

PRODUCT DATASHEET

AAC LINTELS

General Features

- ELC Autoclaved Aerated Concrete (AAC) Lintels are lightweight, fire resistant, fast and easy to install and provide lifelong superior thermal insulation.
- ELC Lintels are steel reinforced E4 Grade Autoclaved Aerated Concrete elements. The interior steelwire reinforcement is covered with an anti-corrosion coating.
- ELC Reinforced Lintel is produced in compliance with DIN 4223.

Physical and design properties

| Properties | | | |
|---------------------------|-------------------|-------------------|---------|
| Specifications | Units | Class | Remarks |
| | | E4 | |
| Dry Density | Kg/m ³ | 650 ± 50 | |
| Aeration Method | | Chemical Reaction | |
| Curing Process | | Autoclaving | |
| Ave. Compressive Strength | N/mm ² | 5.0 | |
| Thermal Conductivity | W/mK | 0.18 | |
| Acoustic Test (STC) | dB | 50 | |
| Elastic Modules | N/mm ² | 2250 | |
| Design Load | KN/m ³ | 7.2 | |

Load Bearing & Non- Load Bearing Lintels

| AAC-Load Bearing & Non- Load Bearing | | | | |
|--------------------------------------|-------|-------------|------------------|-------------|
| Lintel Type | Class | Dimension | | |
| | | Length (mm) | Thickness /Width | Height (mm) |
| Lintel | E4 | 1000-3500 | 100-300 | 200, 250 |

| Clear Span (mm) | Minimum End Bearing (mm) | Height (mm) | Thickness/Width (mm) |
|-----------------|--------------------------|-------------|-----------------------------|
| 900 | 150 | 200, 250 | 100, 150, 200, 250, and 300 |
| 901-2000 | 200 | 200, 250 | 100, 150, 200, 250, and 300 |
| 2001-3500 | 250 | 200, 250 | 200, 250, and 300 |

ELC Reinforced Lintels are used over openings in doors and windows as a system on Litecrete Masonry Components or load-bearing wall



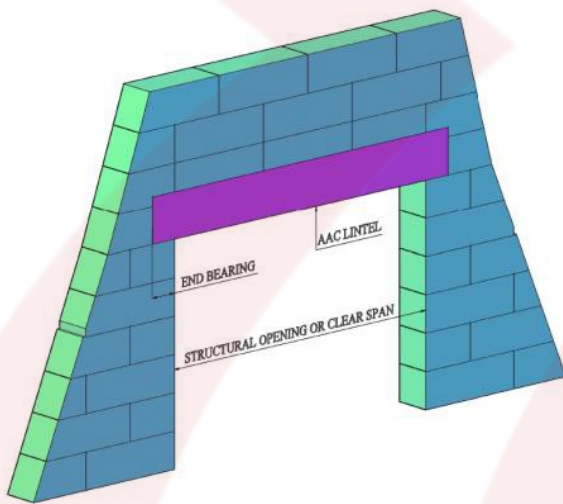
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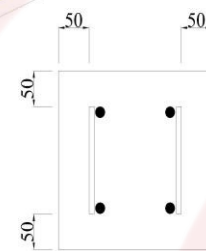
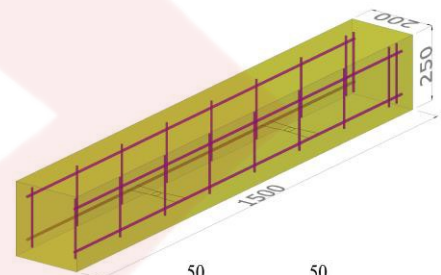
Design Considerations

- Designed in order to comply with strength and serviceability requirements as specified by DIN4223.
- The lintels thickness and span will determine the allowable service load. The load (dead and live) must comply with the Local and Regional Building Codes.
- Lintels can be supported by ELC AAC Masonry Blocks and Solid Blocks.
- ELC AAC Lintels are reinforced with two layers of high strength smooth bars $FY = 520 \text{ N/mm}^2$ which are protected with an anti-corrosive coat.
- The longitudinal bars develop their tensile stress using mechanical anchorage provided by cross bars.

Perspective View
(AAC Solid Lintel)



AAC Lintel Mesh details
(Solid)



Dia.6mm
(Dia. May vary depending on UDL.)

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Method Statement

Laying of ELC AAC Blocks with thin bed mortar (See Figure-1).

- Apply 5mm bedding mortar on the top block at end (See Figure-2).
- Place ELC AAC Lintel on the top as shown in figure - 3 (Maintain end bearing on both sides as per technical data sheet).
- If there is no additional support, provide corbel beam or L-Angle as a support for the AAC Lintel on the existing column (see figure – 4)
- Continue laying ELC AAC Blocks above the lintel as per block method statement (See Figure-5).

Figure - 1

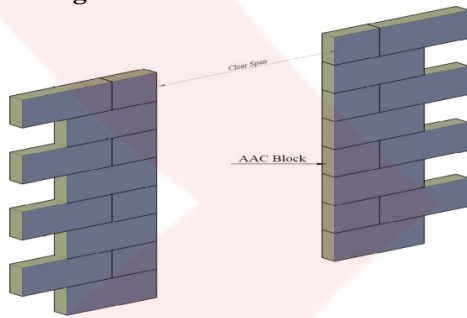


Figure - 2

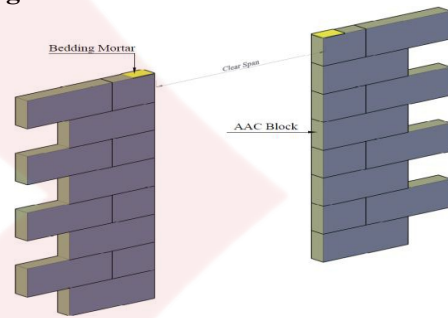


Figure - 3

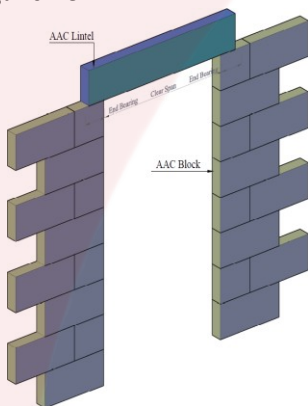
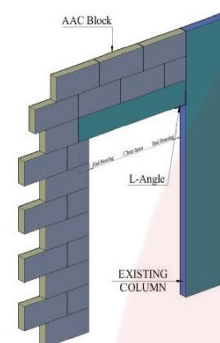
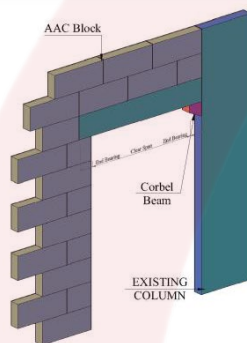


Figure - 4



**U-Block and C40
Concrete with Reinforcement.**

Figure - 5

