'TLL THE CRAC

Crackin-6940 Waterproofing Assembly



Application on Concrete deck Section 07122 Manufactured In Calgary Alberta 587-926-7257

1 General

The following is prepared in standard CSC three-part Section format. It should be included in Division 7- Thermal and Moisture Protection under its own section.

1.1 Summary

This Specification is for a system consisting of the following;

- 1. Structural concrete deck
- 2. Primer
- Fully reinforced Crackin-6940 to nominal thickness of 4.5mm
- 4. Protection Course (horizontal and vertical)

1.2 **Related Sections**

- Section [] Cast-In-Place Concrete 1.
- Section [] Structural Precast Concrete 2.
- 3.
- Section [] Rough Carpentry Section [] Sheet metal flashing and counterflashing Section [] Caulking and sealants 4.
- 5.
- Section [] Plumbing specialties 6.

1.3 References

- CGSB-37.50-M89, Hot-Applied Rubberized Asphalt for Roofing and Waterproofing. .1
- CGSB-37.9M; Asphalt Primer for Roofing and Waterproofing. .2

1.4 Shop Drawings

.1 Submit shop drawings in accordance with Section [1.

1.5 **Submittals**

.1 Submit with the tender form a letter from Fill The Crackin Ltd stating that the contractor has a minimum of 5 years experience installing SPI-6940 membrane and is gualified to perform Warranty work.

1.6 **Delivery, Storage And Handling**

- .1 All material must be delivered to the jobsite in its original packaging. The manufacturers name, product name, production/batch code, and handling instructions must be easily identifiable.
- .2 Store materials in manufacturers packaging until used on site. Additional protection from the elements may be required to ensure materials remain clean and dry until ready to install.

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.3 Any materials damaged during delivery must be replaced prior to commencement of work.

1.7 Site Conditions

- .1 Ensure all surfaces to receive the membrane are clean, dry and free of frost. New concrete must be cured a minimum of 14 days prior to installing Crackin-6940.
- .2 Do not apply Crackin-6940 when the ambient temperature is below -18°C.
- .3 Ensure the service temperature of the products falls within acceptable limits as detailed on the product data sheets. Notify Fill The Crackin Ltd of any potential risks prior to commencement of work.
- .4 Ensure the components of the system will not be exposed to any chemicals to which they are not resistant as detailed on the product data sheets. Care must be taken to ensure that primer, oil, gas, etc., are not spilled on the system.
- .5 Protect Crackin-6940 from construction traffic during and after installation. Inspect the system for damage prior to installing the balance of the assembly.

1.8 Warranty

- .1 Upon completion of work, the manufacture must supply the Owner with a manufacturers 20 year Warranty providing coverage against any actual leakage caused by material defects.
- .2 Upon completion of work, the contractor must supply the Owner with a workmanship Warranty of a minimum of 2 years providing coverage against any actual leakage caused by faulty Workmanship.
- .3 Combined material and workmanship warranties are available through the manufacture at extra fees.

2 Products

2.1 MEMBRANE MANUFACTURER: Fill The Crackin Ltd. 2727 58th Ave Southeast Calgary, AB T2C-0B4

2.2 Materials

- .1 Primer: Synthetic rubber based primer acceptable for use on concrete designed with rubberized asphalt.
- .2 Hot Applied Rubberized Asphalt: Crackin-6940 as manufactured by Fill The Crackin Ltd meeting CGSB 37.50-M89.

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- .3 Reinforcing Fabric: Polyester fabric reinforcing sheet designed for use with Hot Applied Rubberized Asphalt Systems.
- .4 Heavy Duty Reinforcing: SBS modified asphalt sheet membrane with 180g/m² polyester reinforcement with film surfaces on both top and bottom.
- .5 Separation Sheet/Protection Course (horizontal or vertical applications): SBS modified asphalt sheet membrane with 95 g/m² fiberglass reinforcement with sanded surfaces on both top and bottom.
- .6 Separation Sheet/Protection Course (vertical applications): Polyethylene separation sheet.

3 Execution

3.1 Cast-in-place concrete

- .1 Ensure concrete has been allowed to cure a minimum of 14 days. Examine surfaces to ensure they are free from laitance, voids, spalling and honeycombing. A wood float finish is acceptable. Steel float finishes may be too smooth and require treatment prior to installing the membrane. Report any deficiencies to the designer and Fill The Crackin Ltd. Do not begin application of the system until all defects have been repaired.
- .2 Ensure the deck is clean, dry and free from frost. Thoroughly clean any spills which occurred during construction (gas, oil, etc.), and ensure the deck is free from form oil and curing compounds. These will affect the adhesion of the membrane to the deck.

3.2 **Primer Application**

- .1 Blow/sweep the substrate immediately before priming to remove any loose dirt & debris.
- .2 Apply the primer by mechanical sprayer or by roller at a rate of 300ft²/gallon. Ponding of the primer should be avoided. Allow the primer to dry completely prior to installing the membrane. Cure time will vary depending on temperature and wind.

3.3 Membrane Application

- .1 Heating of Crackin-6940
 - .1 Crackin-6940 must be heated in an air jacketed, indirectly fired melter equipped with a mechanically operated agitator and thermometer to register membrane temperature.
 - .2 Heat membrane in melter until it reaches between 190°C and 204°C. The temperature in the melter and during application shall not exceed 205°C (400°F).

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- .2 Detail work
 - .1 Perform detail work prior to installing membrane in the field. Follow Fill The Crackin Ltd's guidelines and details. Contact Fill The Crackin Ltd where treatment of expansion joint(s) is necessary.
- .3 Field Application (Fully Reinforced)
 - .1 Apply a monolithic base coat of Crackin-6940 at a rate of 2-3mm. Using a heavy squeegee, work the membrane in to the deck to ensure it is fully bonded and free of voids and thin spots.
 - .2 While the membrane is still hot, embed the Polyester reinforcing fabric. Overlap the sides $\frac{1}{4}$ ".
 - .3 Apply a second monolithic coat of Crackin-6940 at a rate of 2.5-3mm. Ensure membrane is worked into the overlap in the reinforcing sheet. The fully reinforced membrane must be a minimum of 4.5mm total thickness.

3.4 **Protection Course**

- .1 Horizontal: While the membrane is still hot, embed the Protection Course. Overlap the sides and ends of the rolls a minimum of 2". Care must be taken to ensure that all Crackin-6940 is covered by the Protection Course on both horizontal and vertical surfaces. Additional pieces can be used to cover any membrane still exposed. The membrane can be re-heated lightly using a detail torch to ensure the Protection Course is adhered.
- .2 Vertical: Allow the membrane to cool slightly before embedding polyethylene separation sheet. Depending on site conditions additional mechanical fastening may be required.
- .3 protection from drainage course
 - .1 Vehicular traffic areas must have a minimum of 3/8" asphalt impregnated protection board, protection course.

.2 Non Vehicular traffic areas require SBS modified asphalt sheet membrane with 95 g/m² fiberglass reinforcement with sanded surfaces on both top and bottom.

3.5 Insulation

.1 Ensure the waterproofed substrate is free of debris before installing any insulation.

3.7 Final Inspection

.1 Notify Fill The Crackin Ltd when installation of the system is complete to arrange a final inspection of the installation. Any deficiencies must be corrected prior to issuance of the Warranty.

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