MasterSeal® SL 100™

High performance one-component, self-leveling hybrid sealant

**DESCRIPTION**
Master Seal SL100 is a one component fast curing, non priming, self-leveling elastomeric hybrid sealant design for expansion joints in concrete floor and decks. This hybrid technology combines the best qualities of organic and silicone sealants to keep moving joints weathertight. Its robust design is suitable to use on green and damp concrete as well as high traffic areas.

**PRODUCT HIGHLIGHTS**
- Isocyanate free
- One-component formula requires no mixing
- Self-leveling with controlled flow, pourable
- Movement capability of 35% allows expansion and contraction with joint movement
- Can be applied to damp and green concrete
- Fast skin time of 5-45 minutes depending upon environmental conditions
- Easy to gun for quick installation
- Paintable
- Wide service temperature range (-75°F to 300°F (-59°C to 149°C))
- Highly UV resistant
- Plastic pail for ease of use (opening and resealing)
- Fast curing helps to speed up job site production.
- Meets all state and Federal VOC regulations

**APPLICATIONS**
- Horizontal
- Interior and exterior
- Expansion joints
- Control joints
- Pavers
- Plaza decks
- Industrial floors
- Driveways/garages
- Sidewalks
- Decks
- Parking structures
- Pitch pans

**SUBSTRATES**
- Concrete
- Metal
- Stone

**HOW TO APPLY**
1. The product may be used in sealant joints designed in accordance with SWR Institute's Sealants - The Professional's Guide.
2. In optimal conditions, the depth of the sealant should be ½ the width of the joint. The sealant joint depth (measured at the center) should always fall between the maximum depth of ½” and the minimum depth of ¼”. Refer to Table 1.
3. In deep joints, the sealant depth must be controlled by closed cell backer rod or soft backer rod. Where the joint depth does not permit the use of backer rod, a bond breaker (polyethylene strip) must be used to prevent three-point bonding.
Technical Data

Composition
MasterSeal SL 100 is a single-component STPE hybrid sealant, which cures by reaction with atmospheric moisture.

Compliances
- ASTM C 920, Type S, Grade P, Class 35, Use T, M, NT, A, I and O*
- Federal Specification TTS-00230C, Type 1, Class A
- Corps of Engineers CRD-C-541
- Canadian Specification CAN/CGSB 19.13-M87, Classification C-1-40-B-N and C-1-25-B-N, No. 81028
- CFI accepted
- USDA compliant for use in areas that handle meat and poultry
* Refer to substrates in Where to Use.

4. To maintain the recommended sealant depth, install backer rod by compressing and rolling it into the joint channel without stretching it lengthwise. Closed cell backer rod should be about ¼" (3 mm) larger in diameter than the width of the joint to allow for compression. Soft backer rod should be approximately 25% larger in diameter than the joint width. The sealant does not adhere to it, and no separate bond breaker is required. Do not prime or puncture the backer rod.

SURFACE PREPARATION
Substrates must be structurally sound, fully cured, dry and clean. Substrates should always be free of the following: dirt, loose particles, oil, grease, asphalt, tar, paint, wax, rust, waterproofing or curing and parting compounds, membrane materials and sealant residue.

NEW CONCRETE
Remove all loose material from joints by wire brushing. Sandblast surfaces in contact with form-release agents. Concrete must be cured at least 24 hours and dry to the touch before applying MasterSeal SL 100. Laitance must be removed by abrading.

OLD CONCRETE
For previously sealed joints, remove all old material by mechanical means. If joint surfaces have absorbed oils, remove sufficient concrete to ensure a clean surface.

PRIMING
1. MasterSeal SL100 is considered a non-priming sealant, but special circumstances or substrates may require a primer. It is the user’s responsibility to check the adhesion of the cured sealant on typical test joints at the project site before and during applications. Refer to the technical data guide for MasterSeal P179 and P173 primers.

2. Apply primer full strength with a brush or clean cloth. A light, uniform coating is sufficient for most surfaces. Very porous surfaces may require a second coat, however, do not over apply.

3. Allow primer to dry before applying MasterSeal SL100. Depending on temperature and humidity, primer will be tack free in 15–30 minutes. Priming and sealing must be done on the same work day.

APPLICATION
1. MasterSeal SL100 needs to be mixed well before it is used. Apply using a professional grade caulking gun. Do not open cartridges, sausages, or pails until preparatory work has been completed.

2. Fill joints from the bottom; avoid bridging of the joint, which may form air voids. Sealant will self level to form a clean joint surface.

3. Best practices dictate that all caulking and sealing be done when temperatures are above 40°F (4°C) to avoid application to frost laden surfaces. Application may proceed as low as 20°F (-6°C) if there is certainty that substrates are free of frost and clean.

CURING TIME
The cure of MasterSeal SL100 varies with temperature and humidity. The following times assume 75°F (24°C), 50% relative humidity, and a joint ½" width by ¼" depth (13 by 6 mm).
- Skins: within 45mins
- Full cure: approximately 2 weeks
### Yield

**LINEAR FEET PER GALLON**

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**LINEAR FEET PER 858ML CARTRIDGE**

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**LINEAR METER PER 858ML CARTRIDGE**

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CLEANUP
Clean equipment with MasterSeal 990 or xylene immediately after use and before sealant has cured. Cured sealant may be removed by cutting with a sharp-edged tool, thin films by abrading.

FOR BEST PERFORMANCE
• In cold weather, store container at room temperature for at least 24 hours before using.
• Do not use polyurethane sealants such as NP1, NP2, TX1 or any sealant effected by alcohol during cure to seal small cracks in the bottom of the joint. Use an acrylic latex sealant or NP100.
• MasterSeal SL 100 is not intended for continuous water immersion. Contact Technical Service for recommendations.
• Backer rods, joint fillers and bond breakers must be tightly installed to prevent loss of sealant through joint bottoms.
• Joints subject to puncture by high heels or umbrella points require a stiffer or higher density backup material; cork or rigid non-impregnated cane-fiber joint fillers are suitable. Separate materials from the sealant by a non-adhering bond breaker (polyethylene tape).
• Trapped air during sealant installation may cause air bubbles to rise to the sealant surface; tool these bubbles out before the material skins.
• Do not use sand, or incompressibles as a bottom bed in a joint.
• Do not install when rain is expected before the sealant develops a substantial skin.
• For joint widths over 1½” (38 mm), use MasterSeal SL 2.
• Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.
• When SL100 is used with deck membranes, it must be cured for 7-10 days depending on joint size as well as ambient conditions.

HEALTH, SAFETY AND ENVIRONMENTAL
Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.basf.us, e-mailing your request to basfsccst@basf.com or calling 1(800)433-9517. Use only as directed. For medical emergencies only, call ChemTrec® 1(800)424-9300.

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