PATCHING AND REPAIR PROCEDURES FOR CEMENTITIOUS FIREPROOFING

MATERIAL

The material used for patching is to be the same brand and specific formulation as the material being patched. Use of one formulation to patch another may jeopardize the fire resistance of the assembly.

PREPARATION

A. Cleaning:
   The area to be patched or replaced is to be cleaned of loose debris and dirt. Cleaning may be done either by brushing or by using an air jet.

B. Wetting:
   Patches are not to be made to dry material. After cleaning, the surfaces to receive fresh material are to be wetted with a water spray. This is to avoid creation of dry interface between the old and new material. Recently sprayed material will not require as much water as cured and dry material.

MIXING

The fresh material is to be mixed in batches small enough to avoid use of partially set material. Standard size mixers with pails are suitable, depending on the quantity of material required.

Refer to the Detailed Mixing and Application Procedures for water use and mix times.

APPLICATION

A. Small Areas:
   Fresh material may be applied by hand trowel directly to small areas of about one square foot or less.

B. Larger areas:
   Areas larger than one square foot should be repaired or replaced by spray application using the procedures described in the Detailed Mixing and Application Procedures for the product being patched.
The first coating to bare steel is to be a scratch coat of only about 3/8” which is allowed to partially set before additional coats are applied. When Portland cement products are used, allow 4 to 6 hours for partial setting of the scratch coat before applying an additional coat. Gypsum scratch coats will set quicker.

CURING

Patched areas are subject to rapid water loss because of suction by adjacent dry material. Therefore, the material should be dampened as required to keep it wet for the appropriate cure time.

A. Gypsum
Gypsum based materials set in four hours or less. If the wetting procedures described in earlier section are used, no additional curing provisions are required.

B. Portland
Portland cement requires longer cure times and therefore more attention to curing.

Water spray every 2 to 3 days may be required during this period.

An alternate curing provision is spray application of a concrete curing compound after the Portland cement patch has been applied.

End of section 2/2005