

PRESTRESSED LINTELS - TEXTURED FINISH

General Specifications

Lintels are manufactured largely by the Slip-Form Method with the following materials specification applying to them:

Concrete: Cube strength = 50N/mm² at 28 days.

Cement: Portland Cement to BS 12.

Aggregates - crushed rock: Sintered P.F.A and washed sand.

Prestressing Wire Strand: Is to B.S 5896:1980

Quality and strength are maintained by strict supervision and the use of modern machinery.

Lintels are designed and manufactured in accordance with BS 5977; Part 2: 1983 ('specification for prefabricated lintels').

Lintels are available in standard lengths. Study of the tabulated load/span table shown below, which is expressed in service loads (safe working loads) will enable the choice of a suitable section size. Fixing of our lintels is carried out in the normal manner, with no special knowledge being required.

- Lighter to handle than conventional prestressed lintels.
- Not dependent upon composite action with the brickwork.
- Most Supreme textured lintels do not need strutting.
- Lightweight aggregate concrete has a greater resistance to heat transmittance than dense aggregate concrete.

LOAD/SPAN TABLE - TOTAL UNIFORMLY DISTRIBUTED SERVICE LOADS (KN)

Note: The self weight of the lintel must be subtracted from the load given

| | Section | P100 | P150 | P220 | P255 | S10 | R15 | R15A | R22 | R22A | S15 | R21 | R21A |
|-------------------------------|------------|----------------------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| | Profile | 65x100 | 65x140 | 65x215 | 65x255 | 100x100 | 100x140 | 140x100 | 100x215 | 215x100 | 150x140 | 140x215 | 215x140 |
| Manufacture size to order | Clear Span | Service Moment (KNm) | | | | | | | | | | | |
| | | 0.75 | 1.03 | 2.46 | 2.76 | 1.68 | 2.57 | 3.37 | 3.62 | 7.05 | 7.46 | 6.99 | 10.86 |
| 600 | 300 | 13.33 | 18.31 | 35.61 | 41.15 | 24.60 | 39.25 | 41.79 | 56.78 | 59.42 | 49.75 | 73.90 | 73.90 |
| 750 | 450 | 10.00 | 13.73 | 32.80 | 36.80 | 22.40 | 34.27 | 41.79 | 48.27 | 59.42 | 49.75 | 73.90 | 73.90 |
| 900 | 600 | 8.00 | 10.99 | 26.24 | 29.44 | 17.92 | 27.41 | 35.95 | 38.61 | 59.42 | 49.75 | 73.90 | 73.90 |
| 1050 | 750 | 6.67 | 9.16 | 21.87 | 24.53 | 14.93 | 22.84 | 29.96 | 32.18 | 59.42 | 49.75 | 62.13 | 73.90 |
| 1200 | 900 | 5.71 | 7.85 | 18.74 | 21.03 | 12.80 | 19.58 | 25.68 | 27.58 | 53.71 | 49.75 | 53.26 | 73.90 |
| 1350 | 1050 | 5.00 | 6.87 | 16.40 | 18.40 | 11.20 | 17.13 | 22.47 | 24.13 | 47.00 | 49.75 | 46.60 | 72.40 |
| 1500 | 1200 | 4.44 | 6.10 | 14.58 | 16.36 | 9.96 | 15.23 | 19.97 | 21.45 | 41.78 | 44.21 | 41.42 | 64.36 |
| 1650 | 1350 | 4.00 | 5.49 | 13.12 | 14.72 | 8.96 | 13.71 | 17.97 | 19.31 | 37.60 | 39.79 | 37.28 | 57.92 |
| 1800 | 1500 | 3.64 | 4.99 | 11.93 | 13.38 | 8.15 | 12.46 | 16.34 | 17.55 | 34.18 | 36.17 | 33.89 | 52.65 |
| 2100 | 1650 | 3.33 | 4.58 | 10.93 | 12.27 | 7.47 | 11.42 | 14.98 | 16.09 | 31.33 | 33.16 | 31.07 | 48.27 |
| 2100 | 1800 | 3.08 | 4.23 | 10.09 | 11.32 | 6.89 | 10.54 | 13.83 | 14.85 | 28.92 | 30.61 | 28.68 | 44.55 |
| 2400 | 1950 | 2.86 | 3.92 | 9.37 | 10.51 | 6.40 | 9.79 | 12.84 | 13.79 | 26.86 | 28.42 | 26.63 | 41.37 |
| 2400 | 2100 | 2.67 | 3.66 | 8.75 | 9.81 | 5.97 | 9.14 | 11.98 | 12.87 | 25.07 | 26.52 | 24.85 | 38.61 |
| 2700 | 2250 | 2.50 | 3.43 | 8.20 | 9.20 | 5.60 | 8.57 | 11.23 | 12.07 | 23.50 | 24.87 | 23.30 | 36.20 |
| 2700 | 2400 | 2.35 | 3.23 | 7.72 | 8.66 | 5.27 | 8.06 | 10.57 | 11.36 | 22.12 | 23.40 | 21.93 | 34.07 |
| 3000 | 2550 | 2.22 | 3.05 | 7.29 | 8.18 | 4.98 | 7.61 | 9.99 | 10.73 | 20.89 | 22.10 | 20.71 | 32.18 |
| 3000 | 2700 | 2.11 | 2.89 | 6.91 | 7.75 | 4.72 | 7.21 | 9.46 | 10.16 | 19.79 | 20.94 | 19.62 | 30.48 |
| 3300 | 2850 | 2.00 | 2.75 | 6.56 | 7.36 | 4.48 | 6.85 | 8.99 | 9.65 | 18.80 | 19.89 | 18.64 | 28.96 |
| 3300 | 3000 | 1.90 | 2.62 | 6.25 | 7.01 | 4.27 | 6.53 | 8.56 | 9.19 | 17.90 | 18.95 | 17.75 | 27.58 |
| 3600 | 3150 | 1.82 | 2.50 | 5.96 | 6.69 | 4.07 | 6.23 | 8.17 | 8.78 | 17.09 | 18.08 | 16.95 | 26.33 |
| 3600 | 3300 | 1.74 | 2.39 | 5.70 | 6.40 | 3.90 | 5.96 | 7.81 | 8.39 | 16.35 | 17.30 | 16.21 | 25.18 |
| *4200 | 3450 | - | - | - | - | - | 5.71 | 7.49 | 8.04 | 15.67 | 16.58 | 15.53 | 24.13 |
| *4200 | 3600 | - | - | - | - | - | 5.48 | 7.19 | 7.72 | 15.04 | 15.91 | 14.91 | 23.17 |
| *4200 | 3750 | - | - | - | - | - | 5.27 | 6.91 | 7.43 | 14.46 | 15.30 | 14.34 | 22.28 |
| *4200 | 3900 | - | - | - | - | - | 5.08 | 6.66 | 7.15 | 13.93 | 14.74 | 13.81 | 21.45 |
| Lintel weight Kg per metre | | 14.27 | 19.38 | 32.20 | 35.61 | 22.91 | 30.91 | 30.91 | 45.59 | 45.59 | 42.19 | 63.83 | 63.83 |

Please Note: Clear spans shown above are in increments of 150mm and the safe working loads indicated are based on the clear span plus 150mm of bearing each end. Our lintels are supplied in a standard range of lengths and can be cut to length as required.

Lengths indicated * are not available in all section sizes

The safe working loads indicated in the grey band on the shorter spans are governed by shear. The safe working loads indicated in the grey band on the longer spans are not great relative to the span, these lintels should be used with caution.

Note 1: No assistance from composite brickwork is assumed or included in these figures.

Note 2 - Bearings: Minimum bearing length to be 150mm each, otherwise provide suitable padstones. Ensure, however, that all bearings are sound.

Loading Guide: The loads on the lintels should be assessed in accordance with the method described in BS 5977: Part 1 1981. We shall be happy to advise you on any aspect of the design and use of units from our standard range of lintels which may be used in combinations to suit your requirements.

