

# Uniflex™ Urethane88 Gray 46-620



## CHARACTERISTICS

Urethane88 is one component Aliphatic moisture curing polyurethane designed for exterior roof industrial and commercial Applications.

- Aliphatic two coat system
- UV stable
- Excellent color retention
- Resists dirt pickup
- Incredible durability
- Flexible and high elongation
- Watertight system resists ponding water
- Strong adhesion to most roofing substrates

### Features:

- Exterior use
- Easy application
- Flows and levels to a smooth finish

Description	SKU	SMIS	Size
Urethane88	KST046620-20	651410144	5Gal

### FOR USE ON THESE SURFACES AS A BASECOAT:

Galvanized Metal, EPDM, TPO, PVC, APP/SBS Modified Bitumen, Smooth BUR, Cured Concrete, Existing acrylic, Existing Urethane and other approved roof coatings.

All substrates should be aged a minimum of 6 months prior to applying coating.

THIS IS A TWO COAT SYSTEM AND A TOPCOAT IS ALWAYS REQUIRED. KST046600 URETHANE88 WHITE ROOF COATING IS THE REQUIRED TOPCOAT TO BE USED WITH KST046620 URETHANE88 GRAY.

An adhesion test is required to confirm compatibility

Additional primers are recommended for metal such as acrylic and alkyd rust inhibitive primers if rust is present or to prevent rust.

Color: Gray

Coverage: 80 sq. ft. per gallon  
Wet mils: 20 total  
Dry mils: 15.6 total

Drying Schedule @ 68°F @ 50% RH:

Drying and recoat times are temperature, humidity, and film thickness dependent.  
Dry To touch 1 hour  
Dry to recoat 4 hours  
Full Cure 72 hours

## PRODUCT CHARACTERISTICS

V.O.C. (less exempt solvents):	134.5 g/l
Volume Solids:	78% ±2%
Weight Solids:	83% ±2%
Weight per Gallon:	9.98 lbs
Flash Point:	50° C (122° F)
Shelf Life:	6 months, unopened

## PERFORMANCE

Permeance	2 perms
Elongation	761%
Tensile Strength	842 psi
Tear Resistance	112 pli
SRI	100
Reflectivity	65
Thermal Emissivity	0.9
Specific Gravity	1.21

## COMPLIANCE

As of 04/30/2025, Complies with:

Miami -Dade	Meets Standard
CRRC	Meets Standard
OTC	Yes
OTC Phase II	Yes
S.C.A.Q.M.D.	No
CARB	No
CARB SCM 2007	No
CARB SCM 2020	No
Canada	Yes

## APPLICATION

Temperature:  
minimum 50°F / 10°C  
maximum 120°F / 50°C  
air, surface and material at least 5°F above dew point  
Relative humidity for cure: 40%-80%

Dry conditions (relative humidity less than 30%) can make the final cure of the material take longer. Higher temperature, higher relative humidity could shorten the cure time. The temperature should not fall below 50°F during curing.

Do not apply in the presence of ignition sources. Surfaces must be clean, dry and no moisture vapor transitions present prior to application.

KST046620 URETHANE88 GRAY ROOF COATING IS THE REQUIRED BASECOAT and should be applied by airless sprayer, brush, roller or squeegee at an approximate rate of 1.25 gallons per square or 20 wet mils 18 DFT.

KST046600 URETHANE88 WHITE ROOF COATING should be applied as the topcoat at 1.25 gallons per square or 20 wet mils 18 DFT. to give a final dry mil thickness of 36 mils for both basecoat and topcoat.  
Reducer: Not Applicable

### Airless Spray:

Rig Graco 5900 or higher  
Pressure 3300-7000 p.s.i.  
Tip .545, .619 or .831

### Brush:

Nylon-polyester

### \*Roller Cover:

½ inch nap or ¾ synthetic.

\*Note: ¾ base coat and the ½ for the topcoat.

## RECOMMENDED SYSTEMS

### Galvanized Metal\*

1 coat of 34-520 Rust Inhibitive Primer or 1 coat of 36-520 rust inhibitive primer as needed.  
1 coat of 46-620 Urethane88 Gray as basecoat  
1 coat of 46-600 Urethane88 White as topcoat

### Single Ply Membranes (EPDM/TPO/PVC):

Clean EPDM with 38-620 Uniflex Bond-it Rinse Primer  
1 coat of 46-620 Urethane88 Gray as basecoat  
1 coat of 46-600 Urethane88 White as topcoat

### Asphaltic Membranes (APP/SBS Modified Bitumen, Smooth BUR):

1 coat of 46-620 Urethane88 Gray as basecoat  
1 coat of 46-600 Urethane88 White as topcoat

### Cured Concrete

1 coat of 46-620 Urethane88 Gray as basecoat  
1 coat of 46-600 Urethane88 White as topcoat

### Existing Coatings:

1 coat of 46-620 Urethane88 Gray as basecoat  
1 coat of 46-600 Urethane88 White as topcoat

Refer to full specifications for additional details.

# Uniflex™

## Urethane88 Gray

### 46-620

Surfaces that are being applied with Urethane88 must be clean, dry, free of oils and all bond impeding compounds and contaminants. Dirt and other debris should be removed until the base surface is exposed. In addition to manually cleaning, power washing or other mechanical methods may be used to sufficiently clean the substrate. Existing peeled or checked coatings should be scraped to a sound surface. Glossy surfaces should be sanded dull. Recognize that any surface preparation short of total removal of the old coating may compromise the service length of the system.

#### **Galvanized Metal:**

Pressure clean to remove all dirt, dust, grease, oil, loose particles, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair all deficiencies in metal panels, tighten fasteners to create a weather-tight condition. Prime corrosion with appropriate rust inhibitive primer.

#### **Single Ply Membranes:**

Pressure clean to remove all dirt, dust, grease, oil, loose particles, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Replace all wet insulation. Repair all membrane and flashing deficiencies. Apply and rinse off Bond-it Rinse primer for EPDM membranes.

#### **Asphaltic Membranes:**

Pressure clean to remove all dirt, dust, grease, oil, loose particles, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Replace all wet insulation. Repair all membrane and flashing deficiencies.

#### **Cured Concrete:**

Moisture content must be 15% or lower. Pressure clean to remove all dirt, dust, grease, oil, loose particles, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Repair all concrete deficiencies.

#### **Existing Coatings:**

Pressure clean to remove all dirt, dust, grease, oil, loose particles, foreign material, peeling and defective coatings, chalks, etc. Allow the surface to dry before proceeding. Replace all wet insulation. Repair substrate deficiencies.

### **MIXING**

Prior to use, this product should be mixed for the minimum amount of time necessary to ensure uniform distribution of color and additives. This time will vary by product and degree of sedimentation. Mixing efficacy can be checked by scraping the bottom of the packaged material with a suitable piece of material. Overmixing should be avoided, particularly in hot and humid climates. Suitable mixers will have the correct ratio of mix blade diameter to

vessel diameter and can be recommended and obtained from vendors that specialize in mixers.

### **SAFETY AND PRECAUTIONS**

**PRECAUTIONS:** For exterior use only. Protect building inlets from product vapors or fumes. DO NOT allow product to freeze. Protective clothing, gloves and eye-wear should be used during application of these products. When transporting this product, ensure that lid is tight and pail secure and upright. DO NOT allow pail to tumble as this may cause lid to loosen and leakage to occur. Do not transport on passenger seats or inside the passenger compartment of any vehicle. Store product in the cargo area of vehicle, and secure over protective clothes to prevent damage due to accidental spills. Do not walk on coating until fully cured. The contents of this container are reactive with moisture in the air. Curing starts immediately upon opening and opened product cannot be returned. Use all contents within one day of opening. DO NOT reuse empty containers. Ponding water creates excessive weight on roofs and may compromise structural integrity leading to a potential collapse hazard. Always follow the National Roofing Contractors Association guidelines to remove ponding water from roof surfaces. **SLIP WARNING:** Use extreme caution when walking or working on urethane coated surfaces, and apply traction promoting particles in coating if needed for walkway areas. If there will be foot traffic on roof after installation (and cured), embed 40 - 60 lbs. of #11 ceramic granules per 100 sq ft into top layer of coating to create a non-skid finish. Surfaces without granules are slippery when damp or wet. Use OSHA approved fall protection when on roof surface. For Exterior use only. Protect from freezing.

**BEFORE USING, CAREFULLY READ SDS FOR PROPER HANDLING AND PROTECTIVE WEAR**

**DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

### **CURE PROFILE**

Curing takes place at ambient temperature by reaction with atmospheric moisture. A relative humidity of 40 – 80% is recommended for appropriate cure. Dry conditions (relative humidity less than 30%) can make the final cure of the material take longer. Higher temperature and relative humidity will shorten the cure time. The temperature should not fall below 50°F during curing.

### **STORAGE**

Coating must be protected against humidity and stored above 50°F. The ideal storage temperature is in the range of 59 – 77°F. Higher storage temperatures over a longer period can

shorten the shelf life. The material should be stored in shaded areas when possible. At ideal conditions, the material can be stored for up to six months in the original, unopened packaging. Partially used drums or totes should be used quickly or purged thoroughly with nitrogen prior to resealing.

### **CLEANUP INFORMATION**

Cleanup with Mineral Spirits or Xylene spills, spatters, hands and tools immediately after use. After cleaning, flush spray equipment with compliant cleanup solvent to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using solvents.

### **WARRANTY**

Uniflex and The Sherwin-Williams Company warrants Urethane88™ to be free from defects in materials and manufacturing. Under this warranty, we will provide, at no charge, a quantity of Urethane88™ sufficient to replace any Urethane88™ proven to be defective when applied according to our written instructions and in applications recommended by us as suitable for the product.

THIS LIMITED WARRANTY IS THE BUYER'S SOLE AND EXCLUSIVE REMEDY AGAINST UNIFLEX AND THE SHERWIN-WILLIAMS COMPANY REGARDING THE PRODUCT. IN NO EVENT SHALL UNIFLEX OR THE SHERWIN-WILLIAMS COMPANY BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE OR OTHER DAMAGES ARISING FROM THE USE OR PERFORMANCE OF THE PRODUCT. Since methods of application and on site conditions can affect performance, UNIFLEX AND THE SHERWIN-WILLIAMS COMPANY MAKE NO OTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE REGARDING THE PRODUCT, AND UNIFLEX AND THE SHERWIN-WILLIAMS COMPANY HEREBY DISCLAIM ALL SUCH OTHER WARRANTIES