# CR304 Urethane Slab Repair w/ UV Stabilization (Small Kit)
## (Requires a Standard Caulk Gun)



## INSTRUCTIONS

**Instructions For Thin Cracks 1/8" and Less**

Wear all appropriate safety gear when performing this work. Have an empty 5 gallon bucket or equivalent, with a large disposable rag in the bottom ready to hold the tube set and dispensing tool assembly.

**Preparation**

1. Chasing the crack.
   a. Using a Bosch 1775E tuck pointing power tool with a ¼" grinding blade or any similar power tool, grind out the crack ¼" wide and ¼" deep.
2. Remove all debris from the crack using a vacuum or brush.
   a. It is important for the crack to be clean and critical that it be dry prior to moving to the next step.

**Tube set and dispensing tool assembly for CS Urethane Slab Crack Repair Material**

Refer to the Tube Set drawings while following the assembly instructions

1. Vigorously shake each tube of CR304 Urethane Slab Crack Repair Material for 30 – 60 seconds prior to assembly and dispensing the CR304 Urethane Slab Crack Repair Material.
2. Once shaken, always keep the tube pointed up until instructed otherwise.
3. Universal Cartridge; unscrew the retaining nut to gain access to the pyramid shaped tube cap beneath it. The Restrictor Button for the universal cartridge is included separately in the kit.
4. Place the Restrictor Button on the top of the now open tube with the small holes positioned over the center of each side of the tube.
5. Place the 3/16 x 48 Mixer Nozzle for the CR304 Urethane Slab Crack Repair Material firmly on top of the tube.
6. Place the Nut over the mixer nozzle and tighten firmly.
7. Place the tube in the single cartridge caulk gun.
8. With the tip pointed up, slowly purge the air in the tube by compressing the trigger on the dispensing tool and slowly tipping the tool from side to side. Purge all of the air in the tube as well as the air in the mixer nozzle.
9. Hang the dispensing tool assembly on the inside of the bucket with the mixer nozzle pointing down. From this point on, the point must always point down. The straighter the better to avoid the back bleed of air into the mixer nozzle and tubes.

*The CR304 Urethane Slab Crack Repair Material sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes.*

**Dispensing of the CS Urethane Slab Crack Repair Material**

1. Place the bucket and dispensing tool next to the start point of your repair.
2. Dispense approx 1 mixer nozzle of CR304 Urethane Slab Crack Repair Material into the rag inside the bucket. This insures proper mixing of the material prior to dispensing in to the crack. Keep the point down at all times during the repair process.
3. Remove the prepared CR304 Urethane Slab Crack Repair Material and dispensing tool from the bucket, prime the crack by wetting it entirely with the CR304 Urethane Slab Crack Repair Material. Just wetting, not filling the crack.
4. Slowly pour dry silica sand into the crack, filling the crack up to within a ¼" of the base of the crack.
5. Slowly move along the crack continuing to saturate the silica sand in the crack. Be careful not to overfill the crack and not to fill the ¼" x ¼" space for the CR305 Polyurea UV Crack & Joint Filler. A small amount of CR304 Urethane Slab Crack Repair Material in the space for the CR305 Polyurea UV Crack & Joint Filler is ok and will not affect the performance of the completed repair.



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# CR304 Urethane Slab Repair w/ UV Stabilization (Small Kit)
## (Requires a Standard Caulk Gun)



## INSTRUCTIONS

6. Once you have saturated all of the silica sand, go back to the start point and apply more CR304 Urethane Slab Crack Repair Material as needed to completely fill and saturate the silica sand filled crack. The CR304 Urethane Slab Crack Repair Material sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes. Purge the mixer nozzle into the rag as needed to insure a free flow of fluid through the mixer nozzle. The dispensing of the CR304 Urethane Slab Crack Repair Material is complete.
7. Keeping the tip pointed down and in the bucket, un-screw the mixer nozzle nut, pull off the mixer nozzle, remove the restrictor and firmly reinstall the white cap over the opening of the tube and screw on the nut over the end of the tube set. The remaining material in the capped tubes may be reusable.
8. Allow to set for approx 30 minutes prior to the next step.

**Tube and Caulk Gun assembly for the CR305 Polyurea UV Crack & Joint Filler**

1. Vigorously shake each tube set of CR305 Polyurea UV Crack & Joint Filler UV for 30 – 60 seconds prior to assembly and dispensing of the CR305 Polyurea UV Crack & Joint Filler.
2. Once shaken, always keep the tube set pointed up until instructed otherwise.
3. Unscrew the cap from the tube or tube set.
4. Remove the small cap covering the opening of the tube set.
5. Locate the Restrictor Button for the CR305 Polyurea UV Crack & Joint Filler it is included in the kit.
6. Place the Restrictor Button on the top of the now open tube with the small holes positioned over the center of each side of the tube set.
7. Place the 3/8 x 30 Mixer Nozzle for the CR305 Polyurea UV Crack & Filler firmly on top of the tube.
8. Place the Nut over the mixer nozzle and tighten firmly.
9. Place the tube in the caulk gun; continue to keep the tip pointed up.
10. With the tip pointed up, slowly purge the air in the tube by compressing the trigger on the caulk gun and slowly tipping the assembly from side to side. Purge all of the air in the tube as well as the air in the mixer nozzle.
11. Hang the dispensing tool assembly on the inside of the bucket with the mixer nozzle pointing down. From this point on, the point must always point down at a 45-90 degree angle. The straighter the better to avoid the back bleed of air into the mixer nozzle and tubes.

*The CR305 Polyurea UV Crack & Joint Filler sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes.*

**Dispensing of the CR305 Polyurea UV Crack & Joint Filler**

1. Place the bucket and dispensing tool next to the start point of your repair.
2. Dispense approx 1 mixer nozzle of CR305 Polyurea UV Crack & Filler into the rag inside the bucket. This insures proper mixing of the material prior to dispensing in to the crack. Keep the point down at all times during the repair process.
3. Remove the prepared CR305 Polyurea UV Crack & Joint Filler assembly from the bucket and slowly begin to fill the ¼" x ¼" chased crack with the CR305 Polyurea UV Crack & Joint Filler. The CR305 Polyurea UV Crack & Joint Filler is very thin and will flow freely, self leveling as you fill the crack. Too much material will overflow the crack and will need to be scraped flush with a razor scraper.
4. Slowly move along the crack continuing to fill the ¼" x ¼" chased crack. Being careful not to overfill the crack.
5. The CR305 Polyurea UV Crack & Joint Filler sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes. Purge the mixer nozzle into the rag as needed to insure a free flow of fluid through the mixer nozzle. The dispensing of the CR305 Polyurea UV Crack & Joint Filler is complete.
6. Keeping the tip pointed down and in the bucket, un-screw the mixer nozzle nut, pull off the mixer nozzle, remove the restrictor and firmly reinstall the white cap over the opening of the tube set and screw on the nut over the end of the tube set. The remaining material in the capped tubes may be reusable.

# CR304 Urethane Slab Repair w/ UV Stabilization (Small Kit)
## (Requires a Standard Caulk Gun)



## INSTRUCTIONS

**Instructions For Wide Cracks 1/8" to 1/4"**

Wear all appropriate safety gear when performing this work. Have an empty 5 gallon bucket or equivalent, with a large disposable rag in the bottom ready to hold the tube set and dispensing tool assembly.

**Preparation**

1. The crack must be dry before beginning this repair.

**Tube set and dispensing tool assembly for CR304 Urethane Slab Crack Repair Material**

Refer to the Tube Set drawings while following the assembly instructions

1. Vigorously shake each tube of CR304 Urethane Slab Crack Repair Material for 30 – 60 seconds prior to assembly and dispensing the CR304 Urethane Slab Crack Repair Material.
2. Once shaken, always keep the tube pointed up until instructed otherwise.
3. Universal Cartridge; unscrew the retaining nut to gain access to the pyramid shaped tube cap beneath it. The Restrictor Button for the universal cartridge is included separately in the kit.
4. Place the Restrictor Button on the top of the now open tube with the small holes positioned over the center of each side of the tube.
5. Place the 3/16 x 48 Mixer Nozzle for the CR304 Urethane Slab Crack Repair Material firmly on top of the tube.
6. Place the Nut over the mixer nozzle and tighten firmly.
7. Place the tube in the single cartridge caulk gun.
8. With the tip pointed up, slowly purge the air in the tube by compressing the trigger on the dispensing tool and slowly tipping the tool from side to side. Purge all of the air in the tube as well as the air in the mixer nozzle.
9. Hang the dispensing tool assembly on the inside of the bucket with the mixer nozzle pointing down. From this point on, the point must always point down. The straighter the better to avoid the back bleed of air into the mixer nozzle and tubes.

*The CR304 Urethane Slab Crack Repair Material sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes.*

**Dispensing of the CR304 Urethane Slab Crack Repair Material**

1. Place the bucket and dispensing tool next to the start point of your repair.
2. Dispense approx 1 mixer nozzle of CR304 Urethane Slab Crack Repair Material into the rag inside the bucket. This insures proper mixing of the material prior to dispensing in to the crack. Keep the point down at all times during the repair process.
3. Remove the prepared CR304 Urethane Slab Crack Repair Material and dispensing tool from the bucket, prime the crack by wetting it entirely with the CR304 Urethane Slab Crack Repair Material. Just wetting, not filling the crack.
4. Slowly pour dry silica sand into the crack, filling the crack up to within a ¼" of the base of the crack.
5. Slowly move along the crack continuing to saturate the silica sand in the crack. Be careful not to overfill the crack and not to fill the ¼" x ¼" space for the CR305 Polyurea UV Crack & Joint Filler. A small amount of CR304 Urethane Slab Crack Repair Material in the space for the CR305 Polyurea UV Crack & Joint Filler is ok and will not affect the performance of the completed repair.



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# CR304 Urethane Slab Repair w/ UV Stabilization (Small Kit)
# (Requires a Standard Caulk Gun)



## INSTRUCTIONS

6. Once you have saturated all of the silica sand, go back to the start point and apply more CR304 Urethane Slab Crack Repair Material as needed to completely fill and saturate the silica sand filled crack. The CR304 Urethane Slab Crack Repair Material sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes. Purge the mixer nozzle into the rag as needed to insure a free flow of fluid through the mixer nozzle. The dispensing of the CR304 Urethane Slab Crack Repair Material is complete.
7. Keeping the tip pointed down and in the bucket, un-screw the mixer nozzle nut, pull off the mixer nozzle, remove the restrictor and firmly reinstall the white cap over the opening of the tube and screw on the nut over the end of the tube set. The remaining material in the capped tubes may be reusable.
8. Allow to set for approx 30 minutes prior to the next step.

**Tube and Caulk Gun assembly for the CR305 Polyurea UV Crack & Joint Filler**

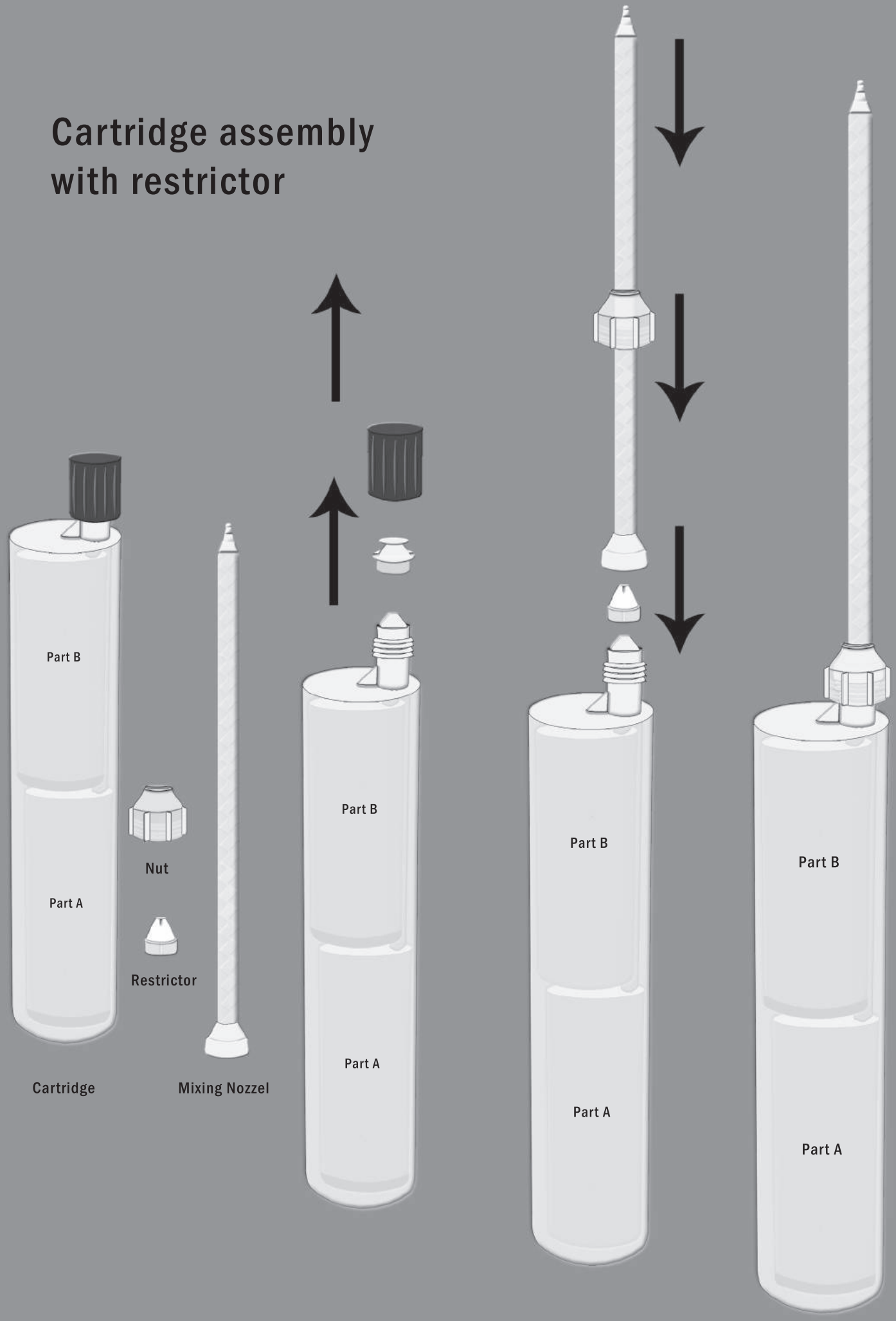
1. Vigorously shake each tube set of CR305 Polyurea UV Crack & Joint Filler UV for 30 – 60 seconds prior to assembly and dispensing of the CR305 Polyurea UV Crack & Joint Filler.
2. Once shaken, always keep the tube set pointed up until instructed otherwise.
3. Unscrew the cap from the tube or tube set.
4. Remove the small cap covering the opening of the tube set.
5. Locate the Restrictor Button for the CR305 Polyurea UV Crack & Joint Filler it is included in the kit.
6. Place the Restrictor Button on the top of the now open tube with the small holes positioned over the center of each side of the tube set.
7. Place the 3/8 x 30 Mixer Nozzle for the CR Polyurea UV Crack & Joint Filler firmly on top of the tube.
8. Place the Nut over the mixer nozzle and tighten firmly.
9. Place the tube in the caulk gun; continue to keep the tip pointed up.
10. With the tip pointed up, slowly purge the air in the tube by compressing the trigger on the caulk gun and slowly tipping the assembly from side to side. Purge all of the air in the tube as well as the air in the mixer nozzle.
11. Hang the dispensing tool assembly on the inside of the bucket with the mixer nozzle pointing down. From this point on, the point must always point down at a 45-90 degree angle. The straighter the better to avoid the back bleed of air into the mixer nozzle and tubes.

*The CR305 Polyurea UV Crack & Joint Filler sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes.*

**Dispensing of the CR305 Polyurea UV Crack & Joint Filler**

1. Place the bucket and dispensing tool next to the start point of your repair.
2. Dispense approx 1 mixer nozzle of CR305 Polyurea UV Crack & Joint Filler into the rag inside the bucket. This insures proper mixing of the material prior to dispensing in to the crack. Keep the point down at all times during the repair process.
3. Remove the prepared CR305 Polyurea UV Crack & Joint Filler assembly from the bucket and slowly begin to fill the ¼" x ¼" chased crack with the CR305 Polyurea UV Crack & Joint Filler. The CR305 Polyurea UV Crack & Joint Filler is very thin and will flow freely, self leveling as you fill the crack. Too much material will overflow the crack and will need to be scraped flush with a razor scraper.
4. Slowly move along the crack continuing to fill the ¼" x ¼" chased crack. Being careful not to overfill the crack.
5. The CR305 Polyurea UV Crack & Joint Filler sets and cures quickly, do not leave fluid in the mixer nozzle for more than 2 minutes. Purge the mixer nozzle into the rag as needed to insure a free flow of fluid through the mixer nozzle. The dispensing of the CR305 Polyurea UV Crack & Joint Filler is complete.
6. Keeping the tip pointed down and in the bucket, un-screw the mixer nozzle nut, pull off the mixer nozzle, remove the restrictor and firmly reinstall the white cap over the opening of the tube set and screw on the nut over the end of the tube set. The remaining material in the capped tubes may be reusable.

# Cartridge assembly with restrictor



# CR304 Urethane Slab Repair

## Hybrid Urethane for Repairing Cracks in Concrete Slabs and Floors



## 1 GENERAL DESCRIPTION

CR304 Urethane Slab Repair is a very rapid set, high strength ultra low viscosity concrete repair material. CR Urethane Slab Repair repairs hairline cracks and larger in parking decks, warehouse floors, driveways, patios, pool decks, etc. It penetrates deep into the crack and cures in minutes. The product can have an overlay placed on it the same day. Repaired area can be put back into service within 20 minutes. It works even in cold conditions. It is especially useful where low turnaround times are advantageous.

## 2 CHARACTERISTICS

CR304 Urethane Slab Repair is very low in viscosity allowing the product to penetrate deeply into concrete and does not become brittle.

## 3 ADVANTAGES

- 2 to 4 minute initial set, 20 minutes to back in service
- High Impact Resistance
- Extremely Low Viscosity
- High Fuel and Chemical Resistance
- High Durability
- Convenient Packaging
- Self Leveling

## 4 TYPICAL COMPONENT PROPERTIES

| | |
|---|---|
| Solids | 60% |
| Shelf Life | 1 Year |
| Hardness ASTM D2240 | Shore D 70 |
| Mix Ratio | 1:1 |
| Tack Free | 4-5 Minutes |
| Tensile ASTM D412 | 4500 Filled |
| Tear Strength, ASTM 624C | 460 |
| Gel Times | 2 min. @75 Deg |
| Elongation ASTM D124 | 8% |
| Viscosity @ 25 Deg. Cel. | 20 |

## 5 PACKAGING

Dual Cartridges

**Concrete Sealers USA** | P.O. Box 5464 | De Pere, WI 54115
Toll-Free: 888.583.2991 | Fax: 920.759.5100 | Emergency: 800.424.9300
info@concretesealersusa.com | www.concretesealersusa.com

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# CR304 Urethane Slab Repair

## Hybrid Urethane for Repairing Cracks in Concrete Slabs and Floors



## 6 PREPARATION

Concrete must have a minimum of 28 days of curing before application of CR304 Urethane Slab Repair. The area must be dry. Not meant for expansion joints.

## 7 APPLICATION

1. For optimum appearance open up the crack a minimum of 1/4” wide by 1/4” deep using, a hand grinder and crack chasing diamond blade. Blow out the crack to clean out any loose debris. Oils, sealers, etc. will inhibit proper bonding of CR304 Urethane Slab Repair. If you choose not to chase the crack CR304 Urethane Slab Repair can be ground off after initial set, usually about 20 minutes.
2. Fill the crack with dry silica sand.
3. Shake CR304 Urethane Slab Repair for 20 to 30 seconds to mix pigments which may have settled.
4. Remove cap of cartridge, attach crossover restrictor found on the neck of the cartridge, static mixer, and then retaining nut to cartridge. While holding Jake tool upward, place cartridge set into gun. Point nozzle upward and squeeze trigger until air and unmixed product is expelled from the static mixer. Maintain a constant flow through the mixer while the gun is pointed in the air. Product is now ready to be applied to repair area. Pointing the gun upward and allowing product back into the cartridge from the static mixer will result in cross contamination and loss of product.
5. Soak sand with CR304 Urethane Slab Repair until saturated leaving a slight hump.
6. CR304 Urethane Slab Repair can be scraped or lightly sanded once it turns light grey and has reached an initial cure to achieve a finished look.
7. CR304 Urethane Slab Repair begins to set up very quickly. If allowed to sit in the mixer for more than a minute or two the mixer will become plugged. Unused product can be capped and reused as long as product that has entered the mixer has not been allowed to reenter either side of the cartridge.

## 8 WARRANTY

Recommendations concerning the performance or use of this product are based upon independent test reports believed to be reliable. If the product is proven to be defective, at the option of the Manufacturer, it will be either replaced or the purchase price refunded. The Manufacturer will not be liable in excess of the purchase price. The user will be responsible for deciding if the product is suitable for his application and will assume all risk associated with the use of the product. This warranty is in lieu of any other warranty expressed or implied, including but not limited to an implied warranty of merchantability or an implied warranty of fitness for a particular use.

# CR305 Polyurea Crack & Joint Filler
## Heavy Duty Rapid Set Polyurea



## 1 GENERAL DESCRIPTION

CR305POLYUREA Gray or Black is a heavy duty, rapid-setting polyurea that cures to a grey/black, hard rubber-like flexible material. UV resistant for use outdoors as well as indoors. CS POLYUREA is tack free in approximately 5 minutes and light traffic ready in 30 minutes, and full traffic ready in 60 minutes. CR305 POLYUREA is available in both black and gray.

- CR305 POLYUREA GRAY
  Use in joints/cracks on concrete sidewalks, driveways and patios for the permanent control of grass and weeds. Use in control joints of industrial floors ( will stand up to heavy traffic).
- CR305 POLYUREA BLACK
  Makes cracks virtually disappear in blacktop driveways and paths. Use for repair of cracks before using a topcoat.

## 2 COMPOSITION

A heavy duty, two component, rapid-setting polyurea that cures to a hard rubber-like UV resistant material with a hardness of Shore “A” 85-90.

## 3 LIMITATIONS

CR305 POLYUREA has a relatively high, load-supportive Shore “A” hardness. The concrete to be repaired should be at least 50° F. at time of application. Concrete should be dry and free of dirt, oil and debris.

## 4 APPLICABLE SPECIFICATIONS

There are no government or ASTM standards for floor joint fillers. CR305 POLYUREA meets and/or exceeds the floor joint filler guidelines set forth by ACI 302, ACI 360 and PCA.

## 5 ADVANTAGES

CR305 POLYUREA is heavy duty, providing greater edge protection and support. At 70°F, it can be opened to full traffic within 60 minutes. At 70°F, it can be opened to light traffic in 30 minutes.

| TEST TYPE | RESULTS | TEST METHOD |
|---|---|---|
| HARDNESS, SHORE “A” @ 70°F | 85-90 | D-2240 |
| TENSILE STRENGTH | 930 PSI | D-638 |
| TENSILE ELONGATION @ 70°F | 170% | D-638 |
| ADHESION TO CONCRETE | 350-400 PSI | D-4541 |
| TACK FREE @ 70°F | 5 MINUTES | ---------- |
| LIGHT TRAFFIC READY @ 70°F | 30 MINUTES | ---------- |
| FULL TRAFFIC READY @ 70°F | 60 MINUTES | ---------- |
| MIX RATIO (BY VOL.) | 1:1 | ---------- |
| SOLIDS CONTENT | 98-100% | ---------- |



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# CR305 Polyurea Crack & Joint Filler
## Heavy Duty Rapid Set Polyurea



## 6 APPLICATION

**Note:** Store in dry place. Protect from freezing. Store cartridges between 60°F and 90°F. Cartridges should be kept at 70°F + for best results.

**Prior to Use:**

1. Shake unit aggressively 30-60 secs.
2. Remove locking nut
3. Remove D Caps
4. Snap-on flow restrictor
5. Place static mixer tip over nozzle
6. Screw on locking nut
7. Load cartridge into gun
8. Slowly squeeze trigger with gun pointed up to purge air
9. Tilt gun down, shoot small amount of material into disposable cup

**During Product Installation:**

If there is a delay installing, purge gun every 1.5 minutes by shooting small amount of material into a cup.

After Installation:

If not using entire cartridge, tilt gun down, wipe off excess material, replace D caps and store upright.

**Helpful Hints:**

1. Pump slowly and evenly
2. Keep cartridge pointed down, even when moving to another location, purging every 1.5 minutes.
3. Never re-use static mixer

**Approximate Coverage Rates:**

| Joint Size (US) | Linear Feet per Gallon | Joint Size (US) | Linear Feet per Gallon |
|---|---|---|---|
| 1/8" x 1 ½" | 100 | 1/8" x 1 ¾" | 85 |
| 1/8" x 2" | 75 | 3/16" x ¾" | 135 |
| 3/16" x 1" | 100 | 3/16" x 1 ¼" | 85 |
| 3/16" x 1 ½" | 70 | 3/16" x 1 ¾" | 60 |
| 3/16" x 2" | 50 | ¼" x 1" | 80 |
| ¼" x 1 ¼" | 60 | ¼" x 1 ½" | 50 |
| ¼" x 1 ¾" | 45 | ¼" x 2" | 40 |

## 7 WARRANTY

Recommendations concerning the performance or use of this product are based upon independent test reports believed to be reliable. If the product is proven to be defective, at the option of the Manufacturer, it will be either replaced or the purchase price refunded. The Manufacturer will not be liable in excess of the purchase price. The user will be responsible for deciding if the product is suitable for his application and will assume all risk associated with the use of the product. This warranty is in lieu of any other warranty expressed or implied, including but not limited to an implied warranty of merchantability or an implied warranty of fitness for a particular use.