

# Utility Pole Restoration

## UPR™ -NF (No Flow) Pole Repair Sealant

UPR™ No Flow Pole Repair Compound (Type UPR-NF) creates a dense, structural polymer with the strength of the wood it replaces. It has excellent adhesion and penetration into wood surfaces. UPR™ NF Pole Repair can be applied in temperatures from 20°F to 100°F, and does not require any special tools. It is gaffable and provides superior resistance to water and future woodpecker attacks.

### Instructions for Use

#### UPR™ NF Pole Repair – Components Required:

UPR™ NF Pole Repair cartridge	Stretch Wrap
Mixing Nozzles	Gloves



- 1.) Measure the depth and diameter of the hole to determine the quantity of UPR™ NF Pole Repair needed. See Chart 1 below. Each cartridge will fill approximately 50 cubic inches.

		Diameter (inches)				
Depth (inches)	Product Quantity	4	6	8	10	12
6	Cartridge(s)	1.5	3.5	5.5	9	13
8	Cartridge(s)	2	4	7.5	11.5	16.5
10	Cartridge(s)	2.5	5.5	9.5	15.5	20
12	Cartridge(s)	3	6.5	11	17	24
14	Cartridge(s)	3	7.5	13	19	29
16	Cartridge(s)	4	8.5	15	23	31
18	Cartridge(s)	4	9.5	17	26	37

Chart 1

Note: For a small hole, fill the hole just under half full with UPR™ NF Pole Repair.



- 2.) Remove all debris and water from the hole.
- 3.) Wrap 2 to 3 layers stretch film around pole, covering the hole and forming a seal to contain the UPR™ Pole Repair. The stretch wrap should cover at least 4 inches below hole. Leave a small access port to inject UPR™ Pole Repair NF in the top of the wrap.
- 4.) Remove UPR™ NF Pole Repair Cartridge from pouch.

*NOTE: Do not remove cartridge from protective foil until ready to use.*

Wear impermeable gloves and eye protection.

**Holding cartridge upright**, remove nut and plug. (Plug can be saved for re-use of cartridge.) Attach mixing nozzle and screw on tight.



- 5.) Use a standard, high-ratio caulking tool to install UPR™ NF Pole Repair. For best performance use Polywater (**Cat. # TOOL-250**).
- 6.) Insert mixing nozzle into the port through the top of the stretch wrap. **Do not prime cartridge first.** Rapid injection will produce better mixing. For best results inject no more than 3 cartridges sequentially.
- 7.) After injecting the final cartridge of UPR™ NF Pole Repair, cover the access port with stretch wrap. UPR™ NF will thicken right away and then foam and rise, filling the hole over five to ten minutes. If the fill is incomplete, additional UPR™ NF Pole Repair may be added to finish the fill. UPR™ NF Pole Repair adheres to wood and to itself.
- 8.) After the hole is filled, the stretch wrap can be removed around the hole by cutting the wrap on each side with a knife.



## Application and Use

### **Clogged/leaking cartridge**

The small orifices in the cartridge tip may become clogged. Poke through and loosen hard material or crust with a wire. Material may be used as directed once the clog is cleared. If the nozzle is fully clogged, a new nozzle may be used in its place. If the back plug is leaking, do not use cartridge.

### **Re-use and Clean-up**

Cartridge can be reused for several weeks after initial use. Remove mixing nozzle and visually ensure that orifices are not blocked. Seal with replaceable plug and nut. When ready to use, remove end cap assembly and check to make sure orifices are clear of any hardened sealant. Attach a new, unused mixing nozzle and insert used cartridge into ratchet application tool.

Unreacted material may be cleaned from surfaces with a solvent wipe such as Polywater's Type HP Cleaner . Part A, amber resin will react with water if surfaces are washed with soap and water solution. Once reacted, material has strong adhesion, and may be scraped or cut from surface. For skin contamination, wash thoroughly with soap and water. See MSDS for further information.

### **Water in Hole**

Remove any standing water. UPR™ NF Pole Repair will incorporate water into the cure. Water and/or contamination will weaken the cured material.

### **Cold Weather Use**

UPR™ NF Pole Repair can be used in temperatures down to 20°F (-7°C). Reaction is slower, but will completely foam and cure with time. At cold temperatures, the UPR™ NF Pole Repair becomes slightly viscous and flows through the mixing nozzle at a slower rate. **If cartridge is below 60° F, warm UPR™ NF Pole Repair cartridges prior to use.**

Dispose of any excess material in accordance with local and national regulations.

### **Storage:**

UPR™ NF Pole Repair cartridge is sensitive to sun, water and heat. To keep the cartridge usable up to a month after initial use, place the partial used cartridge into the foil bag and tape it shut. Place the foil bag in a dry cool dark place until ready to use.