
Part 1 General

1.1 SECTION INCLUDES

- .1 Preparing substrate surfaces.
- .2 Sealant and joint backing

1.2 REFERENCES

- .1 American Society for Testing of Materials (ASTM).
 - .1 ASTM C834-00e1, Standard Specification for Latex Sealants.
 - .2 ASTM C919-02, Standard Practice for use of Sealants in Acoustical Applications.
 - .3 ASTM C920-02, Standard Specification for Elastomeric Joint Sealants.
 - .4 ASTM D2369-04, Standard Test Method for Volatile Content of Coatings.
 - .5 ASTM D5893-96, Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Concrete Pavements.
- .2 Canadian General Standards Board (CGSB)
 - .1 CANCGSB-19.13-[M87], Sealing Compound, One-Component, Elastomeric, Chemical Curing.

1.3 SUBMITTALS FOR REVIEW

- .1 Provide submittals: in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product data: provide data indicating sealant chemical characteristics, performance criteria, substrate preparation, limitations, and colour availability.
- .3 Samples: submit two sample ribbons of sealant, illustrating sealant colours for selection.
- .4 Submit written confirmation that sealants are compatible with the joint forming materials.
- .5 Submit laboratory tests or data validating product compliance with performance criteria specified. include SWRI validation certificate where required.

1.4 QUALITY ASSURANCE

- .1 Installer qualifications: qualified to perform work specified by reason of experience or training provided by product manufacturer. submit reference list including minimum three projects of similar size and scope.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver and store materials in original wrappings and containers with manufacturer's seals and labels, intact. protect from freezing, moisture, water and contact with ground or floor.
- .2 Store products in a location protected from freezing, damage, construction activity, precipitation, and direct sunlight in strict accordance with manufacturer's recommendations.
- .3 Condition products to approximately 16 to 21°C for use in accordance with manufacturer's recommendations.

Part 2 Products

2.1 SEALANT MATERIALS

- .1 VOC limit - typical for all sealants: 250 g/l (2.08 lb/gal) when tested in accordance with USEPA method 24 and ASTM D2369.
- .2 Acoustical sealant: to ASTM C919, single component, non-hardening, non-skinning, synthetic rubber.
- .3 Acrylic latex: To ASTM C 834, single component general purpose siliconized acrylic latex sealant.
- .4 Butyl sealant: to ASTM C1311, single component, solvent release, non-skinning, non-sagging, black colour.
- .5 Epoxy, flexible: poured flexible 100% solids epoxy joint filler.
- .6 Polyurethane, self-levelling: to ASTM C 920, type S, grade P, class 25, Single component self-levelling polyurethane sealant with plus or minus 25 percent movement capability for horizontal joints.
- .7 Silicone, one part: to ASTM C 920, type S, grade NS, class 25, single component neutral cure silicone sealant, plus minus 50% joint movement capability.
- .8 Silicone, mildew resistant: to ASTM C 920, single component mildew resistant silicone sealant, +/- 25% movement capability.

2.2 ACCESSORIES

- .1 Primer: type recommended by the sealant manufacturer and compatible with joint forming materials.
- .2 Joint cleaner: non-corrosive and non-staining type recommended by sealant manufacturer and compatible with joint forming materials.

2.3 COLOURS

- .1 Unless indicated otherwise in respective technical specification sections, colour selection is at the option of the Departmental Representative.

2.4 SEALANT SCHEDULE

- .1 Perimeters of interior door/window frames and surfaces, where required.
 - .1 Sealant type: acrylic latex or silicone, one part; refer to technical specification section.
- .2 Interior partitions and acoustic applications:
 - .1 Sealant type: acoustical sealant.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify that substrate surfaces and joint openings are clean, dry, and free of frost and ready to receive work.
- .2 Verify that joint backing and release tapes are compatible with sealant.

3.2 PREPARATION

- .1 Remove loose materials and foreign matter which might impair adhesion of sealant.
- .2 Clean and prime joints in accordance with sealant manufacturer's written instructions.
- .3 Perform preparation in accordance with sealant manufacturer's written instructions.
- .4 Protect elements surrounding the work of this section from damage or disfiguration.

3.3 INSTALLATION

- .1 Install sealant in accordance with sealant manufacturer's written instructions.
- .2 Mask edges of joint where irregular surface or sensitive joint border exists to provide neat joint.
- .3 Measure joint dimensions and size materials to achieve required 2:1 width/depth ratios.
- .4 Install sealant free of air pockets, foreign embedded matter, ridges, and sags.
- .5 Apply sealant within recommended application temperature ranges. consult manufacturer when sealant cannot be applied within these temperature ranges.
- .6 Tool joints concave.

3.4 FIELD QUALITY CONTROL

- .1 Joint sealants: perform adhesion tests in accordance with manufacturer's written instructions.
- .2 Perform test 21 days after installation at a rate of one test every 300m of installed sealant.
- .3 Remove sealants failing adhesion test, clean substrates, reinstall sealants and perform retesting.
- .4 Maintain test log and submit report to Departmental Representative indicating tests, locations, dates, results, and remedial actions.

3.5 CLEANING

- .1 Clean adjacent soiled surfaces.

3.6 PROTECTION OF FINISHED WORK

- .1 Remove masking tape and excess sealant.
- .2 Protect sealants until cured.

END OF SECTION