

## ITW TACC – MASON BOND® Guide Specification

### SECTION 040514

#### MASONRY ADHESIVE

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. This Section includes masonry adhesive.

##### 1.2 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Reports:
  - 1. ES Report, ESR-1968.
  - 2. NCMA TEK document 10-2B.
  - 3. Special Inspection report: Statement of compliance.

#### PART 2 - PRODUCTS

##### 2.1 MANUFACTURERS

- A. Masonry Adhesive:
  - 1. Mason Bond F6200F manufactured by ITW TACC (Basis of Design).
    - a. 195 DeMille Road, Lapper, Michigan 48446 (810) 245-2155.
  - 2. Or equal.

##### 2.2 MASONRY ADHESIVE

- A. Description: Polyurethane adhesive formulated to bond concrete masonry units for plain (unreinforced), grouted or ungrouted, non-fire-resistant-rated masonry construction consisting of open and closed, hollow concrete masonry units complying with ASTM C90 in bearing walls, nonload - bearing walls, retaining walls, foundation stem walls and piers.
- B. Use:
  - 1. Alternative to type M, N, O, and S portland cement/lime masonry mortar as addressed in Section 2103.8 of the IBC and section R607.1 of the IRC.
  - 2. Applicable to masonry construction designed in accordance with following requirements:
    - a. IRC Section R606.
    - b. IBC Section 2107 (Allowable Stress Design).

- c. IBC Section 2108 (Strength Design of Masonry).
  - d. IBC Section 2109 (Empirical Design of Masonry).
  - e. ACI 530-05/ASCE 5TMS 402 Masonry code for use under either the IBC or IRC as permitted in IBC Section 2109.1 and IRC Sections R404.1 and R606.1.
- C. Seismic: Limited to Seismic Design Categories A and B.
- D. Curing Time: 7 days.
- E. Vertical Control Joints: For wall construction, comply with NCMA TEK document 10-2B.
- F. Shear Walls: Comply with Section 2.2 of the ACI 530-05/ASCE 5-05/TMS 402-05.
- G. Other condition of use: See ES Report, ESR-1968.
- H. Storage Life: 18-month when stored in unopened containers at temperature between 65 degrees and 95 degrees F.

### PART 3 - EXECUTION

#### 3.1 INSTALLATION, GENERAL

- A. Adhesive must be used in head and bed joints of masonry, with first course of masonry set into setting bed of code-complying mortar applied to concrete foundation.
- B. Adhesive is installed without premixing before application.
- C. Tip of applicator must be cut before use to allow for minimum 3/16 inch bead of adhesive.
- D. Comply with adhesive manufacturer's written instructions for installation.

#### 3.2 ADHESIVE APPLICATION

- A. Adhesive must be applied to only one contact surface of block.
  - 1. For 8-inch-wide and wider CMUs, center line of bead application must be 3/4 inch from outside edge of CMU.
  - 2. For 4-inch and 6-inch-wide units, bead center line must be 1/2 inch from outside edge of CMU.
  - 3. See ES Report, ESR-1968 for diagram.
- B. Assembly Conditions:
  - 1. Adhered surfaces must be free of dust, grease, other contaminants and standing water at time of installation.
- C. Curing Conditions:
  - 1. Assembly temperature for masonry construction with adhesive must be between 40 degrees to 100 degrees F.

2. Relative humidity range must be between 20 to 90 percent. Assembly time (open time) is 15 minutes at 50 percent relative humidity.
3. Open time can be adjusted plus or minus depending on humidity percentage; the higher relative humidity, the low open time.
4. Hardening time: Minimum of 72 hours.

### 3.3 SPECIAL INSPECTION

- A. Periodic special inspection is required. Statement of special inspection in accordance with IBC Section 1704.1.1 must be provided. In addition to all applicable items in Table 1704.5.1 and Table 1704.5.3 of the IBC, special inspection must include following:
  1. Verification that adhesive is labeled in accordance with requirements of evaluation report.
  2. Verification that adhesive is used with its storage life and open time.
  3. Verification that adhesive is dispensed as specified by adhesive manufacturer.
  4. Observation that adhesive bead is being applied per manufacturer's recommended installation instructions, including following:
    - a. Moisture content of block.
    - b. Cleanliness of block.
    - c. Adhesive bead size.
    - d. Adhesive bead location.
  5. Verification that head and bed joints meet manufacturer's requirements for maximum allowable joint width.
  6. Verification that control joints are placed in compliance with NCMA TEK document 10-2B.

END OF SECTION 040514