

## RECOMMENDED INSTALLATION PROCEDURES

### INSTALLATION OF QPR HIGH PERFORMANCE PAVEMENT REPAIR

#### Concrete or Bituminous Surfaces

*Preparation and proper compaction are the "key ingredients" to a successful repair.*

Clean out the pothole or area to be repaired. Remove all loose debris and clean and square the edges if possible. Larger potholes, or utility cuts, should be filled in no more than 5 cm. (2") lifts, using QPR High Performance Cold Patch available in bulk from a local stockpile or in convenient 22.7 kg. (50 lbs.) plastic bags. Compaction of each 5cm. (2") lift of QPR is highly recommended. In some soil conditions, it may be necessary to place sufficient material to form a 1cm. (1/2") crown to allow for latent compaction by traffic. (In soft sub-base conditions, settlement may occur and additional QPR can be added later to bring the repair to level with the existing pavement surface.)

Several methods of compaction are available:

**Throw and Go:** Let the traffic compact the repair. This is the least expensive installation method. However, high-speed traffic may cause excessive raveling and may pull the product out of the repair area. Stop and Go traffic and the severe turning of wheels may also hamper compaction and result in an unsatisfactory repair.

**Hand Tamp:** This is a quick and easy method with very low equipment cost. The effectiveness of the repair is dependent on the strength and motivation of the tamp person.

**Plate Compactor/Jumping Jack:** This is also a quick and easy repair method with somewhat higher equipment costs than Hand Tamp compaction. However, with mechanical compaction and minimal operator effort, a better repair is assured.

**Truck Tire:** In the absence of either a hand or mechanical tamper, a tire of the repair crew's truck may be driven slowly and carefully over the repair a few times to achieve a satisfactory repair. This method is particularly effective for small potholes and rebuilding the edges of paved shoulders. A truck tire repair is cost effective as no additional equipment or manpower is required.

**Ride on or Walk Behind Compactor:** This method is the most expensive from an equipment perspective but produces the most effective repair. A ride on or walk behind compactor is highly recommended for large road repairs, utility cuts, and watermain break repairs.

#### Pothole Repair

*The better the preparation, the better the result.*

**Clean out the hole:** Remove loose stones and debris from the hole. QPR High Performance Cold Patch will adhere to clean asphalt. Although QPR displaces water and maintains its tenacity to bind to old asphalt in wet conditions, It is important to remove excess water, especially in winter conditions. Excess water left in the hole may result in premature failure of the repair because of ice build up underneath the surface.

***REMEMBER, The better the compaction, the better the result.***

**Install and compact QPR High Performance Pavement Repair:** Shovel or pour QPR High Performance Pavement Repair in sufficient quantity to fill the hole in 5 cm. (2") lifts. Compact the material before adding additional material in. Over-fill the hole to create for a 1cm. (1/2") crown to allow traffic to further compact the hole in some soil conditions.

### **Road Cuts or Watermain Breaks**

*Preparation and proper compaction are the "key ingredients" to a successful repair.*

Road cuts and water main repairs are generally larger than a pothole and as a result, additional care should be taken in preparation. The sides of the road cut, or excavated area to repair a water main break, should be saw-cut back to a solid asphalt surface. The repair area should be swept to remove residual dust to assure bonding of the QPR High Performance Cold Patch to the existing asphalt or concrete road surface. QPR High Performance Cold Patch should be placed or poured in no more than 5 cm. (2") lifts and compacted using recommended procedures for each 5 cm. (2") lift. A 1cm. (1/2") crown on the repair is recommended to accommodate future traffic compaction of the repaired area.

### **Trip Point Repairs**

A trip point is the result of frost heave in a concrete or asphalt sidewalk, walkway, or golf course cart path. Prepare the area by removing loose material such as sand or dust. Spread QPR High Performance Pavement Repair over the repair area to form a sloped ramp to the highest point. Compact the area using a hand or plate tamper. To eliminate "pick-up" that may occur on pedestrians' shoes, cover the freshly repaired area with a thin layer of Portland cement or mortar dust. The cement or mortar will also help to smooth out the repair and enhance the appearance.