

PART 1 GENERAL

1.01 SCOPE OF WORK

A. Provide (concealed lintel system) (anchoring system) (restraint system) [specifier to choose] and accessories as indicated in the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A.	Concrete Accessories	03250
B.	Precast Concrete	03400
C.	Masonry Accessories	04150
D.	Stone	04400
E.	Metal Fabrication	05500

1.03 QUALITY ASSURANCE

- A. Material shall be provided by a manufacturer with at least five years experience in the manufacture of (concealed lintel system) (anchoring system) (restraint system) (specifier to choose).
- B. Manufacturer shall demonstrate experience in projects of similar scope.
- C. Product must be manufactured in accordance with an established quality assurance program.
- D. Product capacity or performance shall be verified by relevant test data or calculation.

1.04 REFERENCES

- A. American Concrete Institute (ACI).
- B. American Institute of Steel Construction (AISC).
- C. American Society of Civil Engineers (ASCE).
- D. American Society for Testing and Material (ASTM).
- E. American Welding Society (AWS).
- F. Brick Institute of America (BIA).
- G. The Masonry Society (TMS).

1.05 SUBMITTALS

- A. Structural calculations and shop drawings shall be submitted for approval by the Project Engineer.
- B. Submittals may include, but are not limited to:
 - 1. Description of design criteria.
 - 2. Stress and load analysis.
 - 3. Test data.
 - 4. Selection or recommendation of components.
 - 5. Shop drawings.
 - 6. Pertinent manufacturer's published data.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. All materials shall be delivered to the job site in original factory packaging to ensure proper handling in transit.
- B. All components shall be stored in a safe and dry place to prevent loss or damage.

1.07 GUARANTEE

A. Manufacturer shall guarantee the products are of good quality, free of defects, and conform to current published technical data.

1.08 RESPONSIBILITIES OF OTHER PARTIES

A. Responsibility for proper design or use of anchor channels and accessories rests with the Architect, Engineer, Construction Manager, or User.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. (concealed lintel system) (anchoring system) (restraint system) [specifier to choose] and accessories shall be as manufactured by HALFEN Anchoring Systems, Converse, TX phone (800)323-6896, fax (888)277-1695.

B. Products of other manufacturers may also be accepted, provided that such products demonstrate equal or superior capacity or other technical benefit.

C. The alternate (substitute) products must be a proven equivalent to that specified, and evaluation must be justified by technical data, test reports, samples, comparative sizing, and engineering calculations.

D. All material offered shall have published load data rated from tests conducted in accordance with appropriate ASTM and ACI procedures. Data shall be provided for allowable working loads at any accessible point on the anchor channel including the extremes of available adjustment in the channel.

2.02 MATERIALS

A. Lintels

i. Concealed lintel system shall comprise fabricated spines and accessories or brackets bolted to Halfen anchor channels cast into concrete back-up elements. Fastening to be Tee-bolts manufactured specifically for use with the anchor channels.

ii. Lintel system components shall be fabricated from steel to ASTM A36 then hot dip galvanized to ASTM A123 or A153 as applicable, or

iii. Lintel system components shall be fabricated from stainless steel to ASTM A666 type 304, annealed.

B. Anchors

i. Anchor channels shall consist of either cold formed or hot rolled channel profiles, with hot rolled "I" anchors securely attached to the back of the channel with fillet welds.

ii. Anchor channels shall be hot dipped galvanized finish, and have a foam filler to prevent concrete seepage.

iii. Fasteners used with anchor channels shall have Tee heads to engage in the channel and shall be sized to suit load requirements. Other fastening devices specifically approved by the manufacturer may also be used.

PART 3 EXECUTION

3.01 INSTALLATION

A. (concealed lintel system) (anchoring system) (restraint system) [specifier to choose] shall be installed as indicated in the approved shop drawings.

B. Anchor channels shall be securely fastened to concrete form work in accordance with manufacturer's instructions.

C. Attachment to the anchor channel shall be by Tee-Bolts manufactured specifically for use with the anchor channel, or other attachment device approved by the manufacturer. Only fastening devices manufactured or approved by the manufacturer of the anchor channel shall be used.

3.02 PROTECTION

A. The installer shall protect all components from damage. Any damage to factory applied finishes shall be touched up by the installer using appropriate materials and techniques.