

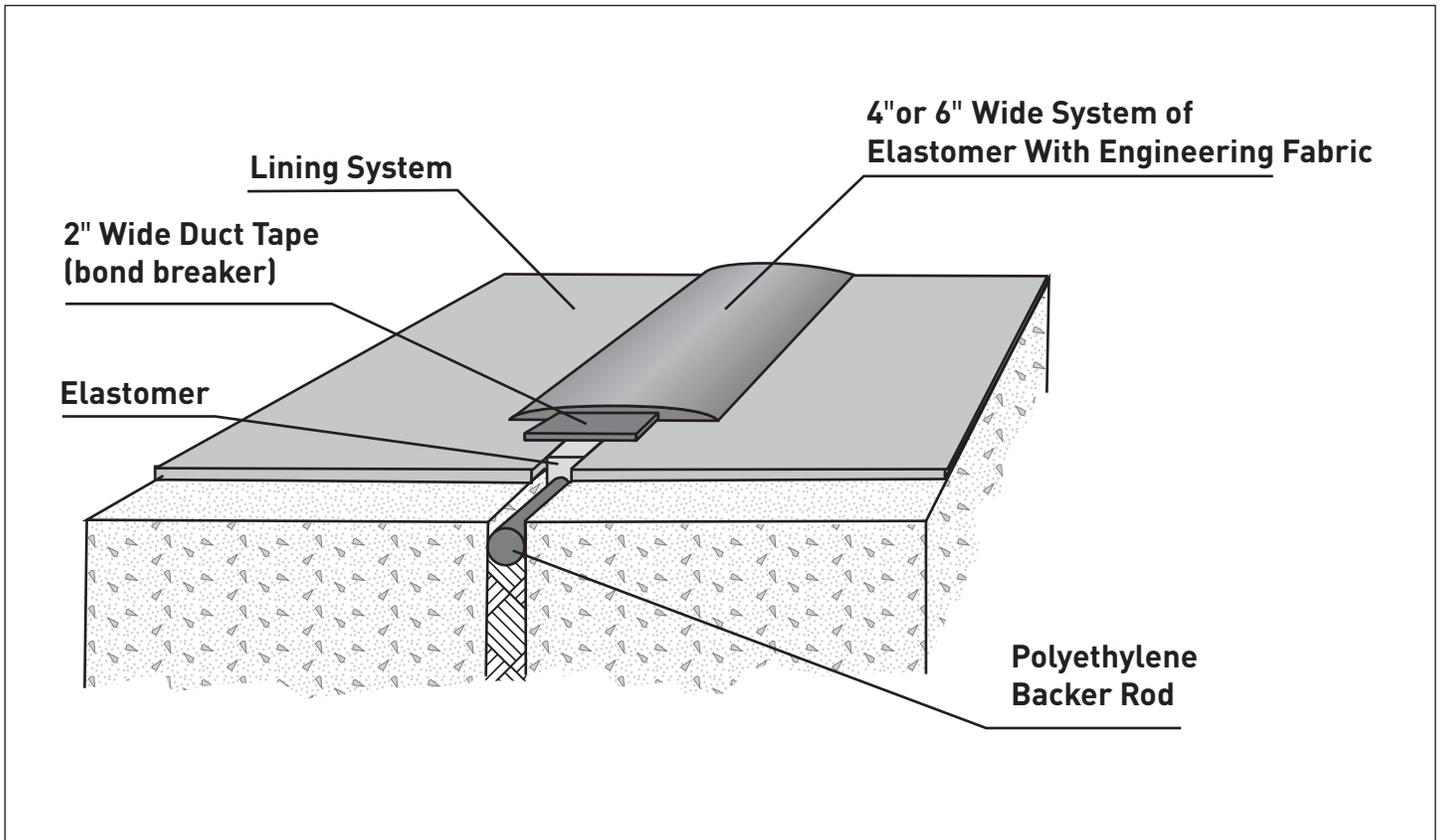


SEMSTONE® CONSTRUCTION DETAILS

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SP01-94

Treatment for Expansion Joints, Control Joints, and Structural Cracks, Vertical and Horizontal, for Non-Vehicular Traffic



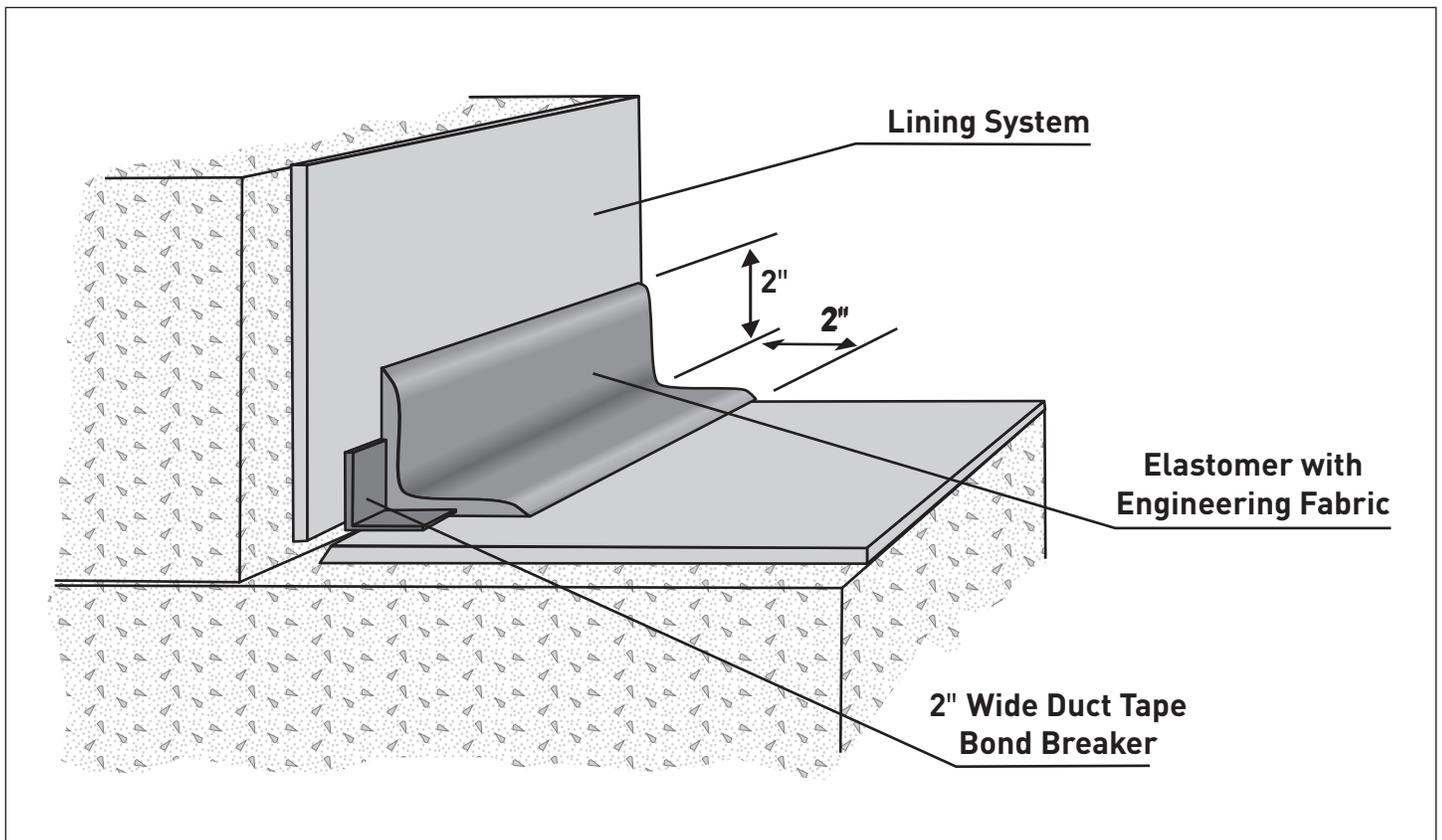
IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

1. Maintain joint/crack through coating. Structural cracks can be maintained through the coating by taping over the crack before application of coating, then removing the tape before the coating sets.
2. Prepare bonding surfaces in accordance with instructions recommended in SEMSTONE® Flexible Coating product data sheet and application guidelines.
3. Place 2" wide duct tape (bond-breaker) over joint/crack.
4. Apply SEMSTONE® Primer to area inside boundary tape. Allow to dry tack free.
5. Apply a 50 mil base coat of SEMSTONE® Flexible Coating.
6. Embed a layer of SEMSTONE® Flexible Coating with engineering fabric into the base coat. Width of fabric and overall system depends on job specifications.
7. Apply a 10 mil topcoat of SEMSTONE® Flexible Coating to ensure saturation of fabric.
8. Optional: For a non-skid surface, broadcast angular grit onto the SEMSTONE® Flexible Coating topcoat while wet.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

If chemical environment is such that SEMSTONE® Flexible Coating is not sufficient, contact Carboline for alternate recommendations.

Treatment for Horizontal to Vertical Transition



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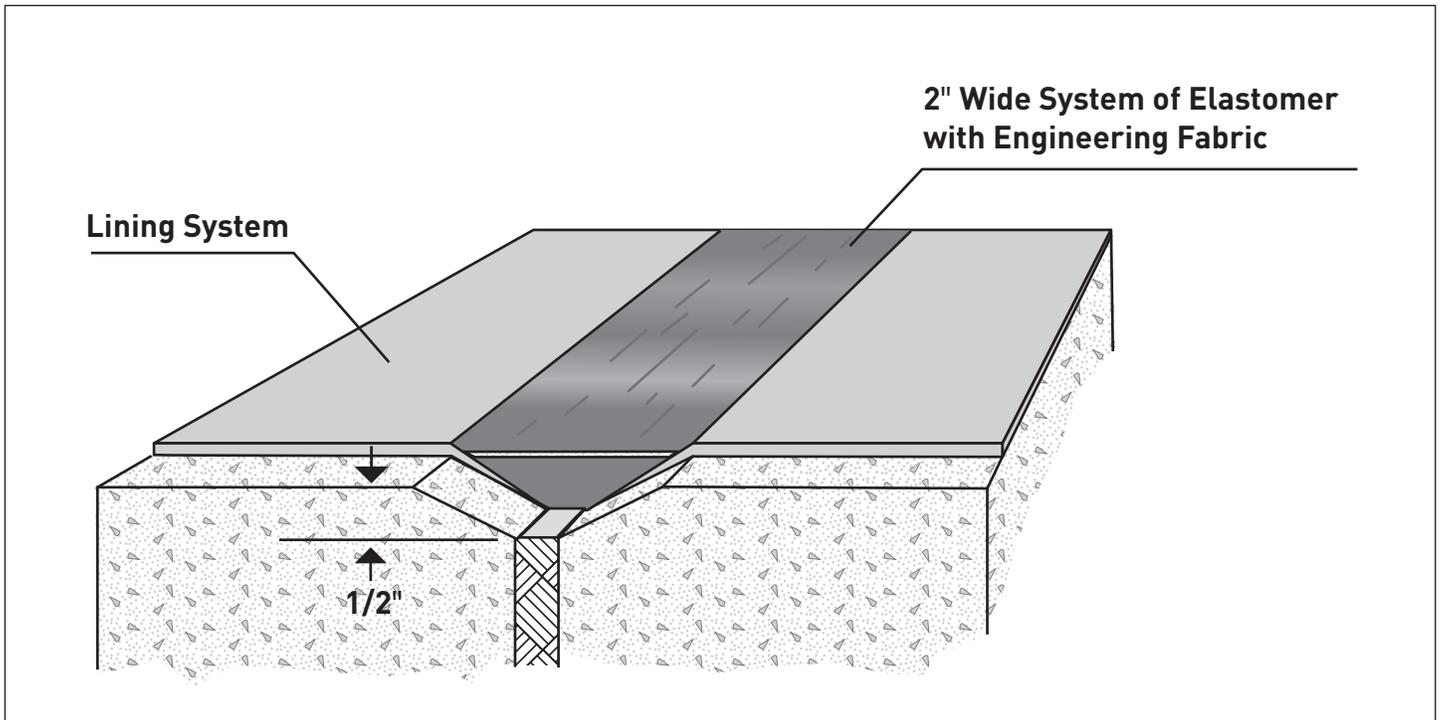
1. Prepare bonding surfaces in accordance with instructions found in recommended SEMSTONE® Flexible Coating product data sheet and application guidelines.
2. Install 2" wide duct tape (bond-breaker), centered on the joint.
3. Mix and apply recommended SEMSTONE® Primer to an area 4" wide centered on the joint. Allow to dry tack free.
4. Apply a 50 mil base coat of SEMSTONE® Flexible Coating to the prepared and primed surface.
5. Embed a 4" wide layer of SEMSTONE® Flexible Coating with engineering fabric into the base coat.
6. Apply a 10 mil topcoat of SEMSTONE® Flexible Coating to ensure saturation of fabric.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

If chemical environment is such that SEMSTONE® Flexible Coating is not sufficient, contact Carboline for alternate recommendations.

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Treatment for Expansion Joints, Control Joints, and Structural Cracks in Traffic Areas



IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

Preparation: Expansion and Control Joints

Starting 1" back from the center of the joint, saw-cut a straight line 1/4-1/2" deep parallel with joint. Make this saw-cut on both sides of the joint. Using a chipping gun, chip a taper starting at the saw cut going toward the joint. Remove any existing joint material to finish flush with the bottom of the taper. Remove all dust and debris.

Preparation: Structural Cracks

Using a pneumatic crack chasing tool or chipping gun with a bushing tool attached, follow the crack making a 2" wide x 1/2" deep channel centered on the crack. Remove all dust and debris.

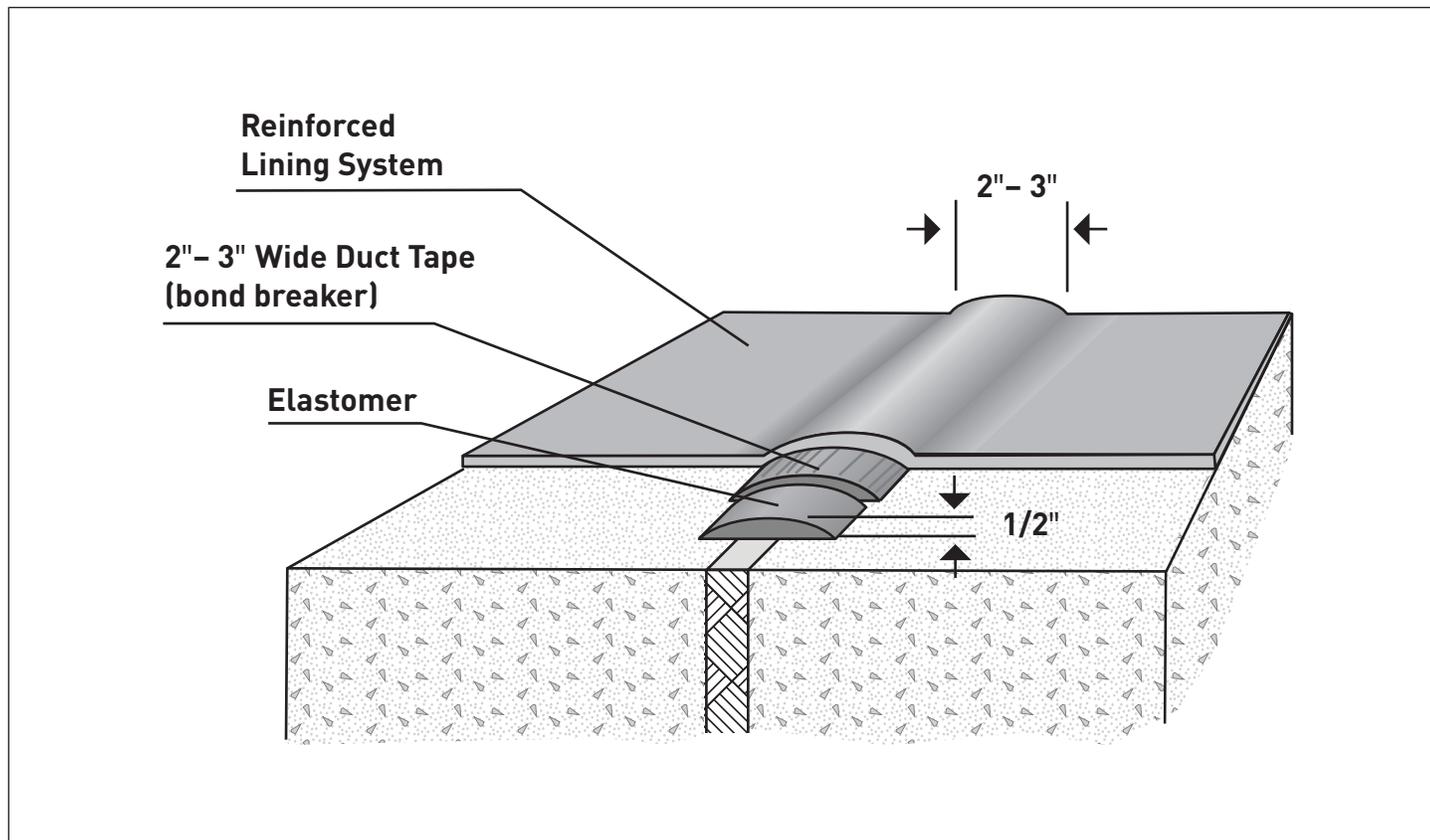
Installation:

1. Prepare bonding surface in accordance with instructions found in product data sheet and application guidelines.
2. Install specified SEMSTONE® coating to the floor surface and extend coating into the taper to joint/crack. Allow to cure to tack free.
3. Prepare surface of coating inside tapered area. Follow instruction for intercoat surface preparation in the technical bulletin and application guidelines for the coating system specified.
4. Apply recommended SEMSTONE® Primer to prepared area. Allow to dry tack free.
5. Fill tapered recess with SEMSTONE® Flexible Coating. Embed a 2" wide strip of SEMSTONE® Flexible Coating with engineering fabric into the surface of the wet SEMSTONE® Flexible Coating. Saturate the fabric with additional SEMSTONE® Flexible Coating. The finished surface of the SEMSTONE® Flexible Coating and fabric should be slightly below the adjacent floor surface.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

If chemical environment is such that SEMSTONE® Flexible Coating is not sufficient, contact Carboline for alternate recommendations.

Loop Treatment for Expansion Joints, Control Joints, and Structural Cracks Intended for Immersion Service



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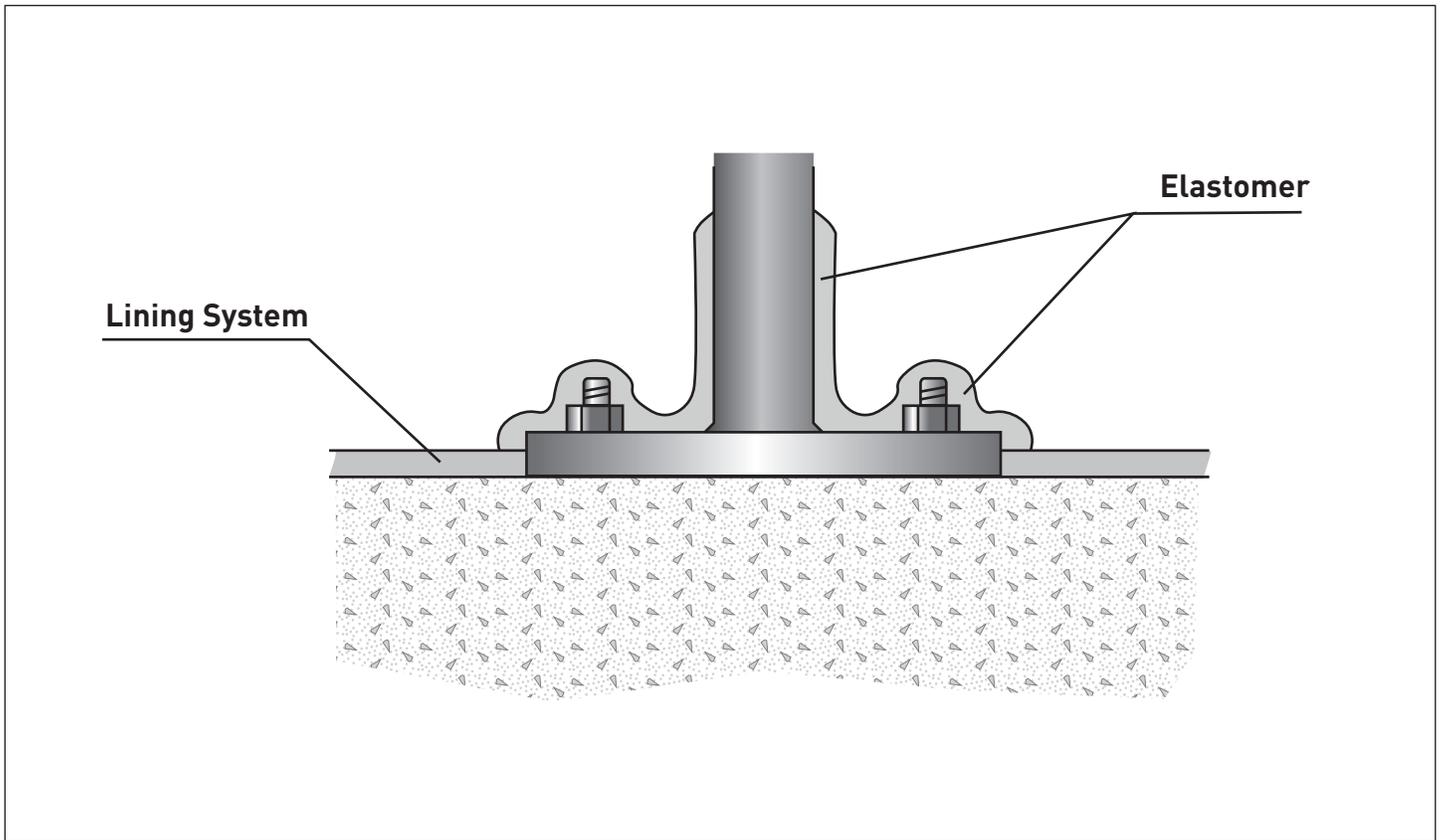
1. Prepare bonding surfaces in accordance with instructions found in SEMSTONE® Flexible Coating product data sheet and application guidelines.
2. Mix SEMSTONE® Flexible Coating into a putty using Part C.
3. Apply SEMSTONE® Flexible Coating putty in a 2-3" wide strip centered over the joint. The SEMSTONE® Flexible Coating strip should be approximately 1/2" high in the center and have tapered edges. Allow to cure until firm.
4. Cover SEMSTONE® Flexible Coating with duct tape.
5. Follow instructions for intercoat surface preparation found in the SEMSTONE® Flexible Coating product data sheet. Install SEMSTONE® reinforced coating system as specified.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

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Treatment for Equipment Footings

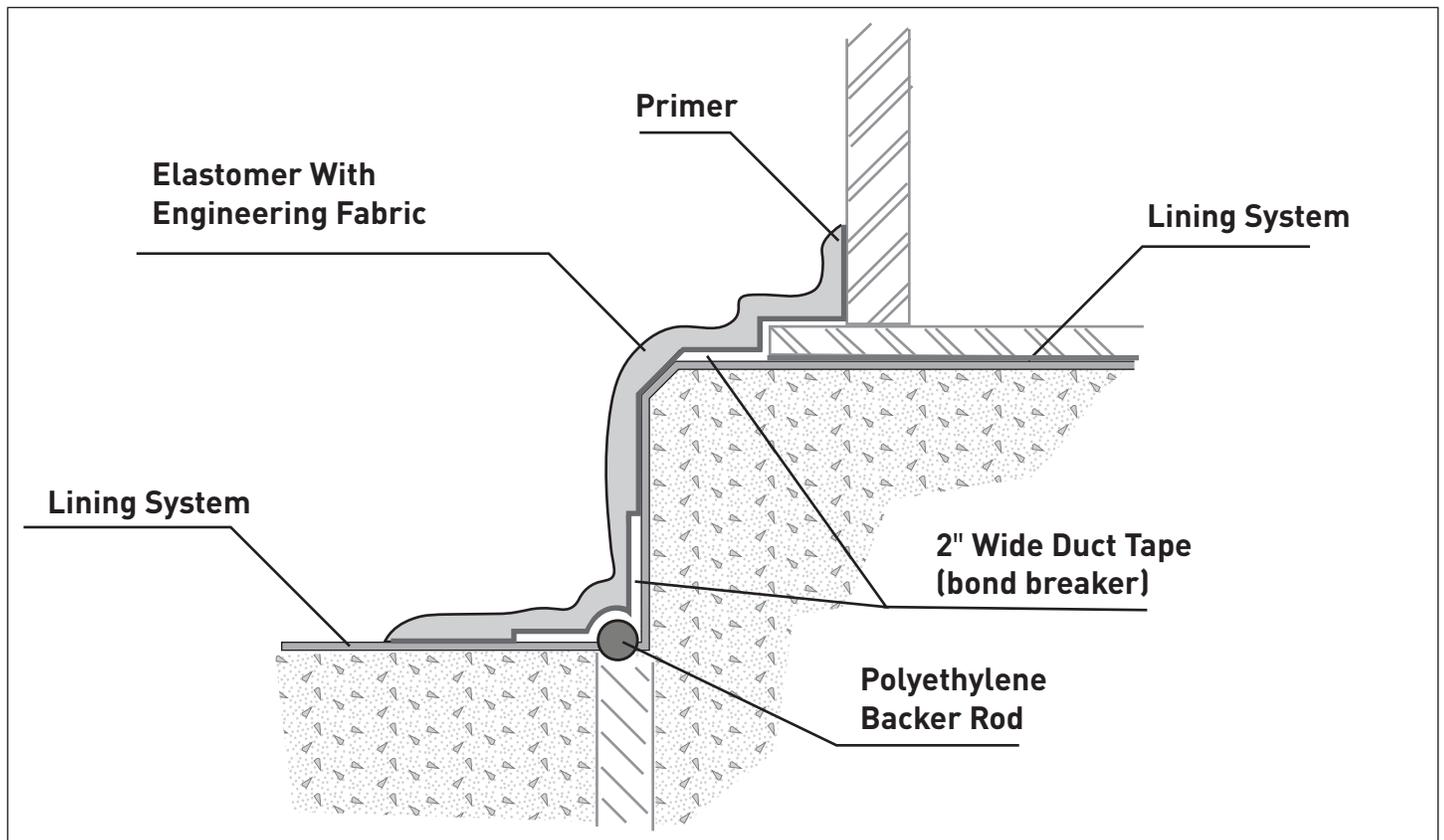


IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

1. Prepare bonding surfaces in accordance with instructions found in SEMSTONE® Flexible Coating product data sheet and application guidelines.
2. Apply recommended SEMSTONE® Primer to the prepared surfaces. Allow to dry tack free.
3. Mix and apply SEMSTONE® Flexible Coating with Part C by brush at a minimum thickness of 30 mils.

If chemical environment is such that SEMSTONE® Flexible Coating is not sufficient, contact Carboline for alternate recommendations.

Seal for Tank Bottom and Foundation Treatment



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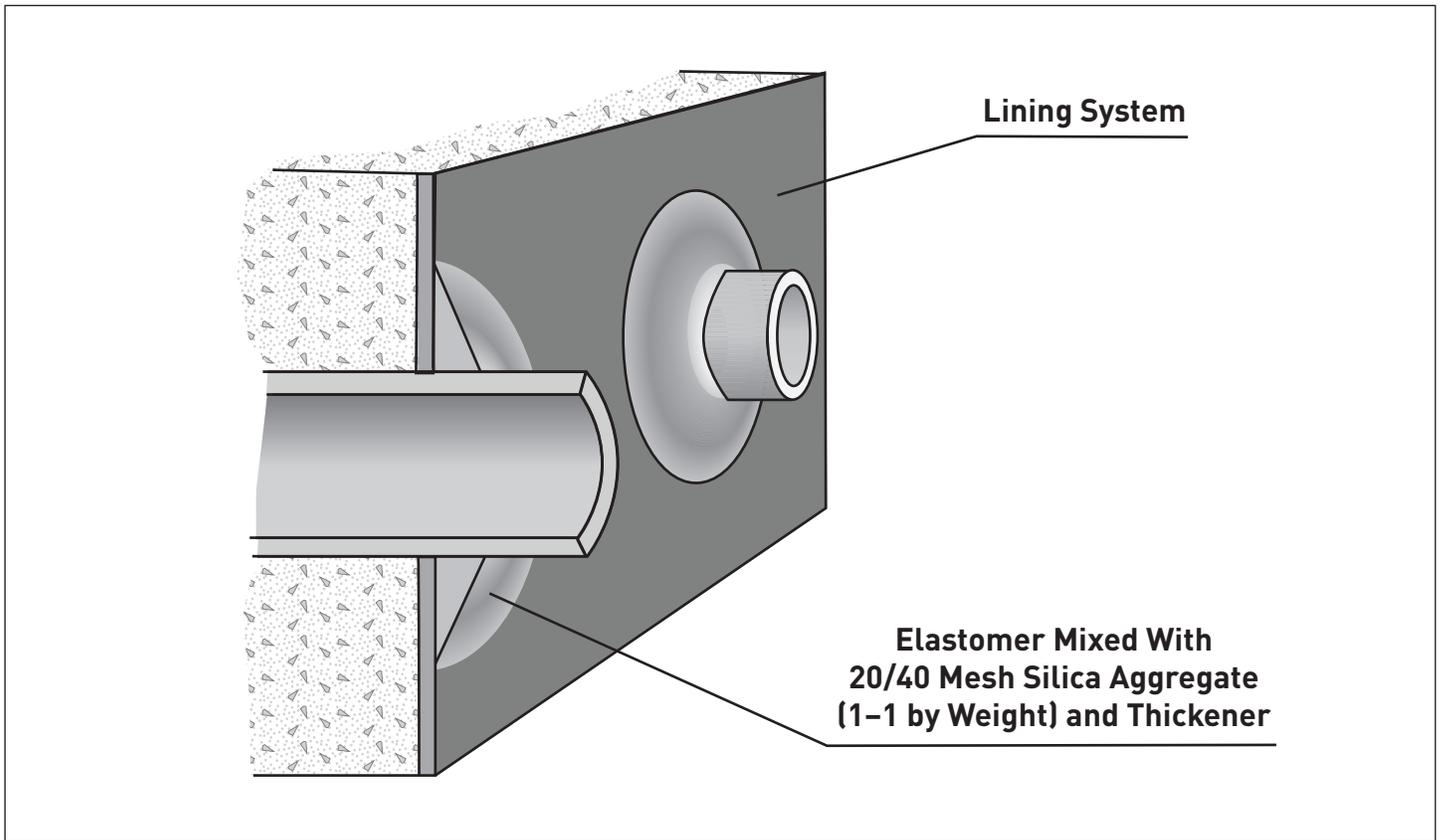
1. Prepare bonding surfaces in accordance with instructions found in SEMSTONE® Flexible Coating product data sheet and application guidelines.
2. Install 2" wide plastic bond-breaker tape centered at tank baseplate/concrete interface.
3. Apply recommended SEMSTONE® Primer. Allow to dry tack free.
4. Apply a 50 mil base coat of SEMSTONE® Flexible Coating with Part C to prepared and primed surface.
5. Embed a layer of SEMSTONE® Flexible Coating with engineering fabric into base coat.
6. Apply a 10 mil top coat of SEMSTONE® Flexible Coating to ensure saturation of fabric.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

If chemical environment is such that SEMSTONE® Flexible Coating is not sufficient, contact Carboline for alternate recommendations.

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Seal for Pipe Penetrations



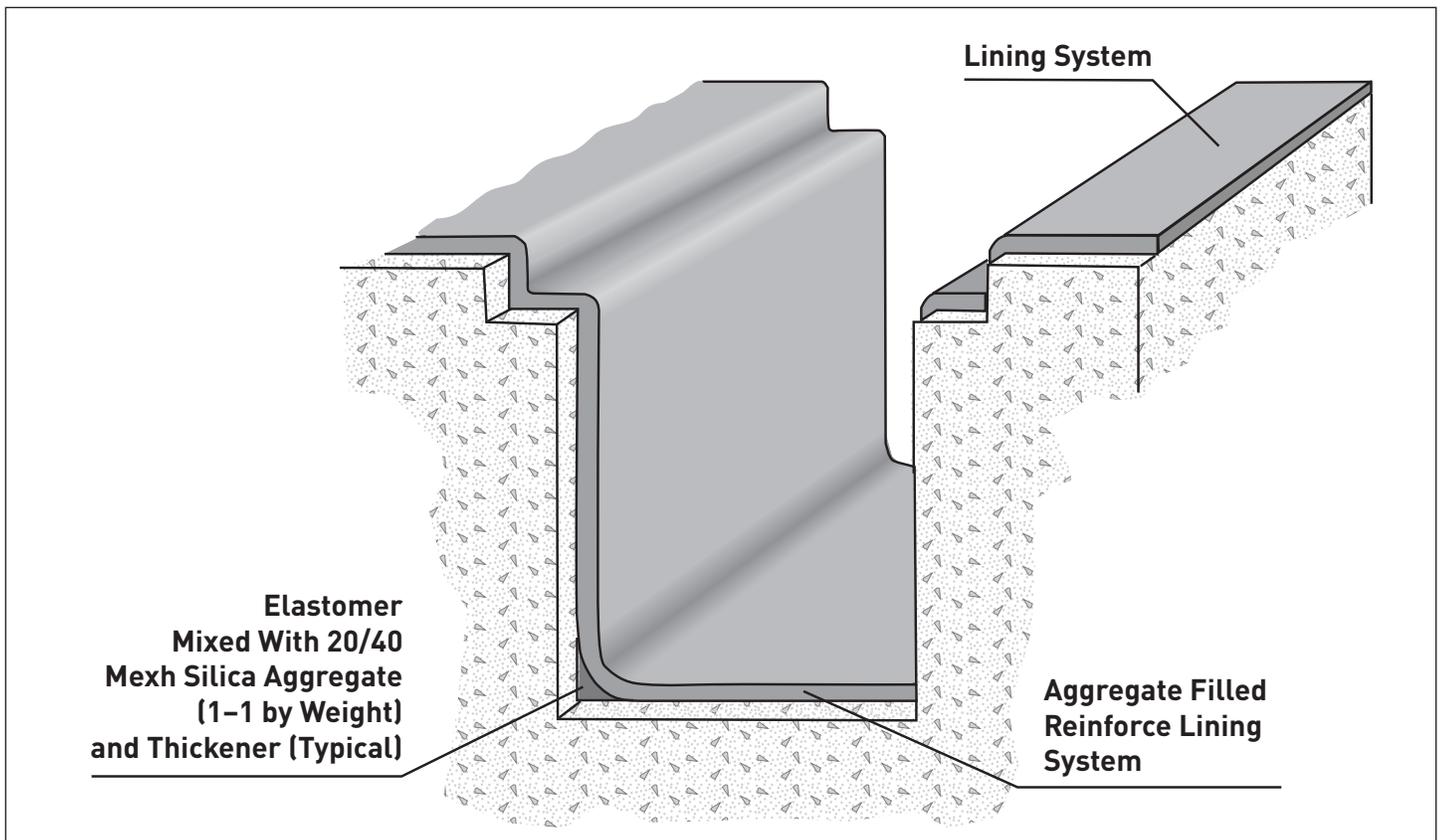
IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

1. Abrasive blast or sand bonding surfaces around pipe 2" on wall and 2" on pipe.
2. Apply recommended SEMSTONE® Primer to prepared surface. Allow to dry tack free.
3. Mix SEMSTONE® Flexible Coating with Part C and 20/40 mesh aggregate. Apply material at a 2" radius around pipes.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

If chemical environment is such that SEMSTONE® Flexible Coating is not sufficient, contact Carboline for alternate recommendations.

Treatment for Sumps and Trenches

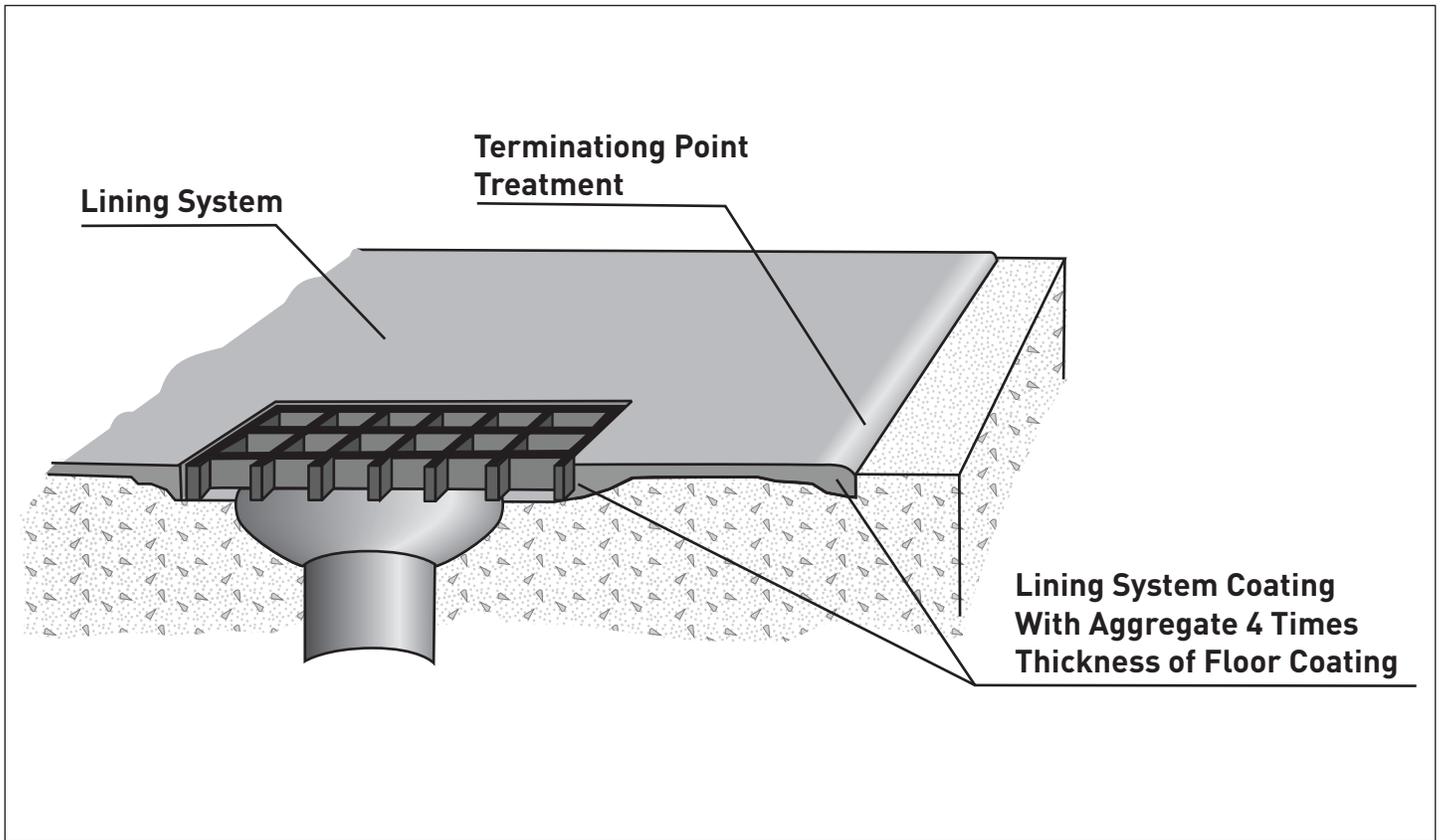


IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

1. Prepare bonding surfaces in accordance with instructions found in SEMSTONE® Flexible Coating product data sheet and application guideline.
2. Mix and apply recommended SEMSTONE® Primer as required by product selection. Allow to dry tack free.
3. Install 1" radius of putty to inside corners.
4. Apply a 64 mil base coat of aggregate filled SEMSTONE® coating to trench/sump floor and walls. Immediately embed a layer of Scrim Cloth into the base coat. Use rollers to embed the Scrim Cloth, and flat trowels to smooth the aggregate filled coating over the Scrim Cloth.
5. Apply a 64 mil top coat of SEMSTONE® aggregate filled coating by trowel. Remove trowel marks and close surface using a stiff bristled brush dipped in appropriate SEMSTONE® smoothing liquid.

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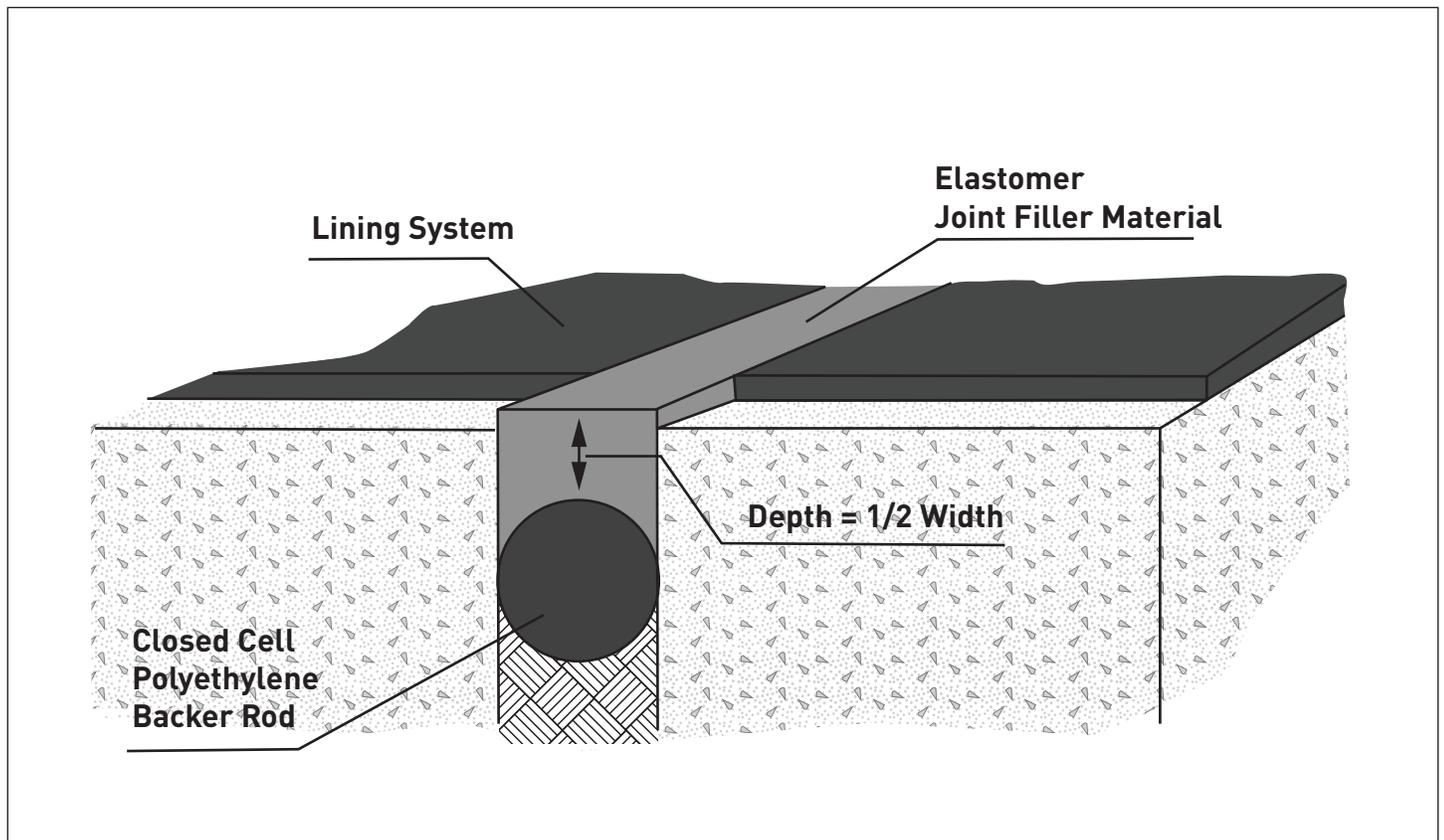
Treatment for Floor Drains and Grating Ledge Mid-Floor Termination Point



IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

1. Starting 4" back from termination point, chip a tapered keyway toward the termination point. The keyway depth should be four times the floor coating thickness at the termination point.
2. Prepare bonding surfaces in accordance with instructions found in product data sheet and application guidelines.
3. Apply recommended SEMSTONE® Primer to the prepared area. Allow to dry tack free.
4. Blend SEMSTONE® coating with 20/40 mesh aggregate and grout in keyway at the time the floor coating is installed.

Joint Pouring Treatment



IMPORTANT: Refer to SEMSTONE® product data sheet, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual SEMSTONE® products.

Preparation:

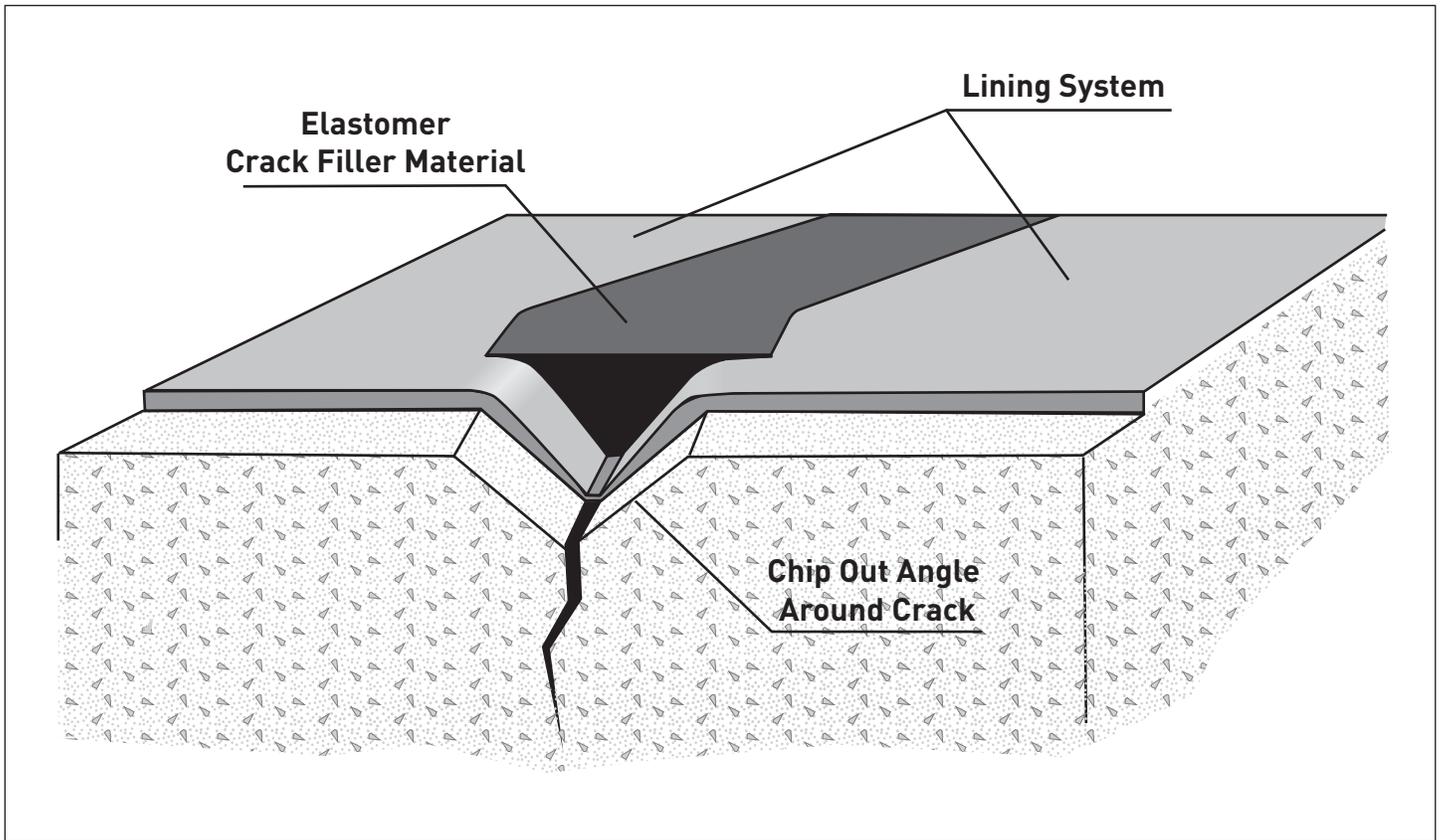
Round off sharp edge of joint using a grinder.

1. Prepare bonding surfaces in accordance with instructions found in the specified Carbolite joint filler material product data sheet and application guidelines.
2. Insert a closed cell polyethylene backer rod into the joint. The size of the backer rod should be 1.25-to-1.5 times the width of the joint. The backer rod should be placed at a consistent depth of 1/2 the width of the joint.
3. Apply specified Carbolite primer to area inside boundary tape. Allow to dry tack free.
4. Pour specified Carbolite joint filler material into joint. The finished surface of the joint filler material should be even with the adjacent floor surface.

NOTE: Use masking tape to keep boundary tape lines neat and straight. This is only for aesthetics. Remove tape while coating is still wet.

Consult Carbolite for selection of joint filler material for chemical environment and exposure.

Treatment for Structural Crack Repair



IMPORTANT: Refer to Carboline's product data sheets, application guidelines and Material Safety Data Sheets for specific information about surface preparation, mixing, application and material safety for individual Carboline products.

Preparation of Cracks:

Using a crack chasing tool or chipping gun, follow the crack making a 1/2" wide x 1/2" deep "V" centered on the crack. Remove all dust and debris.

Installation:

1. Prepare bonding surface in accordance with instructions found in product data sheets and application guidelines.
2. Install specified Carboline coating to the floor surface and extend coating into the taper to joint/crack. Allow to cure to tack free.
3. Prepare surface of coating inside tapered area. Follow instruction for intercoat surface preparation in the product data sheet and application guidelines for the coating system specified.
4. Fill tapered recess with specified Carboline joint filler material. The finished surface of the joint filler material should be even with the adjacent floor surface.

Consult Carboline for selection of floor coating and joint filler material for chemical environment and exposure.