You want to create an opening in a brick-veneered wall? No problem. But suppose you don’t want a steel angle supporting brick above the opening to show. Then it gets trickier.

Prefabricated or site-built reinforced masonry lintels are one solution. Now an anchor manufacturer has devised a steel lintel support system that’s concealed to produce the look of an all-brick soffit.

The system consists of several components (Figure 1):
- A steel spine that spans the opening and rests on bearing plates at each end
- “Horseshoe” plates that hang on the spine at every third brick joint
- Stitching rods that are inserted through openings in the horseshoe plates and through the brick cores as the work progresses to tie the brick and the support system together

The soffit must be supported from below until the mortar sets. All components of the system are manufactured from Type 304 stainless steel or hot-dipped galvanized steel. The spine may be ⅛-, ⅜-, or ⅝-inch thick, depending on design requirements. The depth of the spine varies according to the span. The manufacturer says the configuration described here spans openings as wide as 10 feet but can be modified to accommodate wider spans. The system also can be used to create curved or pointed arches.

The manufacturer’s technical department uses an architect’s conceptual design to engineer the lintel support system for a specific opening. Detail drawings and all needed support components are then shipped to the jobsite for the masonry contractor to install.
The lintel system was used last year for a series of semicircular arched openings at a Florida shopping center. Each arch spanned about 16 feet and had four courses of brick forming its soffit.

The project architect and the building owner were extremely pleased by the appearance of the arches, and the contractor says the installation went well. He advises contractors bidding on projects using the system to factor in some extra labor cost for crews to learn the installation technique. “After we’d done it a couple of times,” he says, “the installation went more smoothly.”

Masonry contractor Mario Bertone of Bertone & Sons, Braintree, Massachusetts, used the system to create more than 20 brick arches for a recent school project. “We’ve built reinforced masonry lintels on other projects to achieve the same effect, but this system did it more economically,” says Bertone. “We also found it allowed us to install flashing more easily and provide better drainage for the cavities above the arches. In the hands of a creative designer, this system offers lots of aesthetic possibilities.”

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