

3246 PenJoint Polyurea

Description: Expansion Joints

3246 PenJoint is a “Slow Set Polyurea” designed for use in concrete Expansion Joints in parking structures, bridges, airfields, etc. The gel time is 3 to 5 minute and this product is very flexible with high elongation and a 1:1 mix ratio. This is a true polyurea system with rapid movement ability and excellent memory. The 3246 expansion joint product is 100% solids and designed to be self-leveling for exterior moving joints. 3246 is machine dispensed using the ASTC LS 1:1 application machine or similar machine and can also be dispensed for small applications using a duplex cartridge. A hand mix version of the 3246 PenJoint is available.

3246 is used for any exterior expansion joint as well as for rapid installations where short down-time is important, the temperature is very low limiting the use of other polymer products. The product can be driven over in 30 minutes after installation.

Cold Temperature Applications: 3246 may be used in cold temperature applications below zero °F . Set times change very in cool temperatures and flexibility is maintained. When using the 3246 in cold conditions keep the product and equipment warm before and during use. 3246 exhibits excellent resistance to moisture, chemicals and abrasive conditions.

Color: Black, Dark Gray, Tan & Non-pigmented

Advantages

- HIGH DENSITY POLYUREA, 100% POLYUREA
- ELONGATION EXCELLENT IN COLD CONDITIONS
- MEETS USDA INTERMITTENT CONTACT
- MEETS FAA P605 – AIRFIELD JOINTS & ESS 200 MILITARY SPECIFICATION
- RAPID APPLICATIONS & SET TIMES
- “DRIVE-OVER” IN 30 TO 45 MINUTES
- STAYS FLEXIBLE IN COLD CONDITIONS ☑ NON-FLAMMABLE
- -5 MINUTE GEL TIME @ 77OF
- SELF-LEVELING, 100% SOLIDS, NO VOC’S, NO ODOR
- EXCELLENT ABRASION RESISTANCE, IMPACT RESISTANCE

Use Areas

- EXPANSION JOINTS – EXTERIOR CONCRETE
- BRIDGES
- PARKING STRUCTURES
- AIRFIELDS, MEETS FAA P605
- DECKS
- LOADING DOCKS
- MOVING EXPANSION JOINTS
- COLD STORAGE THRESHOLDS

General Physical Characteristics

| | |
|-------------------------------|-----------------------|
| Solids | 100% |
| Gel Time | 3-5 min. |
| Shelf Life | 1 year |
| Hardness ASTM D2240 Shore A | 30-40 |
| Mix Ratio | 1:1 |
| Tack Free | n/a |
| Tensile ASTM D412 450 | |
| Tear Strength, pli ASTM 624-C | 200 psi |
| Elongation ASTM D124 | >600% |
| Processing Temperature | 70°F |
| Viscosity @ 25°C cps, | A 450, B 400 |
| VOC Content | 0gms/1 or 0.0 lbs/gal |



Preparation:

Concrete must have a minimum 28 day cure prior to application. Use a dry diamond saw, saw/abrade both sides of the joint walls. Assure that the joint is properly abraded and cleaned to full depth. Remove any curing agent, form release materials, oils, wax, moisture or any material that may affect bonding. Clean, vacuum and wash to remove dust from the walls of the joint. An acetone joint side wall wash down is suggested for best bonding after vacuuming. No Backer rod is used in control joints, only in construction joints to control depth.

Primer

Small exterior joints of less than 1/2" do not need a primer. Large joints with the substrate prepared via shot-blasting or sand blasting may not require a primer. For large moving joints a primer may be used. Use ASTC PenPrime 7001. Prime 1-2 hours before application of the 3246. For best bonding results apply the joint product as soon as possible over the primer when the solvent in the primer has flashed.

Application:

Use a 1:1 positive displacement (cylinder) application machine or ASTC LS pump.

Pre-condition 3246 temperature making sure the product is >72°F before beginning the machine application. Warm the product in the containers as needed to proper working temperature for this product. Use ONLY the ASTC recommended static mixing units for this product. When using Duplex Cartridges of the 3246 PenJoint, keep cartridges warm and follow all application instructions for cartridge use.

Bond Breaker:

A bond breaker is often used at the bottom of an expansion joint to allow for greater movement of the product filling the joint. Use a bond breaker on deep joint fills as needed or backer rod.

Filling:

Fill the joint from the bottom of the joint up. fill to slightly below grade. The product is self-leveling and quick to set, avoid overfilling.

Always mix the part B before using.

Joint Size and Movements:

Expansion joints should be designed with a maximum of +/- 25% movement. The overall movement of a joint should be measured at the temperatures extremes that are normal for the structure.

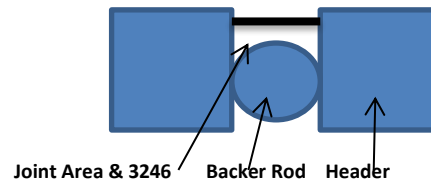
Measure the opening of the joint at the coldest temperature and at the highest temperature and

multiply by 4. If a joint opens and closes 1/4 inch the joint width should be 1 inch and the fill depth should also be approximately 1/2" to 1 inch with the backer rod placed at this depth.

Depth:

Minimum depth is normally about half the open width of the joint to equal the depth over backer rod. Areas of higher movement, standing water and deicing chemicals should have joint depth of 1/2 the width and up to 1 to 1.5 inches depth over a backer rod.

Structures such as bridges, airfields or parking structures that are exposed to wide thermal cycle swings and a high movement potential that may exert excessive compression and expansion (pulling) forces on the joint material should be filled when they are "cool" and open. The configuration of the backer rod should be round allowing for the added depth on the sides of the fill.

**Minimum Depth Airfields:**

Shallow fill applications have a greater potential for loss of adhesive bond and damage when snow removal equipment is used. Moving joints may be filled slightly greater than the half the width as determined by the project engineer. A primer may be required.

Application Finish:



*For aesthetic appearance around buildings and structures and to stop environmental dust from sticking to the new 3246 surface “remove” the surface tack on standard expansion joints by using fine sand or tack removal powder as supplied by ASTC. Dusting the surface while the product is fresh provides a fresh, clean finish and appearance.

Below Finished Grade:

Keep the installation of the product slightly below the finished surface grade. Install the product when the joint area is cool and the joint is open.

Static Mixer Metal Tip:

Use ASTC provide metal tip tracker for the end of the static mixer.

Limitations:

Keep out of direct sunlight and store at room temperature on wood pallets. Protect from cold when using in the cold.

Warm or pre-condition product kits on pallets before using in cool conditions below 70F. 3246 Polyurea exhibits good chemical resistance to motor pool fluids, aviation fluids, i.e. hydraulic fluid, diesel fuel and JP4 and cleaning solutions for short periods of time.

To maintain proper joint integrity clean up chemical spills soon. Submersion of product or continued water ponding over product - may result in a low skid resistance condition, hazardous working condition or slip hazard. Chemicals, oils, soaps etc. should be removed from the surface as a normal part of cleaning and maintenance. Part A is moisture sensitive, keep away from compressed air units that may dispense moisture near the part A, avoid exposing the pail/container to humidity. Observe appearance of part A in humid conditions.

*Note: The 3246 is very adhesive and stays “tacky” on the surface allowing for top coating when used on deck joints. Top coat the surface of the 3246 not more than 1 hour after application in joints on surfaces that will have a finish coat

This product is for use by professional applicators only. Wear Protective Clothing and gloves as the product bonds very well to fabrics. Read MSDS before using this product. DOT/Flash Point – Non-flammable Liquid Classification, not regulated. Warranty: See ASTC Polymers, Inc. Warranty data sheet. (2-13) Product data sheets subject to change without notice. © 2010 ASTC Polymers, Inc .