

TECHNICAL DATA SERIES

SDI
110-18

**Standard Steel Doors
and Frames**
for
Modular Masonry Construction



Standards As Tough As Steel.™
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STEEL DOOR INSTITUTE
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The Module

Definition:

The size of any individual part, taken as a unit of measure for regular proportion. A basic unit of measure adopted by the building industry as 4 inches.

Concept:

The use of a standard modular dimension common to building products such as masonry improves finished buildings and structures in the following ways:

- Increased accuracy, legibility, and simplicity of contract documents.
- Added aesthetic flexibility induced by small unit standardization, allowing freedom of architectural design.
- Increased flexibility of finished structure through lower modification, addition, and renovation costs.
- Reduced overall material and labor costs by facilitating the use of standard practices and definable operating procedures.
- Interchangeability of materials is facilitated by the ability to substitute modular components.
- Estimating and takeoff simplified.
- Detailing and drawing coordination between trades and specialties simplified by small size standard grid.

Dimensions:

Concrete masonry units (CMU) have been standardized to a nominal 8" high and 16" long module.

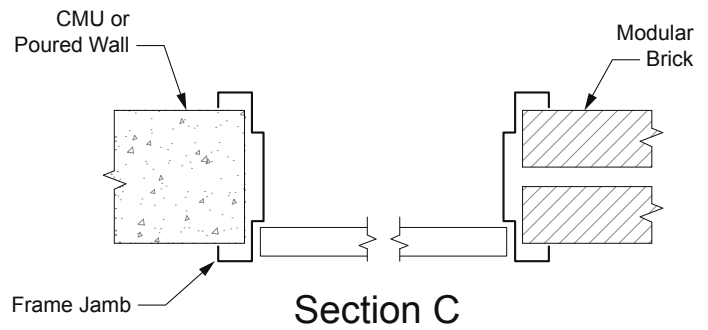
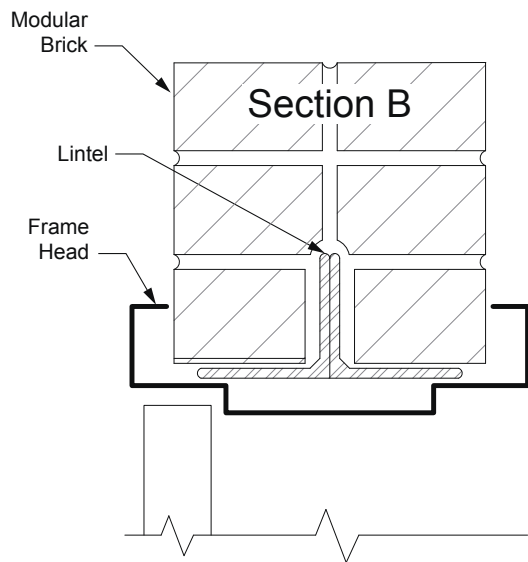
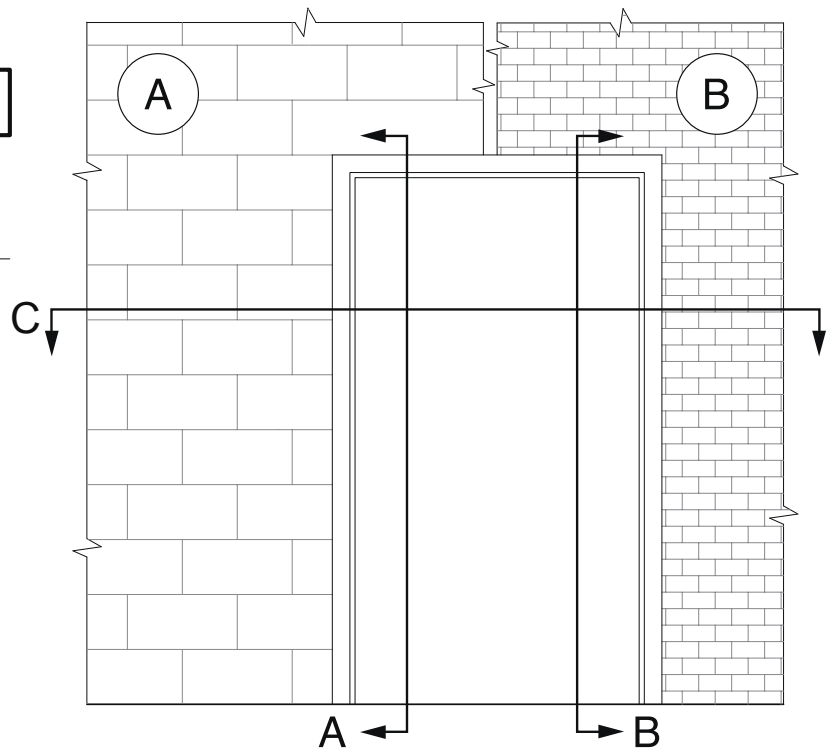
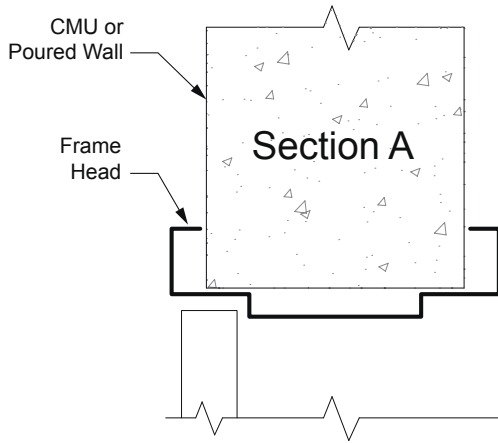
Modular bricks have been standardized to a nominal $2\frac{2}{3}$ " high and 8" long module, therefore 6 bricks correspond to the modular size of CMU. This relationship is clearly shown on the following pages.

Frame Installation in Cast-In-Place Concrete Walls

While the use of hollow metal frames in cast-in-place concrete walls is a common construction practice, the SDI does not recommend the inclusion of the frame as part of the process of pouring the wall. Instead, a rough-opening should be blocked out no less than $\frac{3}{16}$ " (4.8 mm) larger than the frame on all three sides. For example the opening for a 3'0" x 7' 0" standard frame with 2" faces would be 3' $4\frac{3}{8}$ " x 7' $2\frac{3}{16}$ " minimum. The installer is responsible for anchoring the frame per the manufacturer's installation instructions, shimming and aligning as necessary.

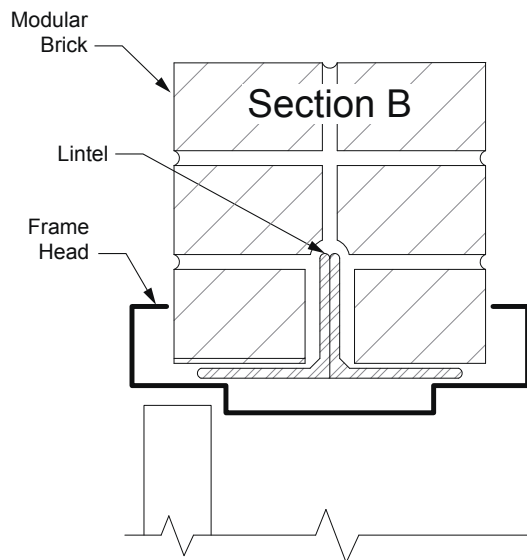
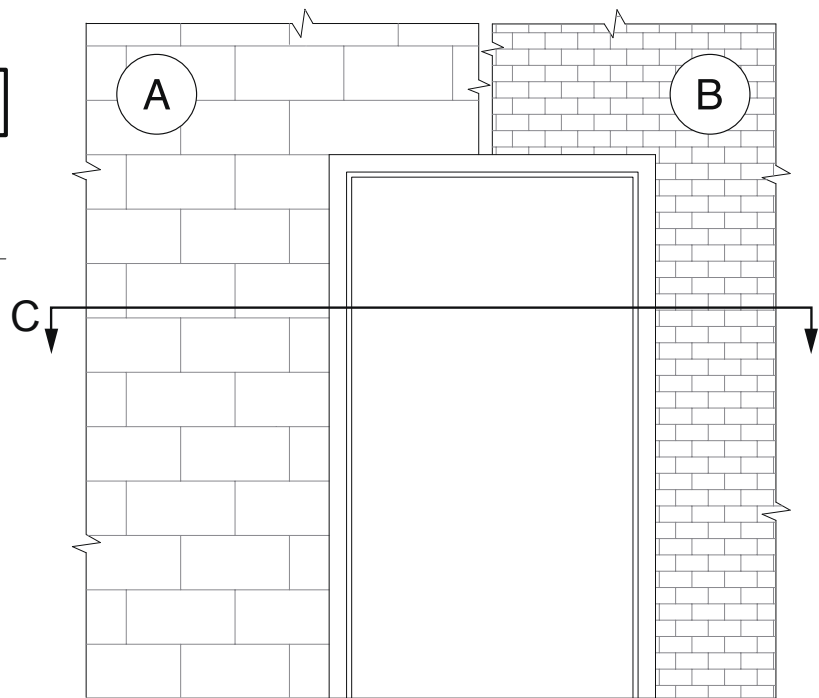
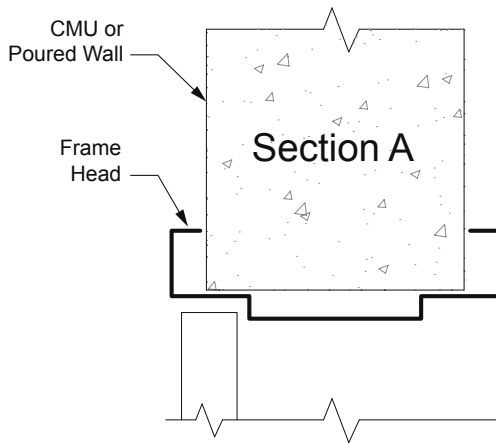
Wrap Around Frame

6' 8" or 8' 0" Door

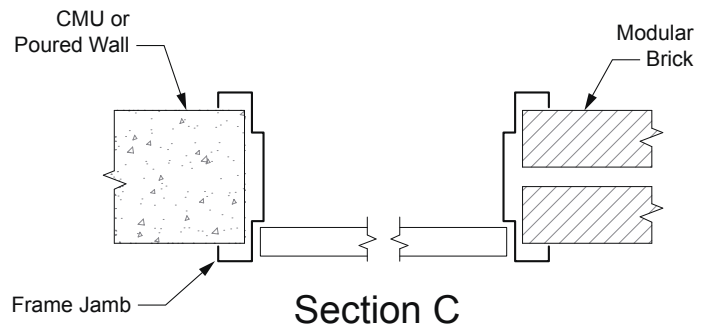


Wrap Around Frame

7' 0" Door



Note: A starter course of 4" modular masonry may be used to create alignment of the frame head with the masonry joints.



Butt Type Frame

7' 0" Door with 4" Header or
7' 2" and 7' 10" Doors with 2" Header

