CLT)
- II. Internal: In-situ drywall

## 4. Other Simplified Construction Solutions

- I. Columns: 100% complies with MS 1064 Part 10:2001
- II. Beams: 100% complies with MS 1064 Part 10:2001
- III. Walls: 61% complies with MS 1064 Part 10:2001
- IV. Slabs: 100% complies with MS 1064 Part 10:2001
- V. Doors & Windows: 0% complies with MS 1065 Part 4 & Part 5:2001

From the information given, the calculation can be tabulated as follows:

ELEMENTS	AREA (m <sup>2</sup> )/ LENGTH (m)	IBS FACTOR	COVERAGE	IBS SCORE
<b>Part 1: Structural Systems</b>				
Ground Floor: Precast steel columns and steel beams + precast concrete half floor slabs.	140	1.0	$140 \div 560$ = 0.25	$0.25 \times 1 \times 50$ = 12.5
First Floor: Precast steel columns and steel beams + precast concrete half floor slabs.	140		$140 \div 560$ = 0.25	$0.25 \times 1 \times 50$ = 12.5
Second Floor: Precast steel columns and steel beams + precast concrete half floor slabs.	140		$140 \div 560$ = 0.25	$0.25 \times 1 \times 50$ = 12.5
Roof truss using prefabricated steel roof trusses.	140		$140 \div 560$ = 0.25	$0.25 \times 1 \times 50$ = 12.5
<b>Total Part 1 =</b>	<b>560m<sup>2</sup></b>		<b>1.0</b>	<b>50</b>
<b>Part 2: Wall Systems</b>				
External wall using prefabricated cross-laminated timber (CLT).	88	1.0	$88 \div 144$ =0.61	$0.61 \times 1 \times 20$ =12.2
Interior wall using in-situ drywall.	56	1.0	$56 \div 144$ =0.39	$0.39 \times 1 \times 20$ =7.8
<b>Total Part 2</b>	<b>144m</b>		<b>1.0</b>	<b>20</b>

<b>Part 3: Other Simplified Construction Solutions</b>				
100% of column usage follow MS 1064 Part 10:2001			100%	4
100% of beam usage follow MS 1064 Part 10:2001			100%	4
61% of wall usage follow MS 1064 Part 10:2001			61%	2
100% of floor slab usage follow MS 1064 Part 10:2001			100%	4
<b>Total Part 3</b>				<b>14</b>
<b>IBS Score of Project (Part 1 + Part 2 + Part 3)</b>				<b>84</b>