
DESCRIPTION:

Nukote JF HM® (Hand-Mix) is a two component, modified aliphatic, rapid setting, self-leveling and 100% solids polyurea caulking compound.

FEATURES:

- 100% Solids with zero VOC
- Flexible
- Odorless and Non-toxic
- Remains Flexible, Even in Cold Temperatures
- Minimum Down time(Back to service in 60 minutes)
- Meets USDA Criteria
- Meets California VOC and AQMD Requirements

TYPICAL USES:

Nukote JF HM® is for small repairs on interior and exterior horizontal concrete surfaces, to repair random cracks, control joints and other areas where down time is limited. Typical application but not limited are to fill cracks, repair spalls, damaged control joints, construction joints (horizontal), damaged floors subjected to industrial traffic and fork lifts in:

- Concrete construction & control joints
- Airports
- Food processing plants
- Bridge headers
- Freezers and cold storage
- Waste water treatment plants
- Parking garage decks
- Industrial/ manufacturing facilities

COLORS:

Standard Black and Medium Grey. Custom colors, blended to match few RAL number, are available upon request subject to minimum quantity.

PACKAGING:

1 gallon (3.8 liters) of side-A and 1 pint (0.55 liters) of Side-B.

| TECHNICAL DATA (All values @ 77 °F / 25 °C) | US | Metric |
|---|---------------------|-------------------------|
| Solids by volume (ASTM D2697) | 100% | 100% |
| Volatile organic compounds (ASTM D2369) | 0 lb./gal | 0 gm/ lit |
| Theoretical coverage (1"x 1/4") (25 mm x6.35mm) joint | 8.3 linear feet/gal | 23.5 linear meter/liter |
| Specific Gravity of materials (ASTM D792) | 8.637 lbs./gal | 1.035 kg/ liter |

| | | |
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| Viscosity at 81 °F/27 °C in cps ±10% (ASTM D4878) | A-2,000-3,000 B-150-190 | A-2,000-3,000 B-150-190 |
| Shelf life @ 70 °F /22 °C | 9-12 months | 9-12 months |
| Tensile strength (ASTM D412-C) | 1800-2200 psi | 12 to 15 MPa |
| Elongation (ASTM D412-C) | 550-650 % | 550-650 % |
| Hardness (ASTM D2240) | 75-85 Shore A | 75-85 Shore A |
| Tear strength (ASTM D642) | 400 to 460 pli | 70 to 80 kN/m |
| Application temperature | 32 °F to 135 °F | 0 °C to 57 °C |
| PROCESSING PROPERTIES (Under standard lab conditions) | | |
| Mix Ratio V/V | 7A:1B | |
| Gel time | 8-12 minutes | |
| Tack free time (DFT & Temperature dependent) | 40-45 minutes | |
| <i>Properties and values are highly dependent on equipment, spray gun, mix chamber temperature, pressure and related parameters. Variations are possible and expected.</i> | | |

COVERAGE:

One gallon (3.8 liters) of Nukote JF HM will fill approximately 8.3 feet (23.5 meters) at 1 inch (25 mm) width by ¼ inch (6.35 mm) depth.

STORAGE:

Nine to Twelve months in factory delivered, unopened drums. Store on pallets and keep away from extreme heat, freezing, and moisture. Nukote JF HM should be stored between 60 ° - 90 °F (15 °-35 °C).

MIXING:

Nukote JF HM may not be diluted under any circumstance. Pre-mix Nukote JF HM side-A and side-B material before combining. Add side-B to side-A while mixing, using a mechanical mixer at slow speed. Mix until a homogeneous mixture and color is obtained (at least 2 minutes). Use care to scrape the sides of the container to ensure that no unmixed material remains. Use caution not to whip air into the materials as this may result in pinhole, blisters and/or shortened pot life. Proportions are premeasured, do not estimate.

SURFACE PREPARATION:

Concrete:

Allow concrete to cure 28 days before installation. Saw cut the Joint to ACI Recommendations. All Joints must be clean and dry prior to installing Nukote JF HM. If Joint is damp, dry with heat torch. Maximum moisture content should be 5% as per ASTM -F2170 & ASTM -F2420.

Profile, repair the joints and remove all dust. Joint edges must be thoroughly cleaned prior to filling, particularly if a floor sealer or densifier has been applied. If required, prime either sides of the joint with Nukote EP Prime I or Nukote

EP Prime II. Construction joints should meet joint depth-width ratio and where necessary, should be adjusted utilizing a backer rod (depth should be less than or equal to 25% of the total width) Do not use backer rod or other fill material for the purpose of reducing volume. Use a debonding tape to prevent adhesion to the bottom of the joint when backer rods are not used. All movement joints should be professionally engineered based on movement, thermal cycling and product physical properties.

To repair T-Joints, the Joints should be cut a minimum of 25% of the total depth of the slab. The side of the T-joint must be cut 5/8 inch (40mm) from the Joint and a minimum of ½ inch (12.5 mm) deep. For random crack each side of the crack should be cut to create a minimum ½ inch (12.5 mm) vertical edge. Ensure that all joint edges are at 90° angles to grade with no V-grooving or feather edges .Dried silica sand, 1/16” to 1/8” (1.5 to 3 mm), may be used to fill the crack at the bottom of the joint and prevent three-sided adhesion

APPLICATION:

This material can be applied at temperatures from 32° F (0° C) to as high as 135° F (57° C). This product needs to be conditioned at 73° - 81° F (23° -27° C) prior to use.

After applying Nukote JF HM, wait 4-5 hours, depending on temperature and humidity before opening to traffic. Slice off any over-pour flush to grade.

EQUIPMENT CLEAN UP:

Cured product may be disposed without any restrictions. Mix excess A and B materials and allow to cure. Check local, state and federal laws before disposing of material.

LIMITATIONS:

Do not dilute Nukote JF HM under any circumstances. Do not use in cracks, construction joints or control joints if surface is subject to thermal cycling. Discoloration will occur if exposed to UV, however no change will occur in the physical properties.

WARNING:

This product contains Isocyanate and curatives

WARRANTIES AND DISCLAIMERS:

Nukote Coating Systems International, a Nevada, USA Corporation warrants that the two components of this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper mixture and application of the components by the applicator. Nukote Coating Systems has no role in the application of the finished polymer other than to manufacture and supply its two components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of plural component equipment and application of plural component materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Nukote Coating Systems International and executed under seal by a company officer.