

**Technical  
Data Sheet**



Willamette Valley Company

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Partnering through service,  
innovation, and integrity

# POLYQuik® EJC-25

## Polyurea Based Expansion Joint (Type M, Grade P, Class-25)

### DESCRIPTION

POLYQuik® EJC-25 is a highly flexible, two component, rapid setting, polyurea-based compound for joint filling. EJC-25 is a Class-25 expansion joint compound and has over 1000% elongation.

### WHERE TO USE

- Expansion Joints— 25% movement joints
- Parking Decks, Bridge Decks, Roofing, Sidewalks

### FEATURES AND BENEFITS

- **Rapid Set**—12-hour return to service
- **Self Leveling**—flows readily, completely fills joint
- **Flexible At Freezing Temperatures**—does not harden
- **Passes Hockman Type-25 Testing**—dynamically stable
- **100% Solids 0 VOC**—environmentally friendly
- **Highly Elastic**—moves readily with the joint
- **1:1 By Volume**—apply through common equipment

### PACKAGING

600-mL Cartridge  
5-Gallon Buckets  
50-Gallon Drums

### COLOR

Gray

### YIELD

600-mL Cartridge = 36.61in<sup>3</sup>  
5-Gallon Bucket Sets = 2310in<sup>3</sup>  
50-Gallon Drum Sets = 13.36ft<sup>3</sup>

### SHELF LIFE

12 months when properly stored.

### STORAGE

Store and ship this product in a clean, dry, low-humidity, shaded or covered environment at 60 to 90°F (15 to 32° C).

## TECHNICAL INFORMATION

### Typical Properties

<b>Hockman Type 25 Testing</b> (ASTM C719)	Pass < 0.05" Set No Failure
<b>VOC</b> , lbs/gal (g/L), ASTM D 2369	0
<b>Tensile</b> , ASTM D412, (psi)	500
<b>Elongation</b> , ASTM D412	≈ 1100%
<b>Modulus</b> , ASTM D412, (ksi)	≈ 0.05
<b>Taber Abrasion</b> , ASTM D3389, CS17 (mg)	15
<b>Mixed Viscosity</b> , 70°F (cP)	6,000
<b>Gel Time</b> , ASTM D2240, 70°F (minutes)	4
<b>Set Time</b> , 70°F (hrs)	1
<b>Tack Time</b> , 70°F (hrs)	4

### Processing Parameters

<b>Application temp</b> , ° F (° C)	50 to 100 (10 to 37)
<b>Mix Ratio</b>	1:1
<b>Application equipment</b>	600-mL Cartridge Applicator; 1:1 WVCO Meter or Equivalent

## APPLICATION

### SURFACE PREPARATION: CONCRETE

- Concrete must be fully cured (28 days). Following ACI 302 recommendation.
- Joint surfaces must be sound, dry, clean, free of dirt, moisture, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing and curing or parting compounds, membranes, and other foreign matter.
- Clean concrete where necessary by grinding, sandblasting, or wire brushing. Expose a sound surface free of contamination and laitance.

### OLD CONCRETE PREVIOUSLY CAULKED

- Remove all old joint sealing material by mechanical means.
- If joint sides have absorbed oils, cut away sufficient concrete to ensure a clean, fresh surface.

### INSTALLATION

#### JOINT DESIGN

- Use POLYQuik®-EJC-25 only in joints where shrinkage and movement will be less than +/- 12% of original joint width.
- POLYQuik®-EJC-25 is not recommended for joints greater than 2" (50mm) wide.
- Joints filled with POLYQuik®-EJC-25 should be designed and prepared according to industry ACI standards. To ensure joint compound performance, sealant depth should be ½ sealant width.
- POLYQuik®-EJC-25 should not be used on slopes greater than 7%. Backer rods should be used in all cases with the exception of small random cracks.

#### PRIMING

- For expansion joint movement of 15%-25%, priming is required. Use Willamette Valley Company supplied ISO Prime or Epoxy Primer.
- For joint movement less than 15%, priming may not be required.
- When joint surfaces have been cleaned as described above, prime in a thin, uniform film (typically 1– 2 mils). Avoid buildup of excess film thickness and application of primer beyond joint faces.
- See manufacturers recommendations for further priming application.

### Coverage Rate, Linear Feet: Per 600mL Cartridge

Inches	¼	½	¾	1
¼	52	26	17	12
½	26	12	8	6
¾	17	9	6	4
1	13	7	4	3

### MIXING

#### CARTRIDGES

Use a 32-element 13 mm diameter static mixer with a pneumatic gun.

#### 5-50 GALLON SETS

Use an AST plural-component metering system, or equivalent, at a 1 to 1 ratio. Thoroughly premix resin with a drill and paddle to redistribute any settled material. Contact your WVCO representative for additional information on pumping equipment.

### APPLICATION

- When using POLYQuik®-EJC-25 cartridges, dispense enough material to ensure proper mixing before placing nozzle in the joint.
- Use a 1-to-1 manual or pneumatic dispenser (maximum of 80 psi).
- Remove the retaining nut and caps from the cartridge.
- Keep the cartridge upright during assembly.
- Check alignment of plungers inside cartridge; level if necessary.
- Place mixing tube on cartridge nozzle and hand tighten nut.
- Point cartridge upward and load into applicator gun.
- While pointing cartridge upward, trigger handle to remove any air trapped in cartridges.
- Point cartridge over waste container and dispense initial material (3 – 4 squeezes).
- Fill the joint from the bottom up. Completely fill joint in 1 pass, avoid overfilling. In cases where slab elevations are different, fill to the lower slab height.
- NOTE: Application of any POLYQuik®-EJC-25 cartridge must be performed continuously. Stopping before the cartridge is completely dispensed will result in the material setting up in the mixing nozzle.

### CLEANING & MAINTENANCE

Wash tools with Reducer 990 or xylene immediately after use. Observe all precautions when handling these solvents. Cured material must be removed mechanically.

**NOTE:** POLYQuik®-EJC-25 is an aromatic compound discoloration from UV light may occur, however, the physical properties are unaffected.

## HEALTH AND SAFETY

Willamette Valley Company recommends reading and becoming familiar with the Material Safety Data Sheet before using this product.

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