



GUIDELINE FOR WRITING SPECIFICATIONS WHEN USING **JAHN M-80 MORTAR**

Select Relevant Selection

Division 4 - Masonry

Part 1 – GENERAL

1.1 SUMMARY OF WORK

- A. For securing anchors in limestone, sandstone, precast concrete, structural concrete, block, brick, terra cotta, marble, or granite.

1.2 SUBMITTAL

- A. Submit the following items in time to prevent delay of the work and to allow adequate time for review and resubmittals, if needed; do not order materials or start work before receiving the written approval:
 - 1. Anchor setting mortar shall be: Jahn M80 Anchor Setting Mortar available through:
Cathedral Stone Products, Inc.
7266 Park Circle Drive
Hanover, MD 21076
 - 2. Samples of all specified materials and Material Safety Data Sheets (MSDS) as appropriate.
 - 3. *Written verification from the Contractor that all specified items will be used. Provide purchase orders, shipping tickets, receipts, etc. to prove that the specified materials were ordered and received.*

1.3 QUALITY ASSURANCE/TEST REQUIREMENTS

- A. If necessary, perform mock-up for field-testing.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Materials are to be delivered, stored, and handled to protect them from damage, extreme temperature, and moisture in accordance with Manufacturer's written instructions.
- B. Deliver and store material in Manufacturer's original, unopened containers with the production date shown on the container or packaging.
- C. Comply with the Manufacturer's written specifications and recommendations for mixing, application, and curing of mortars.

1.5 PROTECTION/SITE CONDITIONS

- A. *Cold Weather Requirements:* Do not work in temperatures below 40° F, when the substrate is colder than 40° F, or when the temperature is expected to fall below 40° F for 48 hours after installation of

repair mortars. Building an enclosure and heating areas to maintain this temperature may only be done with the written approval of the Specifier.

- B. *Hot Weather Requirements:* **Protect repair mortar from direct sunlight and wind.** Do not use or prepare mortar when ambient air temperature is above 90° F.

Part 2 – PRODUCTS

2.1 MASONRY REPAIR

- A. Jahn Restoration Mortars are distributed by Cathedral Stone[®] Products, Inc., 7266 Park Circle Drive, Hanover, MD 21076; tel. (410) 782-9150; fax. (410) 782-9155; website: www.cathedralstone.com email: info@cathedralstone.com. Jahn Mortars are premixed cementitious repair materials formulated to match the color and texture of the existing masonry, and do not contain any acrylic, latex, or other synthetic polymer additives. Mix the mortar with clean, potable water.

Substitutions: If proposed equal is submitted, lab test to establish equivalent performance levels. Use an independent testing laboratory, as determined by the Specifier, and paid for by the submitting party.

- B. *Setting anchors in existing masonry:* Jahn Anchor Setting Mortar (M80).
- C. *Mechanical anchors and dowels:* Stainless steel threaded rod (ASTM F593) with a diameter as indicated on Contract Drawings, bent and cut to lengths required to achieve embedments shown on the Contract Drawings..

Part 3 – EXECUTION

3.1 WORKMANSHIP

- A. Do not use any additives, such as bonding agents, accelerators, or retardants in the mortar.

3.2 PREPARATION FOR REPAIRS

- A. All holes to be filled with M80 must be free of all dust, dirt, grease, oil, laitance or any loose material, which could prevent proper adhesion.
- B. Clean dust out of holes prior to application.
- C. All anchors must be free of rust and oil. Treat anchors with protective coating to prevent rusting. Apply mortar only after coating is completely dry.

3.3 MIXING MORTAR FOR REPAIR

- A. It is recommended that a dust mask be worn during mixing. Do not mix more material than can be used within 30 minutes. Discard any mixed material that has been unused for 30 minutes or more.
- B. Mixing ratios for M80 is as follows:
 - 1. Approximately 5 parts dry material to 1 part water.
- C. Add water to dry ingredients and mix well. Adjust amount of water according to the weather and the porosity of the substrate.

3.4 APPLICATION OF REPAIR MATERIAL

- A. Moisten the drill holes using clean water prior to applying M80.
- B. **If the holes are allowed to dry out, this step must be repeated. This is important.**
- C. Pour the mortar into the drill hole so that it is approximately half full. Insert anchor and tap it several times in order to remove any voids or air pockets. Fill the remainder of the cavity with mortar. Anchor should be able to withstand a full load in approximately two days.

3.5 CURING PROCEDURE

- A. Periodically mist M80 using clean water. The timing for initial misting will vary with ambient conditions. Hot, dry conditions will require misting in 30 to 60 minutes. Cooler, damp conditions may require waiting several hours before beginning the curing process.

3.6 CLEAN UP

- A. Remove uncured mortar from the perimeter of the repair before it dries using clean water and a rubber sponge. Repeat several times with clean water to prevent a halo effect (staining of adjacent masonry). Cured mortar may only be removed chemically or mechanically.
- B. Remove uncured mortar from tools and equipment with water as soon as possible. Cured material may only be removed chemically or mechanically.

END OF SECTION

04/2005