

# FLEX-SEAL UTILITY SEALANT®

## GRADE ADJUSTMENT RING AREA & JOINT SECTION INSTALLATION INSTRUCTIONS

1. THE OUTDOOR TEMPERATURE MUST BE ABOVE 7° CELCIUS BEFORE PROCEEDING WITH THE INSTALLATION OF FLEX-SEAL. USING A GRIT BLASTER (MINIMUM 70 CFM @ 90 PSI), THOROUGHLY CLEAN THE **ENTIRE AREA** TO BE COATED. ALSO REMOVE ANY BITUMINOUS COATINGS, PAINTED COATINGS, OR RUST SCALE BUILD-UP ON THE METAL AND OTHER SURFACES. THIS PROCEDURE **MUST** BE FOLLOWED TO ENSURE THAT FLEX-SEAL UTILITY SEALANT BONDS TO THE STRUCTURE (CLEANING EQUIPMENT NEEDED WILL DEPEND UPON THE CONTAMINATES ON THE SURFACE AND/OR THE TYPE OF SUBSTRATE). IF USING CEMENT MATERIALS TO PROFILE OR PATCH REPAIR THE MANHOLE CONTACT SEALING SYSTEMS, INC. FOR THE PROPER PREPARATION REQUIRED TO BOND URETHANES TO THESE MATERIALS. SOME CEMENT MATERIALS ARE NOT COMPATIBLE WITH FLEX-SEAL.

2. AFTER THE GRIT BLASTING, GO OVER THE ENTIRE AREA WITH AIR ONLY TO REMOVE ANY LOOSE SAND THAT MAY HAVE BEEN DEPOSITED ONTO THE SURFACE. THE SUBSTRATE SURFACE **MUST** BE **DRY** AND FREE OF SAND, LOOSE DEBRIS, LATENCIES, DUST, DIRT, OIL, GREASE, OR CHEMICAL CONTAMINATION. ALL HYDROSTATIC LEAKS **MUST** BE STOPPED WITH AN APPROPRIATE WATER STOP MATERIAL. QUICK SET CEMENT IS RECOMMENDED. OPENINGS OR GAPS LARGER THAN 3/8 INCH SHOULD BE PATCHED WITH QUICK SET CEMENT. MOST QUICK SET CEMENTS REQUIRE A MINIMUM OF SEVEN (7) DAYS TO CURE FOLLOWED BY THE CORRECT PREPARATION PROCEDURES BEFORE APPLYING ANY COATING. NEVER APPLY THIS COATING TO UNCURED CEMENT. FLEX-SEAL UTILITY SEALANT WILL NOT BOND TO UNCURED CEMENT.

3. IF THE SURFACE IS WET, DRY THE MANHOLE USING A LARGE PROPANE TORCH ALONG WITH THE APPROPRIATE SAFETY PRECAUTIONS. **CAUTION SHOULD BE TAKEN DUE TO THE EXPLOSIVE GASES COMMONLY ASSOCIATED WITH SANITARY MANHOLES.**

4. BEFORE COATING, AN ACETONE WET WIPE OF THE ENTIRE SURFACE TO BE COATED IS RECOMMENDED. THIS IS TO GET A MECHANICAL WIPE OF THE SURFACE, A WET WIPE OF THE SURFACE AND A HIGH FLASH POINT WIPE OF THE CEMENTITIOUS PORTION OF THE SURFACE TO EVAPORATE ANY SURFACE MOISTURE IN THE NON METALLIC PORTION OF THE CHIMNEY AREA TO BE COATED WITH FLEX-SEAL UTILITY SEALANT.

5. IF COATING **FIBERGLASS, PVC OR EPOXY** TO ENSURE EXCELLENT BOND STRENGTH USE 40 GRIT SAND PAPER TO ROUGH UP THE SURFACE THEN APPLY A VERY THIN LAYER OF PREPARATION MATERIAL "NHNS" AS MANUFACTURED BY SEALING SYSTEMS, INC.

6. LOCATE THE FOIL BAG OF PRIMER AND THE FOIL BAG OF CATALYST. POUR THE CONTENTS OF BOTH IN THE WHITE PLASTIC CONTAINER PROVIDED THEN THOROUGHLY MIX THE TWO PRODUCTS TOGETHER WITH THE WOODEN STIR-STICK PROVIDED IN THE KIT. THE PRIMER **MUST** BE APPLIED TO A **DRY** SURFACE AND ONLY TO THE PREPARED SURFACE AREA. **STOP ALL WATER INFILTRATION BEFORE APPLYING THE PRIMER.** USING THE BRUSH PROVIDED APPLY THE PRIMER DIRECTLY FROM THE WHITE PLASTIC TUB.

7. **GRADE ADJUSTMENT RING APPLICATION** - APPLY A **THIN LAYER** OF PRIMER 2-3 INCHES ABOVE THE BOTTOM OF THE FRAME AND THE ENTIRE ADJUSTMENT RING AREA TO 2-3 INCHES BELOW THE BOTTOM RING. **JOINT SEALING APPLICATION** - APPLY A **THIN LAYER** OF PRIMER 3 INCHES ABOVE THE JOINT AND 3 INCHES BELOW THE JOINT.

8. THE FINAL COAT OF FLEX-SEAL UTILITY SEALANT **MUST** BE APPLIED WITHIN 3 HOURS AFTER THE PRIMER HAS BECOME TACKY (STICKY BUT NO LONGER TRANSFERS WHEN TOUCHED). TACK TIMES WILL VARY DEPENDING ON TEMPERATURE. IT IS VERY IMPORTANT TO REMAIN WITHIN **3 HOURS** AFTER THE PRIMER BECOMES TACKY TO ENSURE PROPER ADHESION. IF THE PRIMER HAS CURED (TACK FREE) ON THE SURFACE FOR MORE THAN 3 HOURS, FOLLOW THE INSTRUCTIONS ON THE BACK OF THIS PAGE.

9. SHAKE THE 1/2 GALLON CAN OF FLEX-SEAL UTILITY SEALANT PART "A" THEN POUR THE PART "A" LIQUID INTO THE 1-1/2 GAL PAIL (BE SURE TO SCRAPE ALL THE LIQUID FROM THE BOTTOM OF THE CAN) THEN ADD THE PART "B" (MATERIAL IN PLASTIC BAG) TO THE PART "A" IN THE 1-1/2 GAL PAIL. USE A POWER DRILL (**MINIMUM OF 2500 RPM**) AND PAINT MIXER ACCESSORY TO MIX THE MATERIAL. TO INCREASE THE VISCOSITY, MIX THE MATERIAL WITH AN UP, DOWN, AND AROUND MOTION UNTIL ONE CONSISTANT COLOR IS ACHIEVED. IT IS **VERY IMPORTANT** TO BLEND PARTS A & B TOGETHER THOROUGHLY USING A POWER DRILL. AFTER MIXING THE A & B MATERIALS IT MAY BE NECESSARY TO WAIT A FEW MINUTES FOR THE MIXTURE TO REACH THE DESIRED CONSISTENCY.

10. USING THE 2ND BRUSH PROVIDED, APPLY THE FLEX SEAL UTILITY SEALANT OVER THE AREA ON WHICH THE PRIMER WAS APPLIED. LEAVE 1" OF PRIMER EXPOSED AT THE TOP AND THE BOTTOM OF THE COATING. APPLY IT AS EVENLY AS POSSIBLE COVERING NO MORE THEN 12 VERTICAL INCHES PER KIT. CONSULT THE JOB ENGINEER FOR THE SPECIFIED MIL THICKNESS. BE SURE TO FILL ALL GAPS WITH THE MATERIAL. IT IS IMPORTANT **NOT** TO APPLY THE FLEX-SEAL UTILITY SEALANT TO ANY **UNPRIMED AREA**. THE POT LIFE OF THE FLEX - SEAL UTILITY SEALANT IS 20 MINUTES DEPENDING ON THE TEMPERATURE.

11. THE FLEX-SEAL UTILITY SEALANT WILL BE TACK FREE IN APPROXIMATELY 8 HOURS DEPENDING ON THE TEMPERATURE. IT WILL CONTINUE TO CURE TO ITS ULTIMATE STRENGTH IN APPROXIMATELY 30 DAYS. DO NOT PERFORM ADHESIVE OR BURST TESTING UNTIL THE 30 DAY CURE TIME HAS ELAPSED.

Equipment suggested: quick set cement, acetone, hammer, chisel, 2500 RPM drill, mixer accessory, whisk broom, wire brush, Grit blasting equipment, goggles, screw driver, wooden stir- stick, and OSHA approved breathing apparatus in confined areas.

**WARNING!!** DO NOT GET ANY MATERIAL IN EYES, ON SKIN OR CLOTHING. DO NOT TAKE INTERNALLY. CONTAINS TOLUENE DIISOCYANATE. VAPORS MAY CAUSE RESPIRATORY IRRITATION AND SENSITIZATION. LIQUID MAY CAUSE EYE DAMAGE. MAY IRRITATE SKIN.

# FLEX-SEAL UTILITY SEALANT®

## APPLICATION OF FLEX-SEAL UTILITY SEALANT OVER CURED PRIMER

1. CLEAN THE AREA TO BE COATED. THE SURFACE MUST BE DRY AND FREE OF SAND, LOOSE DEBRIS, DUST, DIRT, OIL, GREASE, OR CHEMICAL CONTAMINATION.
2. USING "NHNS" PREPARATION MATERIAL MANUFACTURED BY SEALING SYSTEMS, INC. APPLY A VERY THIN COAT OF NHNS PREPARATION MATERIAL OVER THE EXISTING CURED PRIMER.
3. THE FINAL COAT OF FLEX-SEAL UTILITY SEALANT MUST BE APPLIED 0 - 8 HOURS AFTER THE APPLICATION OF THE NHNS PREPARATION MATERIAL.
4. SHAKE THE ½ GALLON CAN OF FLEX-SEAL UTILITY SEALANT PART A WHITE MATERIAL THEN POUR IT INTO THE WHITE PAIL. THEN ADD THE PART B THICKENING AGENT (BLUE MATERIAL). USE A POWER DRILL (WITH A MINIMUM 2500 RPM) AND MIXER ATTACHMENT TO BLEND PART A & B. IT IS VERY IMPORTANT TO BLEND A & B TOGETHER THOROUGHLY TO CREATE A UNIFORM BLUE COLOR.
5. USING A BRUSH APPLY THE FLEX-SEAL UTILITY SEALANT MIXTURE OVER THE AREA IN WHICH THE NHNS PREPARATION MATERIAL WAS APPLIED. SPREADING THE MATERIAL AS EVENLY AS POSSIBLE ON THE ENTIRE SURFACE. IT IS IMPORTANT **NOT** TO APPLY ANY FLEX-SEAL UTILITY SEALANT TO ANY AREA THAT WAS NOT FIRST COATED WITH THE NHNS PREPARATION MATERIAL. THE POT LIFE OF THE FLEX-SEAL UTILITY SEALANT IS 15 - 60 MINUTES DEPENDING ON THE TEMPERATURE.
6. THE FLEX-SEAL UTILITY SEALANT WILL BE TACK FREE IN APPROXIMATELY 8 HOURS DEPENDING ON TEMPERATURE. IT WILL CONTINUE TO CURE TO ITS ULTIMATE STRENGTH IN APPROXIMATELY 30 DAYS.

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