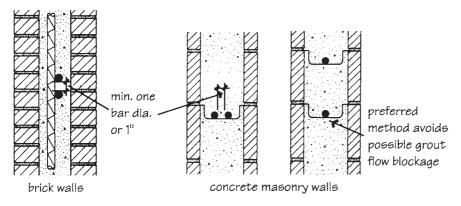
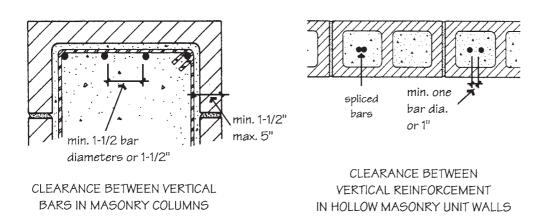
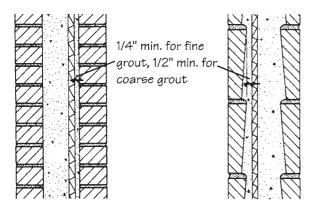
15.3 Installation 505



CLEARANCE BETWEEN HORIZONTAL REINFORCING BARS





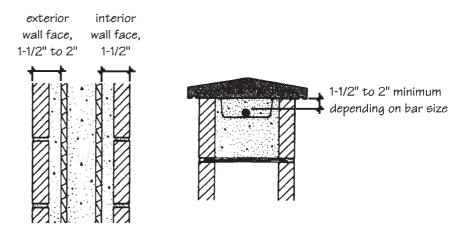
CLEARANCE BETWEEN REINFORCING STEEL AND MASONRY UNITS

**Figure 15-45** Code-required minimum clearances for masonry reinforcement. (*Drawings from Amrhein*, Reinforced Masonry Engineering Handbook, 5th ed.)

Chapter 15 Installation and Workmanship

Reinforcement Cover for Masonry Structures		
Reinforced Masonry	Minimum Cover (în.)§	
Masonry exposed to earth or weather No. 6 and larger No. 5 and smaller	2 1-1/2	
Masonry not exposed to earth or weather	1-1/2	

<sup>§</sup> Minimum cover includes thickness of masonry unit.



**Figure 15-46** Code requirements for minimum masonry and grout cover for reinforcement. (*Drawings from Amrhein*, Reinforced Masonry Engineering Handbook, 5th ed.)

	Distance From Centerline of Steel to the Opposite Face of Masonry		
Element	≦ <b>8</b> in.	> 8 in. but ≦ <b>24</b> in.	> <b>24</b> in.
Walls and Flexural Elements	± 1/2 in.	± 1 in.	± 1-1/4 in.
Walls	For vertical bars, within 2 in. of location along length of wall		

Figure 15-47 MSJC Code placement tolerances for masonry reinforcement.

Cleanouts must be provided at the base of the wall by leaving out every other unit in the bottom course of the section being poured. In single-wythe hollow-unit walls, cleanout openings of at least  $3\times 4$  in. are located at the bottom of every core containing dowels or vertical reinforcement, and in at least every second core that will be grouted, but has no steel. In solidly grouted, unreinforced single-wythe walls, every other unit in the bottom course should be left out. Codes generally specify exact cleanout requirements, and should be consulted prior to construction.

A high-pressure air blower is used to remove any debris that may have fallen into the core or cavity. The cleanouts are filled in after inspection of the cavity, but before the grouting begins (*see Fig. 15-55*). The mortar joints