Facility Design Information

Joint Sealants

1.0 QUALITY ASSURANCE

A. Installer Qualifications: Engage a qualified waterproofing contractor who employs trained workers who are qualified to supervise the handling and installation of sealant materials. Firm must have been in business a minimum of 10 continuous years and have a successful record of prior performance. Firm shall provide proof of SWRI Institute Applicator Training (www.swrionline.org) within organization.

2.0 PRODUCTS AND APPLICATIONS

A. Exterior vertical wall construction joints in cast-in-place concrete: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation 795; or Dow Corning Corporation 790 (when not in contact with porous substrates); or GE Silpruf LM (when not in contact with porous substrates).

B. Exterior horizontal traffic isolation and contraction joints in cast-in-place slabs: Multicomponent, nonsag, urethane sealant; Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2; or Multicomponent self-leveling urethane sealant; Pecora Corp., Dyantrol II; or Sika Corporation, Inc., Sikaflex-2c SL; or BASF Const. Chem. LLC., Sonneborn, SL 2. Note: traffic joints are a design issue and not a product exclusive issue which remain the responsibility of the designer.

C. Exterior vertical wall joints between plant-precast architectural concrete units: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795 or Dow Corning 790.

D. Exterior vertical control and expansion joints in unit masonry: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795. (if left unpainted); Multicomponent, nonsag, urethane sealant; Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2; (if surface is to be painted).

E. Exterior joints in dimension stone cladding: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795 or Dow Corning Corporation; 790.
F. Interior and exterior sealant-pointed mortar joints in glass unit masonry assemblies: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795.

G. Exterior joints in exterior insulation and finish systems: Single component, nonsag, neutral-curing silicone sealant; Dow Corning; 790; use preformed silicone sealant system in retrofit/renovation work.

H. Exterior butt joints between metal panels: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795 or 756 where exceptional dirt pickup resistance is required.

I. Exterior perimeter joints between other materials and frames of doors, windows and louvers: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795 or 756 where exceptional dirt pickup resistance is required.

J. Exterior control and expansion joints in soffits and other overhead surfaces: Single component, nonsag, neutral-curing silicone sealant; Dow Corning Corporation; 795. (if left unpainted); Multicomponent, nonsag, urethane sealant; Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2 (if surface is to be painted).

K. Exterior control and expansion joints in horizontal traffic surfaces of brick pavers, ceramic tile and stone paving units: Multicomponent, nonsag, urethane sealant; Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2; or Multicomponent self-leveling urethane sealant; Pecora Corp., Dyantrol II-SG; or Sika Corporation, Inc., Sikaflex-2c SL; or BASF Const. Chem. LLC., Sonneborn, SL 2. Note: Traffic joints are a design issue and not a product exclusive issue which remain the responsibility of the designer.

L. Vertical control and expansion joints on exposed interior surfaces of exterior walls: Multicomponent nonsag urethane sealant; Pecora Corp., Dyantrol II; or Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2.

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2.0 PRODUCTS AND APPLICATIONS-continued

M. Interior perimeter joints of exterior openings: Multicomponent nonsag urethane sealant; Pecora Corp., Dyantrol II-NS; or Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2.

N. Interior ceramic and dimension stone tile expansion, control, contraction, and isolation joints in horizontal traffic surfaces: Multicomponent self-leveling urethane sealant; Pecora Corp., Dyantrol II-SG; or Sika Corporation, Inc., Sikaflex-2c SL; or BASF Const. Chem. LLC., Sonneborn, SL 2.

O. Interior joints between plumbing fixtures and adjoining walls, floors and counters: Single-component mildew-resistant acid-curing silicone sealant; Dow Corning Corporation; 786 Mildew Resistant.

P. Vertical joints on exposed surfaces of interior unit masonry and concrete walls and other partitions: Multicomponent nonsag urethane sealant; Pecora Corp., Dyantrol II; or Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2.

Q. Perimeter joints between interior wall surfaces and frames of interior doors, windows and elevator entrances: Multicomponent nonsag urethane sealant; Pecora Corp., Dyantrol II; or Sika Corporation, Inc., Sikaflex-2c NS; or BASF Const. Chem. LLC., Sonneborn, NP 2.

R. Cylindrical Sealant Backings: ASTM C1330 Type “O” open-cell material or Type “B” bicellular material with a surface skin.

3.0 WARRANTY

A. Special Installer’s Warranty: Installer’s standard form in which Installer agrees to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in specification section within specified warranty period.

1. Warranty Period: Two (2) years from date of Substantial Completion.
3.0 WARRANTY-continued

B. Special Manufacturer’s Warranty: Manufacturer’s standard form in which elastomeric sealant manufacturer agrees to furnish elastomeric joint sealants to repair or replace those that do not comply with performance and other requirements specified in specification section within specified warranty period.

1. Warranty Period: Five (5) years from date of Substantial Completion.

4.0 INSTALLATION OF JOINT SEALANTS

A. Sealant Installation Standard: Comply with recommendations of both ASTM C1193 and SWRI Application Training Program.

5.0 FIELD QUALITY CONTROL

A. Field-Adhesion Testing: Field test joint-sealant adhesion to joint substrates as follows:

1. Extent of Testing: Perform ten (10) tests for the first [1000 feet or if using swing stage, 10 tests per drop zone] of joint length for each type of elastomeric sealant and joint substrate. Replace any failures of geometry or adhesion.

2. If no failures are discovered, perform one (1) test for each [1000] feet of joint length thereafter or one (1) test per each floor per elevation. If any failures are discovered, increase testing frequency to requirements in item number one above.