



GUIDELINE FOR WRITING SPECIFICATIONS WHEN USING JAHN M-150 MORTAR

Select Relevant Selection

Division 4 - Masonry

Part 1 – GENERAL

1.1 SUMMARY OF WORK

- A. For casting to replicate limestone, sandstone, precast concrete, structural concrete, 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. Casting mortar shall be: Jahn M150 Casting Mortar available through:
Cathedral Stone Products, Inc.
7266 Park Circle Drive
Hanover, MD 21076
Samples shall be submitted for color matching to the same address.
 - 2. Samples of all specified materials and Material Safety Data Sheets (MSDS) as appropriate.
 - 3. Samples or mock-ups should be produced in the same manner as work performed onsite.
 - 4. *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. *Mortar Samples:* Prepare a sample of each type of repair listed below, using masonry removed from the building where designated by the Owner. Prepare, install, and finish each sample repair according to the specifications. Prepare samples in an area where they will be exposed to the same conditions as will be present on the building during curing. **Allow samples to cure at least three days (or longer, if possible) before obtaining Owner's approval for color match.** Mortar colors will continue to lighten as they cure and are exposed to the weather, so samples should be installed as far in advance as possible. A slightly darker color will give better long-term results. **Samples should be viewed from a minimum distance of 12 feet.**

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 CASTING

- A. Jahn Casting Mortars are distributed by Cathedral Stone[®] Products, Inc., 7266 Park Circle Drive, Hanover, MD 27016; tel. (410) 782-9150; fax. (410) 782-9155; website: www.cathedralstone.com email: info@cathedralstone.com. Mix the mortar with clean, potable water. Excessive water will lighten the color of the cured mortar.

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.

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 CASTING

- A. A mold must be made to replicate the object to be cast. Construction of the mold must be done in accordance with manufacturers specifications.
- B. Clean the mold of all foreign material, which could cause imperfections. Coat the mold with a non-staining release agent.

3.3 MIXING MORTAR

- 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 ratio:
 - 1. Approximately 9 parts dry material to 1 part water: This ratio is approximate. Adjustments to the water ratio must be made according to the type of mold. Excessive water will lighten the final color.
- 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

- A. Scoop approximately 1/3 of the mixed mortar into the mold and tamp it firmly. Press the initial application into place by hand, making certain to completely fill intricate detailing and undercut areas. As the build-up of material proceeds, tamp mortar repeatedly to consolidate.
- B. Compaction may be performed using wood tamp and a mallet. Proper compaction is essential for sharp edges. Repeat the process until the mold is slightly overfilled.
- C. Once filled and firmly compacted, screed excess material. This should produce a flush surface with the top of the mold.
- D. Cover casting with plastic sheeting for approximately 24 hours.

3.6 CURING PROCEDURE

- A. After the initial 12-24 hours has elapsed, uncover the mold and pour clean potable water into the cast until the point of rejection.
- B. Recover mold with the plastic. Remove cast from the mold after an additional 24 hours have passed.

END OF SECTION

04/2005