

troubleshooting

Flashing arches

Q How should you install flashing over a semi-circular arch in a masonry wall?

A Flashing arches is particularly difficult. Do you try to install a curved flashing above the head of the window, or do you just use a straight flashing over the apex of the arch and ignore the masonry below the flashing?

For small arches less than 3-ft wide, Brick Industry Association *Technical Note 31* recommends installing a through-wall flashing with end dams immediately above the apex of the arch, as illustrated in Fig. 1. With this approach, water can still penetrate the joints of the masonry below the flashing, which has the potential of causing leakage problems. The front edge of the flashing immediately above the arch will be

visible, which can detract from the appearance of the wall.

A similar approach is recommended in this same technical note for flashing above larger arches. However, in this case, instead of just putting a single line of flashing above the apex of the arch, several short lengths of stepped flashings are installed to follow the curve of the arch, as illustrated in Fig. 2. This approach maximizes the amount of masonry that is covered by the flashing, leaving only a small amount of masonry not protected. The edge of the flashing, however, is visible and may detract from the wall's appearance.

An alternate approach that would minimize some of these problems is to construct a special metal flash-

ing, which would be self-supporting immediately above the head of the window. The flashing would only extend past the window below, over the length of the arch, and would then step out to where it extends into the masonry jambs and

end dams, as shown in Fig. 3. This approach avoids the horizontal lines of flashing that can detract from the appearance of the wall. Only a small length of flashing will be visible at the base of the arch, which can be concealed by the joint pattern.

Anchors and ties

Q What is the difference between a wall anchor and wall tie? I hear the terms used interchangeably.

Is one more generic than the other?

A There is a great deal of confusion over these two terms. Many references and masonry product literature use the terms wall tie and wall anchor interchangeably.

Anchors and wall ties are defined in ACI 530-05/ASCE 5-05/TMS 402-05 (MSJC 2005) and in the International Building Code (IBC), as well as several other references. The definitions for a wall anchor in MSJC 2005 and IBC are similar. MSJC 2005 defines an anchor as a "Metal rod, wire, or strap that secures masonry to its structural support," and says a wall tie is a "Metal connector that connects wythes of masonry walls together."

Therefore, a metal element that attaches masonry veneer to a steel stud, wood stud, or reinforced concrete backing should be referred to as an anchor or masonry veneer anchor. A metal element that attaches a masonry veneer to a masonry interior wythe, such as in a cavity wall, is correctly referred to as a wall tie.



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Fig. 1

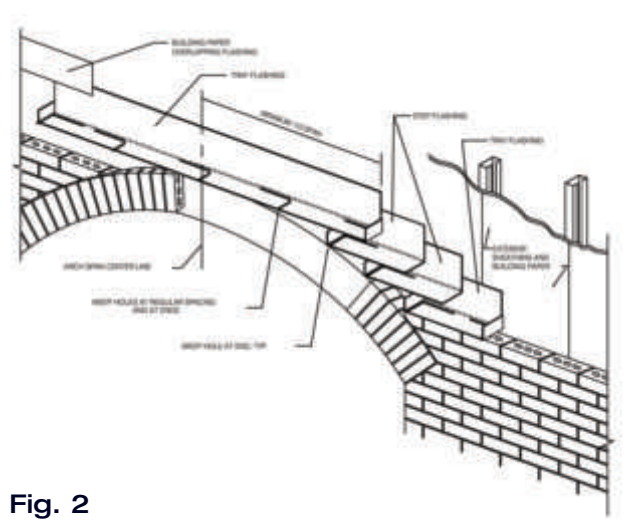
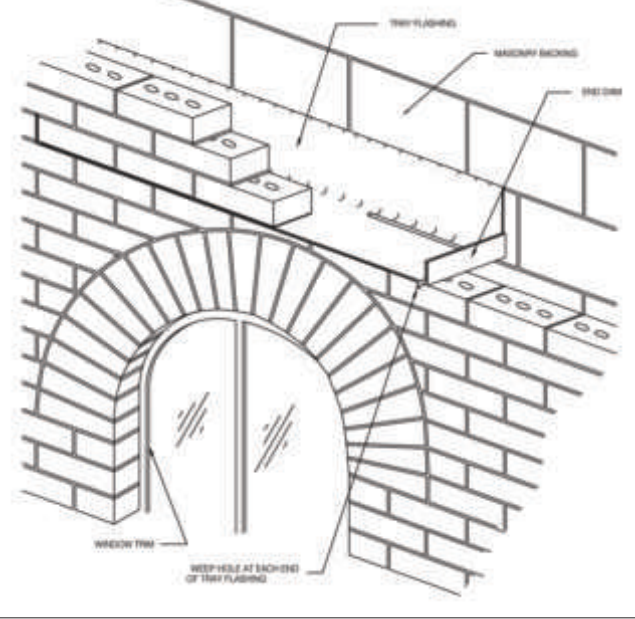


Fig. 2

Fig. 3

