



Standard Specification for Manufactured Concrete Masonry Lintels¹

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1. Scope*

1.1 This specification covers concrete masonry lintels (beams) that are solid in cross-section, are reinforced for flexure, and are made from hydraulic cement, water, and mineral aggregates with or without the inclusion of other materials. These lintels are suitable for both loadbearing and nonloadbearing applications.

NOTE 1—This specification covers only concrete masonry lintels containing reinforcement. Due to building code imposed limitations on the design of masonry lintels, all lintels must contain reinforcement. Concrete masonry lintels are not typically manufactured using shear reinforcement (stirrups or other vertical reinforcement). Therefore, this standard does not address issues related to such. For further guidance, refer to *Building Code Requirements for Masonry Structures*, TMS 402/ACI 530/ASCE 5. Prestressed concrete lintels are not covered by this standard.

1.2 Lintels are manufactured using a no-slump concrete mix to provide a surface texture similar to that of concrete masonry. This specification applies to both machine-made and hand-tamped concrete masonry lintels intended for use in concrete masonry applications.

1.3 Concrete masonry lintels covered by this specification are made from lightweight or normal weight aggregates, or both.

1.4 This specification does not address the design or analysis of lintel capacity. Structural evaluations must be performed separately. The strength of a lintel is a function of factors including, but not limited to, the characteristics of the materials used in manufacturing (concrete materials and reinforcement), the amount and location of reinforcement, and the manufacturing and curing procedures. For design and analysis methods, refer to *Building Code Requirements for Masonry Structures*, TMS 402/ACI 530/ASCE 5.

1.5 This specification does not cover U-shaped lintels or those of other cross-sections that are not 100 % solid.

1.6 This specification does not cover lintels of grouted concrete masonry lintels, or precast or cast-in-place lintels of slump concrete.

1.7 The text of this standard references notes and footnotes that provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the standard.

1.8 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

2. Referenced Documents

2.1 *ASTM Standards*:²

- A615/A615M Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- A706/A706M Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement
- A996/A996M Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement
- C33 Specification for Concrete Aggregates
- C140 Test Methods for Sampling and Testing Concrete Masonry Units and Related Units
- C150 Specification for Portland Cement
- C331 Specification for Lightweight Aggregates for Concrete Masonry Units
- C595 Specification for Blended Hydraulic Cements
- C618 Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete
- C979 Specification for Pigments for Integrally Colored Concrete
- C989 Specification for Slag Cement for Use in Concrete and Mortars
- C1157 Performance Specification for Hydraulic Cement
- C1232 Terminology of Masonry
- C1240 Specification for Silica Fume Used in Cementitious Mixtures
- C1262 Test Method for Evaluating the Freeze-Thaw Durability of Dry-Cast Segmental Retaining Wall Units and Related Concrete Units

¹ This specification is under the jurisdiction of ASTM Committee C15 on Manufactured Masonry Units and is the direct responsibility of Subcommittee C15.03 on Concrete Masonry Units and Related Units.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

*A Summary of Changes section appears at the end of this standard