



## ***Technical Information***

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### **PATCHBOND INSTALLATION TIPS FOR PATCHING A CORELESS INDUCTION FURNACE**

PATCHBOND is an induction furnace patching mortar. When mixed with water to produce an adhesive patching mix it is used to build up, by hand troweling, worn areas and patch minor cracks.

**STORAGE:** Store in a cool, dry area under cover.

- MIXING:**
1. All tools and equipment must be clean.
  2. Water must be clean, fresh, and potable
  3. 5% to 10% water by weight is mixed with the Patchbond to obtain a thick troweling consistency.
  4. Only mix the amount of material required for the patch.
  5. Patchbond does not require any tempering and can be used immediately after mixing.

### ***SURFACE PREPARATION:***

1. Carefully remove all loose material, dust and slag from the area of the lining to be patched, but do not remove or disturb the hardened surface of the Indux 98.
2. A slurry mix of Patchbond should be brushed over the surface of the material to be patched to aid adherence of patch.

- PATCHING:**
1. Patching should only be used for repairing fine cracks or minor repairs of small areas (less than 6 sq. inches) less than one inch thick. Patching a lining to a residual thickness of less than 1½ inches is not recommended.
  2. Force the Patchbond/water mixture into the area being patched with a trowel or by hand. Rubber gloves should be worn.
  3. Knit the material together, being careful not to cause any laminations in the patch.
  4. When completed, the patch can be worked smooth with a slight amount of water.

**DRYING:** When the installation is complete, heat should be applied to the furnace:

1. Thickness greater than ½" must be vented
  - a. Poke holes in the patch using 18 or 20 gauge wire
  - b. Holes should be on 2" centers
2. The patch should be dried with a lazy gas flame.
3. Heat to 250°F at 100°F per hour and dry a minimum of eight hours
4. The furnace is now ready to be charged. However, it must be remembered that there is only a surface hardness on the patch until the patch is exposed to a heat. Reasonable care should be taken when charging the first heat to avoid impact on patched areas.