

HALFEN ADJUSTABLE CONCEALED LINTEL SYSTEMS

TECHNICAL PRODUCT INFORMATION



HALFEN ADJUSTABLE CONCEALED LINTEL SYSTEMS

HCL 11-US

FAÇADE



HALFEN

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HALFEN ADJUSTABLE CONCEALED LINTEL SYSTEMS

Introduction

Engineered brickwork support systems provide hidden support for brick soffits.

Virtually any flat or arched masonry opening can be accomplished without any exposed steel using HALFEN's Adjustable Concealed Lintel System. Commercial, government, industrial, religious, and high-end residential projects can now have all brick masonry openings that are aesthetically pleasing and maintenance free.

HALFEN's technical engineering department uses the architect's and structural engineer's design to engineer a brick lintel support system for each specific opening. Unlimited combinations utilizing different size, span, coursing, soffit width and arch geometry can be designed and manufactured to meet the project specifications.



HALFEN's Adjustable Concealed Lintel System is designed to allow the brick to remain the architectural focal point of the opening.

HALFEN ADJUSTABLE CONCEALED LINTEL SYSTEMS

System Characteristics



Custom Designed Planned Radius Brick Soffit.



Custom Designed Corbelled entry.

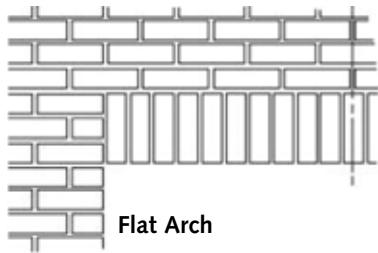
An example of a traditional exposed steel plate commonly used for lintel support by others. This will eventually rust and need to be scraped, re-primed and refinished periodically, adding unnecessary maintenance costs for the life of the building.



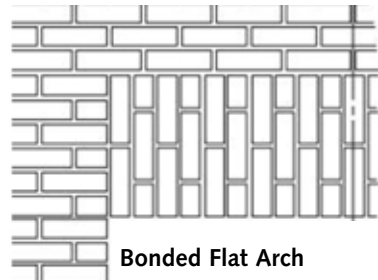
Weeping is always installed above the system.

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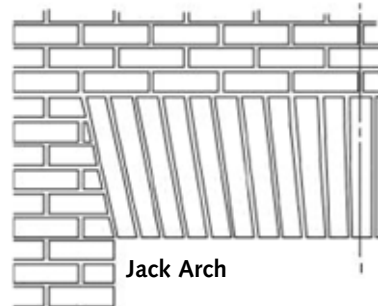
System Characteristics



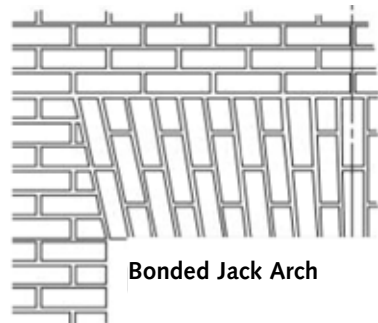
Flat Arch



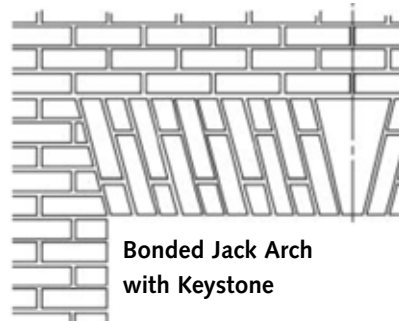
Bonded Flat Arch



Jack Arch



Bonded Jack Arch

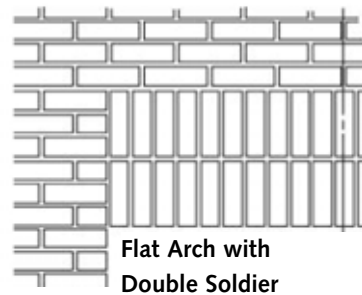


**Bonded Jack Arch
with Keystone**

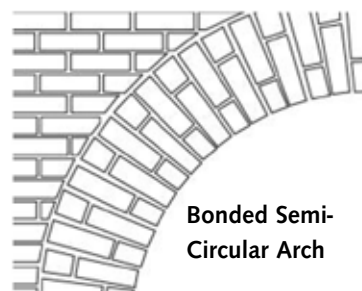
Traditional or Contemporary Designs.

Engineered to match the Architect's conceptual design.

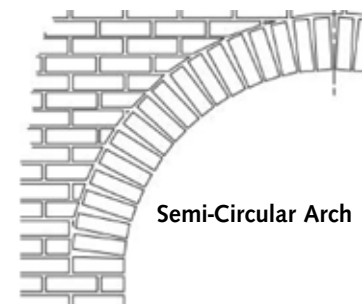
Curved or specially shaped spines or channel brackets can be manufactured to support any of the shapes illustrated on this page, or to suit the Architect's specific design.



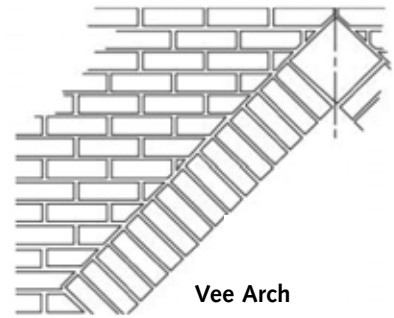
**Flat Arch with
Double Soldier**



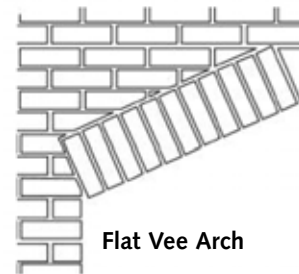
**Bonded Semi-
Circular Arch**



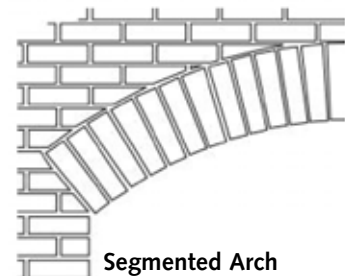
Semi-Circular Arch



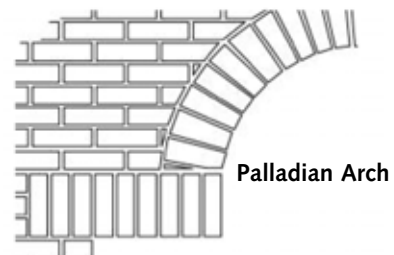
Vee Arch



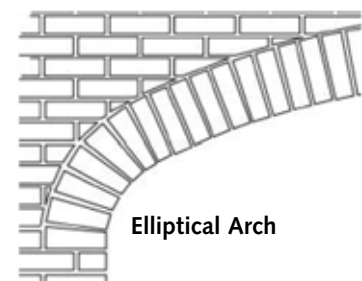
Flat Vee Arch



Segmented Arch



Palladian Arch



Elliptical Arch

HALFEN ADJUSTABLE CONCEALED LINTEL SYSTEMS

System Characteristics

Additional advantages:

- Available in Hot Dipped Galvanized or Stainless Steel
- Field Adjustable to allow for job site conditions
- Maintenance of Exposed Steel is eliminated
- Shop Drawings & Calculations provided for all soffit conditions
- State Stamp is available upon request



Fill cored brick with mortar.



Place brick next to bracket and slide stitching rods into core holes.



Mid spans connected to embeds in concrete.

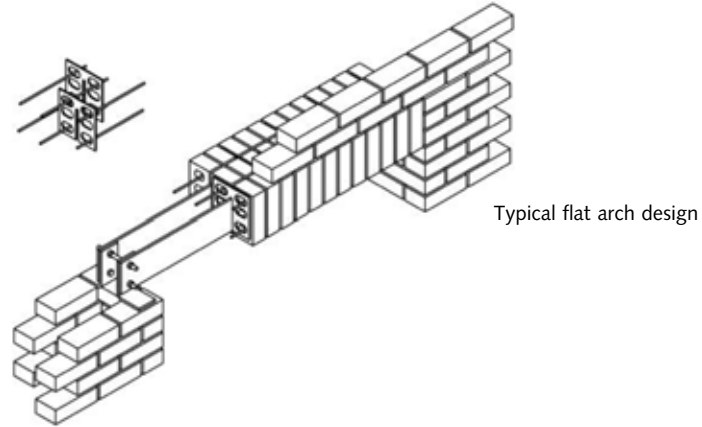
The system's components are installed over formwork. Mid span supports can be attached to channel welded above to a steel structure, or embedded channel in concrete.

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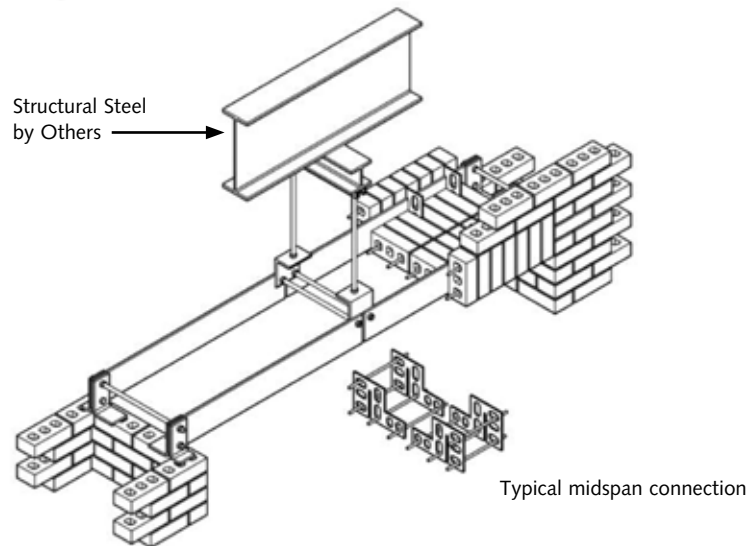
Spine Design

Spine Design

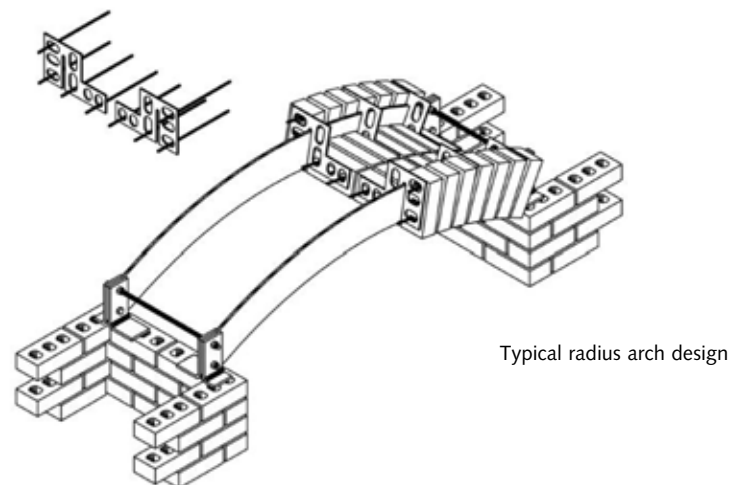
Flat or arched openings can be spanned using the SPINE DESIGN. Spines span the opening, end supports connect to the spine and sit on the brick veneer. Horseshoe plates are installed every 8", stitching rods pass through the slots in the plates and through the mortar filled core holes of the brick. Where circumstances prohibit the use of end supports, MID SPAN SUPPORTS can be used to provide a completely hung system.



The typical free span of the SPINE DESIGN is 8'. Openings larger than 8' will require the use of MID SPAN SUPPORTS. The spines are fabricated in Sections depending on the masonry spans required. These supports are engineered and designed to be attached to a structural component over the opening.



The SPINE DESIGN will typically require a stack bond soffit as the spine rests inside the mortar joint. Any soffit depth can be accomplished as more spines are simply added to the design.



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Channel & Bracket Design

Channel & Bracket Design

The CHANNEL & BRACKET DESIGN can typically be used where there is a structural component in very close proximity to the bottom of the brick soffit. This can allow the channel & bracket design to carry a larger amount of veneer. It can also be utilized when a running bond look is desired.

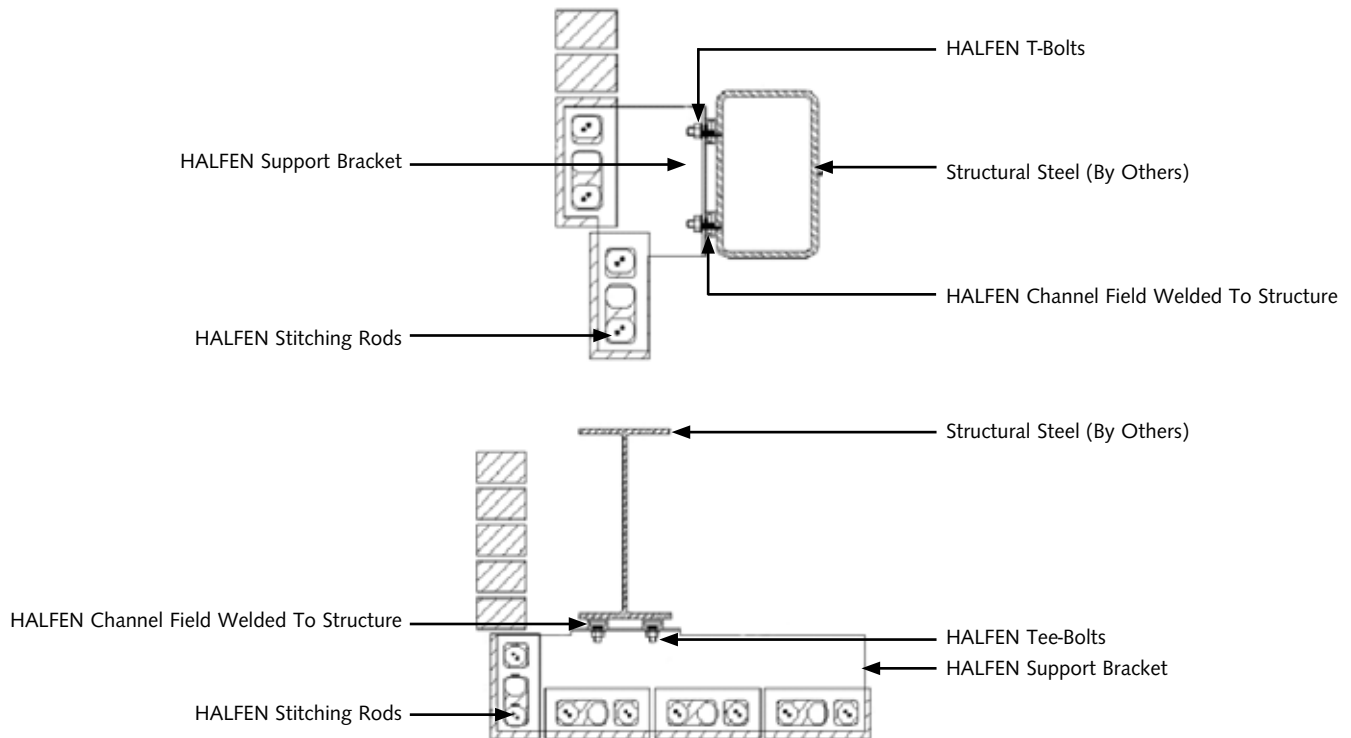
HALFEN Channel can be welded to a structural component or embedded in a concrete beam or slab.

A minimum 12" clearance is generally required between any structural component and the brick soffit. This allows for ease of installation and eliminates notching of the brick at the HALFEN Bolts.

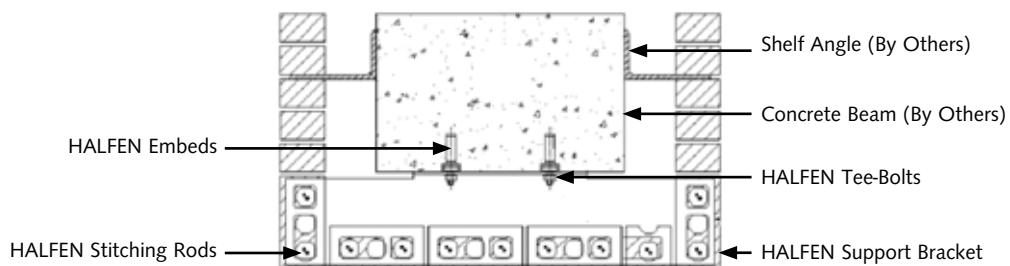
The CHANNEL & BRACKET DESIGN allows for more custom brick arch. Corbelled openings and other special designs are available using this design method.

Engineered submittal drawings and calculations are provided for every opening. If required, a State Stamp is also available.

Welded Channel is used to attach the CHANNEL BRACKET



HALFEN Embedded Channel for attachment of the CHANNEL BRACKET.



CONTACT HALFEN WORLDWIDE

HALFEN has a global network of Subsidiary Companies to assist you. The main contact information for North America, Europe and Asia is provided below. For a full list of offices please visit www.halfen.com



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