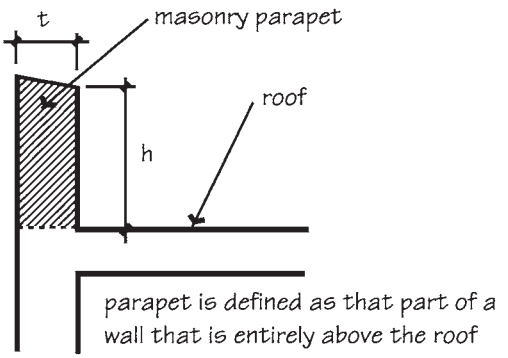
rain also induce greater lateral stress at the top of the wall. Code requirements for masonry parapets cover minimum size and structural design (*see Fig. 10-52*), but do not address weather resistance.

Coping materials for masonry parapets should be selected on the basis of performance as well as compatibility and aesthetics. Metal copings provide the best protection (*see Figs. 10-53 and 10-54*). They are impervious to moisture and can be installed in lengths requiring a minimum number of joints. Since every joint that occurs on the horizontal surface of a coping is an opportunity for a leak, the fewer joints there are, the greater is the probability of keeping the wall dry. Metal copings should be designed with cover or splice plates to accommodate the differential movement between the masonry and the metal. The size and spacing of the joints will be affected by the movement characteristics of the masonry materials. That is, joints in the metal cap must be able to open to accommodate permanent expansion in brick walls, and close to accommodate permanent shrinkage in concrete masonry walls. The vertical legs of metal copings should extend at least 2 in. below the top course of the masonry, turn out to form a drip, and may be caulked with a high-performance elastomeric sealant. Through-wall flashing should be installed below the metal cap, particularly in high wind areas and over



Masonry Parapet Wall Requirements

Requirement	MSJC*
Minimum thickness (t)	
solid masonry units	8
hollow masonry units	8
Maximum h/t ratio for unreinforced masonry parapets	
solid masonry units	3
hollow masonry units	3
Maximum height of unreinforced masonry parapets	
solid masonry units	3t
hollow masonry units	3t
Maximum wind loads for unreinforced parapets	110 mph basic wind speed
Steel reinforcement required	Seismic Design Categories D, E and F

* Based on requirements of the Masonry Standards Joint Committee *Building Code Requirements for Masonry Structures,* ACI 530/ASCE 5/TMS 402.)

Figure 10-52 Empirical requirements for masonry parapets.

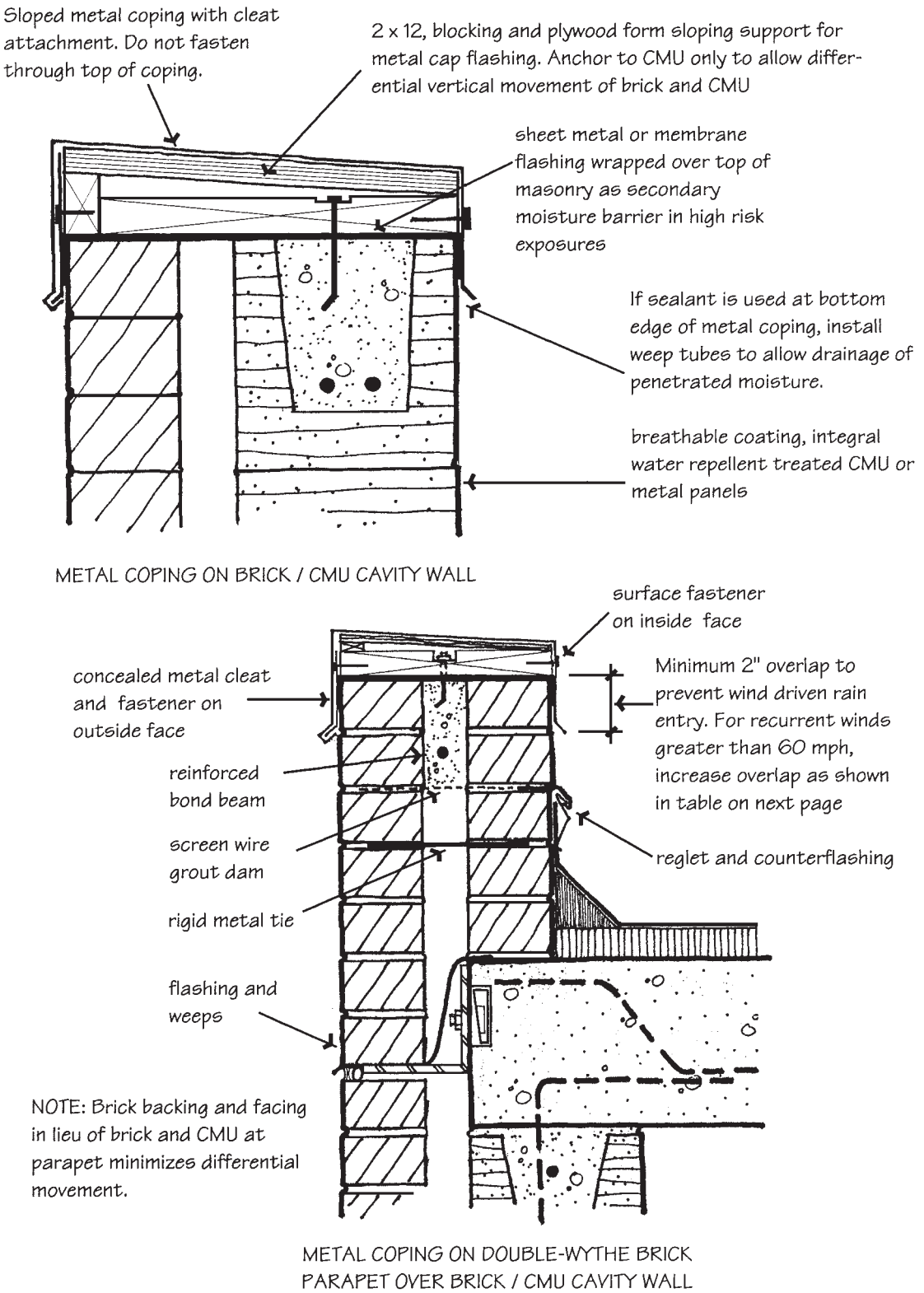


Figure 10-53 Metal coping details for masonry cavity walls.