

Span 4.2m

From TRADA - 47x195 C24 @
400mm centres

Trimming to daylight

Loads

$$\begin{aligned}
 D & 0.8 \times 1.2 / 2 = 0.48 \text{ kN/m} \\
 L & 0.75 \times 1.2 / 2 = 0.45 \text{ kN/m} \\
 & \underline{0.93 \text{ kN/m}}
 \end{aligned}$$

Bending

$$0.93 \times 4.2^2 / 8 = 2.05 \text{ kNm}$$

Timber properties -

3 No 47x195 C24 Joists

$$\begin{aligned}
 \checkmark & 7.5 \times 1 \times 1.25 \times 1.045 \times 1.1 = 10.77 \text{ N/mm}^2 \\
 \Sigma & 3 \times 45 \times 192^2 / 6 = 829 \text{ E3 mm}^3 \\
 I & 3 \times 45 \times 192^3 / 12 = 79.6 \text{ E6 mm}^4
 \end{aligned}$$

Permissible Bending

$$10.77 \times 829 \text{ E3 mm}^3 = 8.9 \text{ kNm} \geq 2.05 \text{ kNm} \quad \checkmark \text{OK}$$

Deflection

$$\delta = \frac{5 \times 0.93 \times 4200^4}{384 \times 10800 \times 79.6 \text{ E6}} = 4.38 \text{ mm}$$

$$4200 / 360 = 11.6 \text{ mm} \geq 4.38 \text{ mm} \quad \checkmark \text{OK}$$



Job No.:

W75681

Date:

April '29

Page/Number:

Lintel

Lintel

Span 3.5m

Loadings

Masonry

$$D 4.35 \times 0.5 = 2.28 \text{ kN/m}$$

$$2.28 \times 3.5 = 7.98 \text{ kN}$$

Use Cathic Standard Duty
Cavity Lintel 'CG' to
suit cavity width.

$$\text{Allowable load } 26 \text{ kN} \geq 7.98 \text{ kN}$$

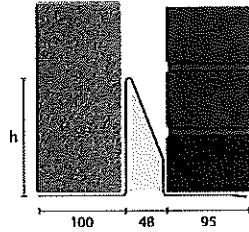
OK

Cavity Wall Lintels

50-65mm Cavity Wall



100-115mm Inner Leaf



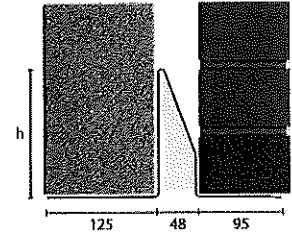
Standard lengths are available in 300mm increments.

CG50/100

Standard lengths (mm)	900-1500	1800	2100	2400	2700	3000-3600
SWL 1:1/3:1 (kN)	15	18	20	22	26	26
Weight (kg/m)	5.8	7.6	8.0	8.7	10.0	12.5
Nominal height 'h' (mm)	140	140	160	180	220	220



125-140mm Wide Inner Leaf

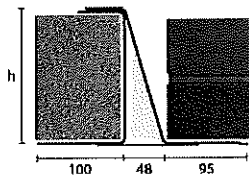


Standard lengths are available in 300mm increments.

CG50/125*

Standard lengths (mm)	900-1200	1500-1800	2100-2400	2700-3000
SWL 1:1/3:1 (kN)	12	17	20	26
Weight (kg/m)	6.4	8.0	9.2	12.9
Nominal height 'h' (mm)	140	140	180	220

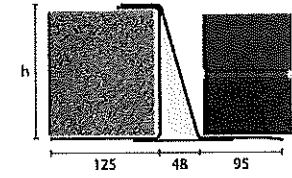
Standard Duty



Standard lengths are available in 150mm increments.

CH50/100

Standard lengths (mm)	900-1800	1950-2100	2250-2400
SWL 1:1/19:1 (kN)	32	48	45
Weight (kg/m)	10.5	13.1	13.1
Nominal height 'h' (mm)	157	157	157

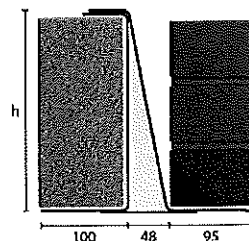


Standard lengths are available in 150mm increments.

CH50/125*

Standard lengths (mm)	900-1800	1950-2100	2250-2400
SWL 1:1/19:1 (kN)	32	48	45
Weight (kg/m)	10.7	13.4	13.4
Nominal height 'h' (mm)	157	157	157

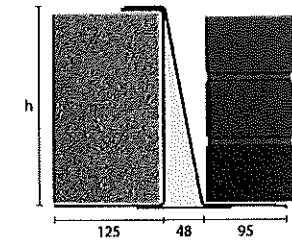
Heavy Duty



Standard lengths are available in 150mm increments up to 3000mm, 300mm at lengths 3000mm to 4800mm (including 4575mm, but excluding 4500mm).

CX50/100

Standard lengths (mm)	900-2700	2850-3000	3300-3900	4200-4800
SWL 1:1/19:1 (kN)	60	55	50	32
Weight (kg/m)	16.0	16.0	19.4	19.4
Nominal height 'h' (mm)	232	232	232	232



Standard lengths are available in 150mm increments up to 3000mm, 300mm at lengths 3000mm to 4800mm (including 4575mm, but excluding 4500mm).

CX50/125*

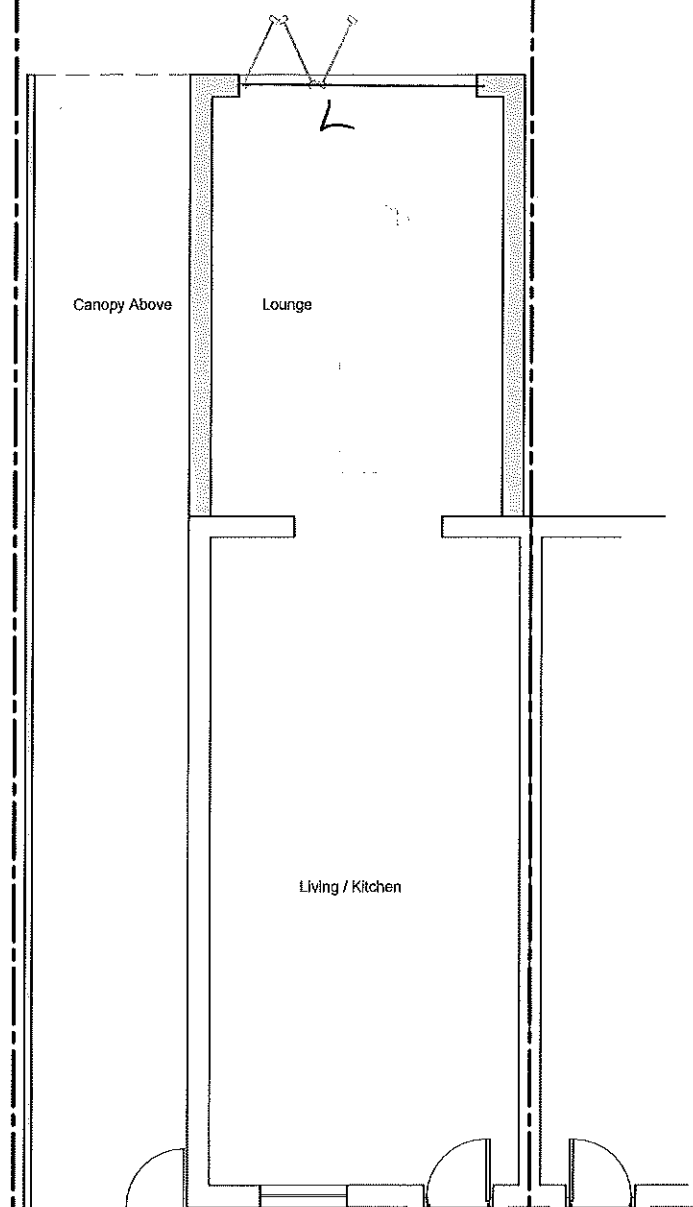
Standard lengths (mm)	900-2700	2850-3000	3300-3900	4200-4800
SWL 1:1/19:1 (kN)	60	55	50	32
Weight (kg/m)	16.2	16.2	19.8	19.8
Nominal height 'h' (mm)	232	232	232	232

Extra Heavy Duty

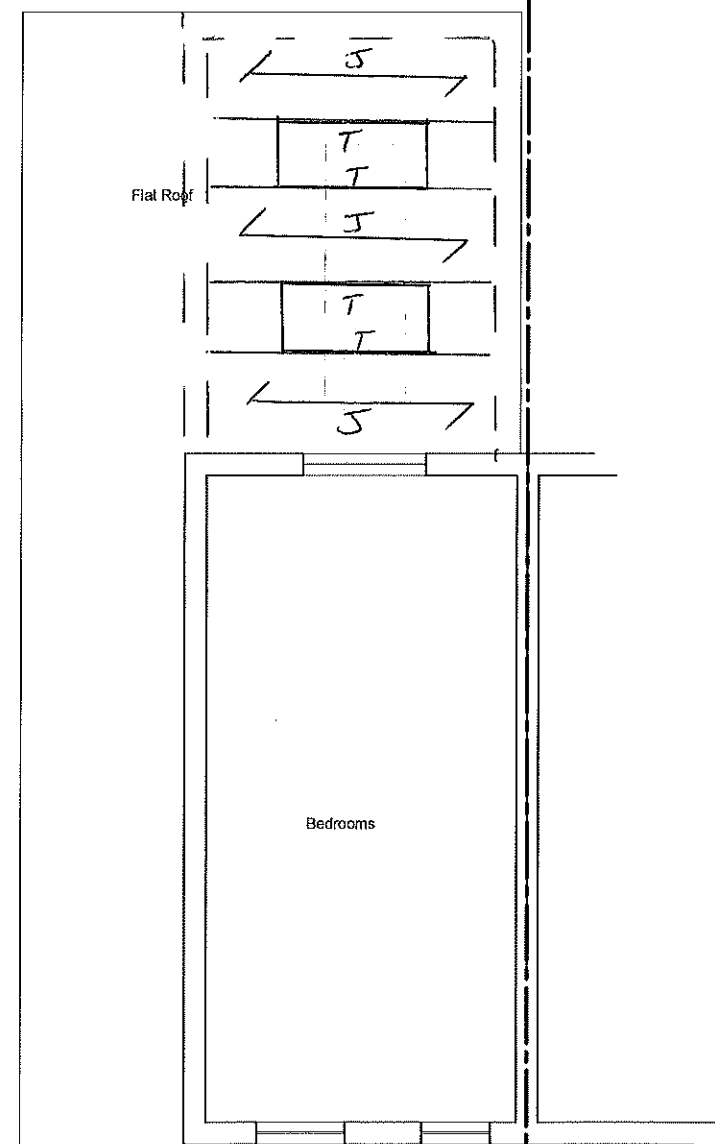
* For CG lintels used with 140mm dense blocks please refer to 'Cavity Wall Lintel Installation Guide' on pages 16-17.

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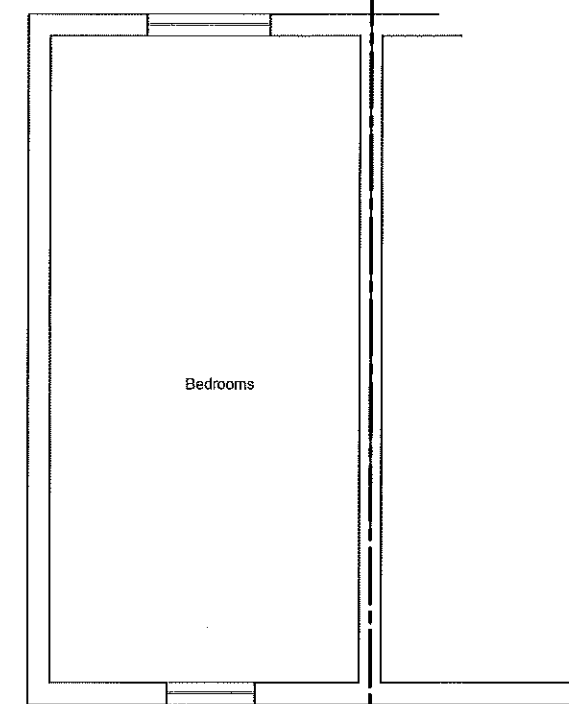
SK



Ground Floor Plan - PROPOSED



First Floor Plan - PROPOSED



Second Floor Plan - EXISTING

L - Catnic Standard Duty Cavity
Lintel to suit cavity width

J - 47x220 C24 Joists at
400 mm centres.

T - 3 No 47x220 C24 Joists, bolted
together with M12 bolts at 600mm centres.

NOTES
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All dimensions are in millimetres unless otherwise stated.

Revision - C	Front wall, side access and canopy added	06-07-23	MA
Revision - B	Side access to rear extension removed	03-07-23	MA
Revision - A	Minor Amendment / Issued for planning	11-04-23	MA

PROJECT

Proposed Single Rear Extension
18 Hawkins Way,
Eastleigh SO50 9QN

STATUS

Planning Application

CLIENT

TITLE

Mr & Mrs Hassell

Floor Plans - PROPOSED

DRAWING NO.

REVISION

0704-PL03

C

SCALES

DATE

DRAWN

1/100

@A3

Apr 23

MA

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