Construction

Sikaflex 1c sl

Application Instructions

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Sikaflex 1CSL

High Performance, Self Leveling Sealant

- Excellent primer-less adhesion to many substrates
- Passes ASTM C920 class 25
  - +/- 25% movement
- Self-leveling for horizontal applications
  - True-flat only, will not handle slope
  - no tooling required
- Bubble free formulation
- Shore A hardness of 45-50
- Tack-free time of 1-2 hours
- Fast final cure: 3 days
- 10 oz & 29 oz cart, 5 gal pails
- Limestone

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Sikaflex 1CSL

High Performance, Self Leveling Sealant

Where to use:

- All flat work that requires minimum movement and higher shore A hardness.
  - Sidewalks and driveways
  - Balconies and terraces
  - Exterior control joints
  - Plaza decking
  - Pitch Pans

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Sealant Installation

Substrate Preparation

- Proper preparation will eliminate majority of installation failures
  - Most common mode of sealant failure is adhesive
- Remove all weak material on bonding surface of porous substrates
- Surfaces must be clean, dry, and free of dew or frost
- Use best practices per industry standards
  - Porous substrate: abrasive, high pressure water (allow to dry after), grinding, wire brush
  - Non-porous substrate: 2 rag method

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Mechanical Methods

Saw cut joint □ to provide proper width & sound joint interface.

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Mechanical Methods

Sandblast to remove residues & provide profile

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Critical Success Factors

Priming

- Priming can help get a better bond in many situations
  - Priming does no substitute for good prep
  - Many products perform w/out primers
  - Most commonly used on horizontal and submerged applications
  - Must be done properly to work (primers are not error free: ponding, waiting time, etc.)
    - Proper primer application with brush
    - Prime sides of the joint only
    - Primer outside the joint may stain the substrate.
    - Prime & seal the same day

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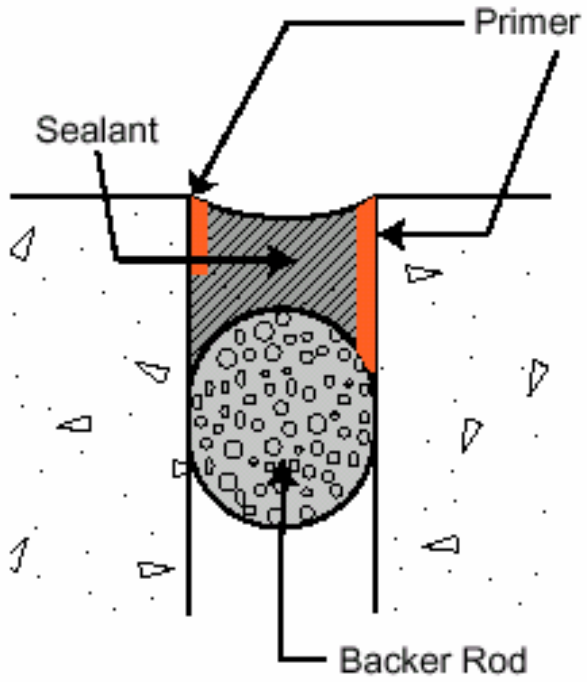
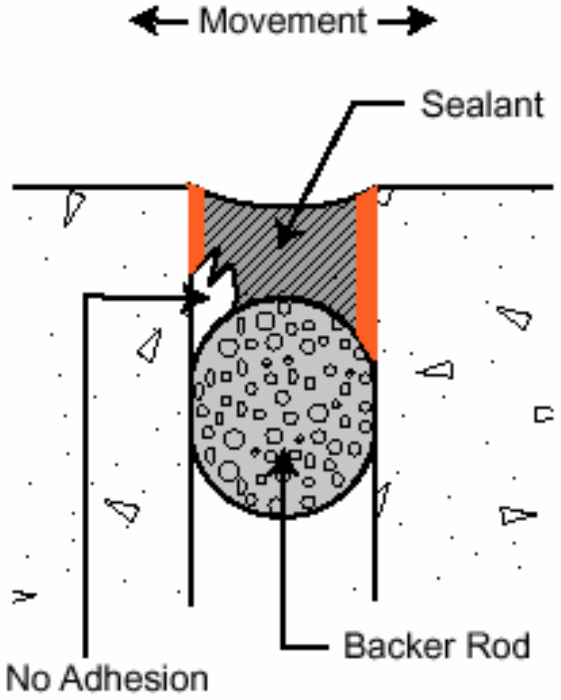
Critical Success Factors
Priming





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Critical Success Factors

Backing materials

- Why use backer rod:
  - Attain proper wetting of substrate when sealant is tooled
  - Control sealant depth
  - Prevent 3-sided adhesion
  - Provide support for traffic areas

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Sealant Installation

Backing Materials

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Sealant Installation

Backing Materials

- Make sure backer rod is 25% larger than joint width (under compression) to offer good tooling base
- No not puncture closed cell backer rod when installing prior to sealant installation
  - Will cause bubbling in sealant

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Sealant Installation

- Packaging:
  - 10.1 fl oz cartridge
  - 29 oz cartridge
  - 5 gallon pails
  - 55 gallon drums

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Sealant Installation

Loading

- Cartridge
  - Cut cartridge tip and puncture seal at the nozzle base
  - Load cartridge into caulk gun

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Sealant Installation

Gunning

- Place nozzle of gun into the bottom of the joint and fill the entire joint
- Keeping nozzle deep in the sealant, continue a steady flow of sealant
- **Coverage:**
  - 10.1 fl oz yields 12.2 linear feet of ½□x ¼□ joint
  - 29 fl oz uni-pac yields 36 linear ft of a ½ □x ¼□ joint

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Sealant Installation
Gunning

When neatness counts always tape off the sides of the joint.

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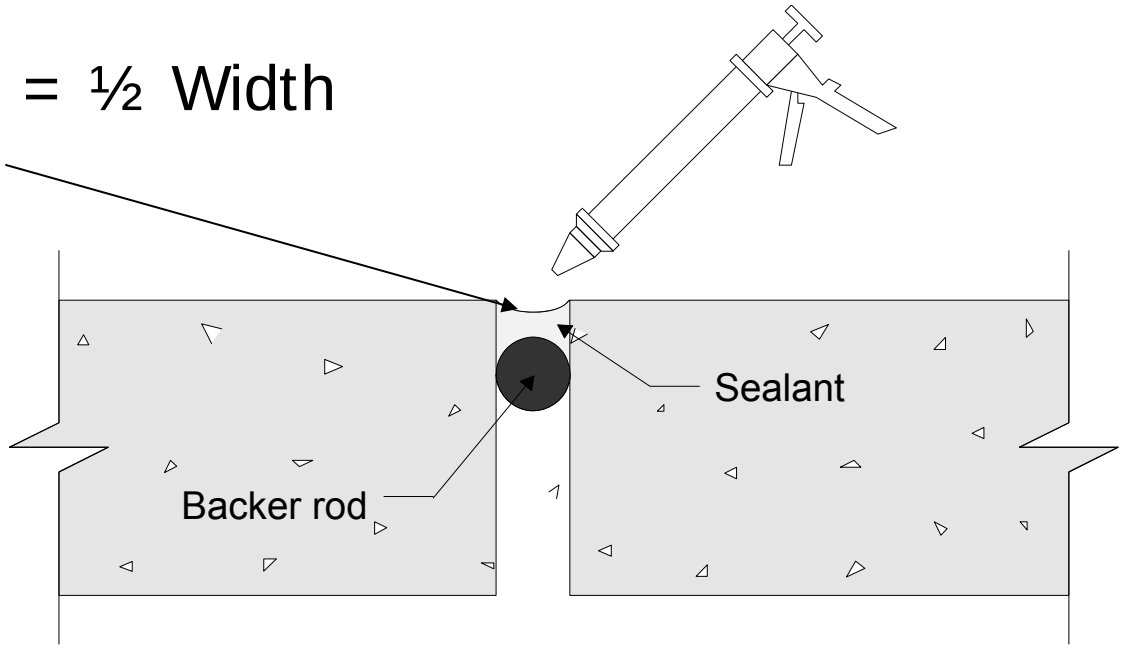
Sealant Installation

Joint Design

Depth = ½ Width



1. Install appropriate backer material to prevent three-sided adhesion and to control sealant depth.
2. Sealant should be gunned into joint at mid-point of designed expansion and contraction to maximize accommodation of movement. Joint dimension of 4X anticipated movement allows proper function of high performance sealants even if applied at temperature extremes.
3. Tool as required to properly fill joints and force sealant against joint interfaces, maximizing bond.

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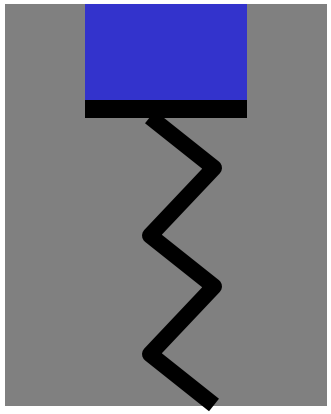
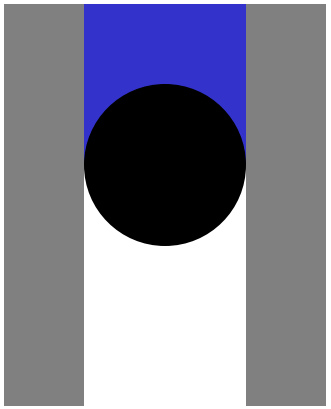
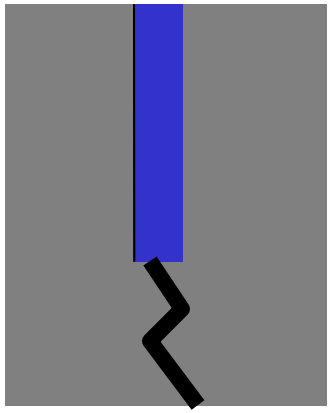
Sealant Installation

Joint Design







- 2:1 or 1:1 width:depth
- Minimum ¼□x ¼□
- Minimum ½□depth for traffic
- 2 sided adhesion, not 3
- Joint movement to match product

- Protect nosing
- Needs support
- May separate

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Sika Technical Data Sheets can be obtained via:

www.sikaconstruction.com

Refer to data sheets for specific information on each Sika product.