

**Minimum Bearing**

- Beam 1 - 200mm
- Beam 2 - 150mm
- Beam 3 - 150mm
- Beam 4 - 150mm

All dimensions and beam lengths to be checked on site to prevent error. Ensure you add sufficient bearing each end.

**Example**

BEAM 3  
span 3630 + 150 bearing + 100 connection = 3880mm

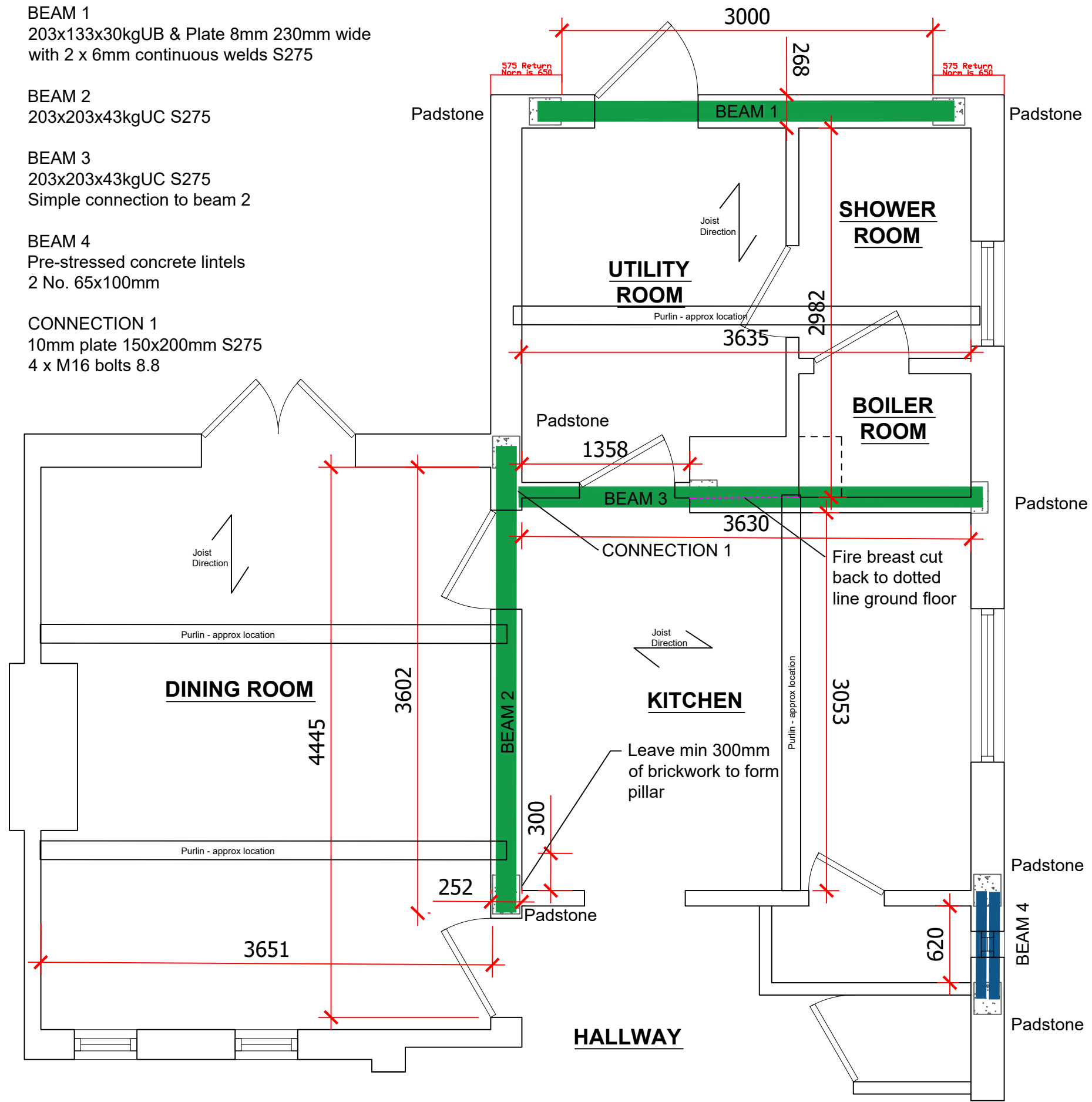
**BEAM 1**  
203x133x30kgUB & Plate 8mm 230mm wide with 2 x 6mm continuous welds S275

**BEAM 2**  
203x203x43kgUC S275

**BEAM 3**  
203x203x43kgUC S275  
Simple connection to beam 2

**BEAM 4**  
Pre-stressed concrete lintels  
2 No. 65x100mm

**CONNECTION 1**  
10mm plate 150x200mm S275  
4 x M16 bolts 8.8



**HUGHES** Load Span Tables for Prestressed Lintels **CE**

4" x 3" Prestressed Concrete Lintels  
65mm x 100mm

Nominal Length mm	Safe Load Capacity <sup>1</sup> On Edge kN/m <i>Rm = 0.53 kNm</i>	Safe Load Capacity <sup>1</sup> On Flat kN/m <i>Rm = 0.21 kNm</i>
900	37.43	22.27
1050	33.54	20.66
1200	29.65	19.05
1350	25.76	17.44
1500	21.87	15.83
1650	17.98	14.22
1800	14.09	12.61
1950	10.20	11.01
2100	7.54	8.88
2250	6.29	6.76
2400	5.24	4.64

**BEAM 4**  
Assume 5 kN/m per skin of brickwork, or 10 kN/m 225mm solid masonry wall. Referring to chart above, 2 No. concrete lintels lying flat spanning 620mm is PASS.

Drawing History

REV	DATE	DESCRIPTION	DRAWN	CHKD

**HomeDESIGNPLANNING APPLICATIONS.com**

Summer House | Upper Court Road  
Woldingham | Surrey | CR3 7BF  
Tel: 0203 294 9477 07922 148 701  
support@planningapplications.com  
www.planningapplications.com

Title  
**Proposed Beam Layout  
Ground Floor**  
Project  
59 Oakhill Road Horsham RH135LE  
Client  
Mr Colin Williams

Job No.      Drawing No.      Revision  
**2023-78 - 01 -**  
Sep 2023      1:100 @ A2

# Structural Beam Layout & Design