

# Less Stress with Prestressed

The allowable load carrying capacity (kN/m) of all concrete lintels is generally limited by the shear resistance of the cross section. All Naylor Lintels are manufactured as prestressed concrete sections giving several distinct advantages to the precast equivalent.

## Quality Assurance in Manufacture

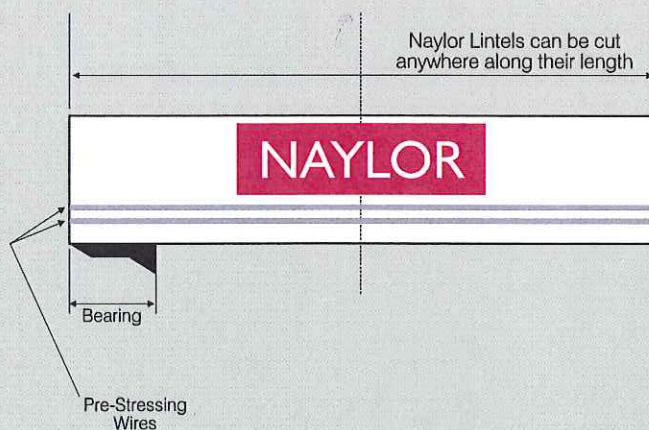
- All Naylor Products are manufactured to an approved Quality Assurance procedure audited to ISO 9001.
- Naylor Lintels have an inherently high resistance to shear due to the prestressed nature of their manufacture. Unlike precast products, Naylor Lintel sections do not require shear reinforcement and rely entirely on the prestressing wires for structural capacity. The need for less components in a Naylor Lintel greatly reduces the possibility of error in manufacture.
- As the prestressing wires of a Naylor Lintel are tensioned in a fabricated steel mould to specific tolerances it is not possible for the structure wires to be misplaced or miss-aligned. This can occur in precast sections that rely on the placement of individual bars fixed with steel or plastic spacers often in timber moulds that have a limited manufacturing life.
- Unlike the precast equivalent, the internal reinforcement of a Naylor Lintel is not reliant on plastic or concrete spacers to ensure accurate and consistent cover to the reinforcement throughout the whole length of section.
- Fair-faced products specified to section F31 of the

National Building Specification (NBS) can prohibit the use of reinforcement spacers on visible faces. Meeting this required specification can realistically only be achieved using a Naylor prestressed lintel as the production method guarantees no spacers will be used.

## Versatility on Site

- With continuous prestressing strands, Naylor Lintels can be cut on site to suit ANY length without affecting the load-carrying capacity of the section.
- A precast lintel should not be cut on site for several reasons;
  - On-site cutting will compromise the internal reinforcement and result in no cover being provided to the end of the reinforcing bar which is not a problem with a prestressed section.
  - Cutting may compromise the shear reinforcement of a cross section and dramatically reduce the section capacity of certain loading conditions.
- Precast lintel sections therefore need to be ordered either to exact known lengths, not always possible when providing a take-off from un-dimensioned drawings. Alternatively, construction on site needs to be adapted to suit the length of section provided; this is often impracticable. Naylor Lintels carry a wide variety of stock lengths that can be cut to length on site, allowing inevitable site changes to be made without the need to delay the works and re-order specific non-stock lengths of precast lintels.

**Prestressed Lintel**



**Precast Lintel**

