



OVERVIEW

Sase FlexJoint 85 is a moisture insensitive, self-leveling, non-staining, 100% solids, two component, 1:1 ratio, Polyurea Elastomer joint and crack filler. Designed for concrete with low to medium thermal cycling. FlexJoint 85 cures rapidly and consistently in applications ranging from 30°F to 130°F (Freezer Blend available). Product is tack free in 5 minutes. Applications can be reopened to vehicle or foot traffic in 1 hour.

APPLICATIONS

FlexJoint 85 is designed specifically for industrial floor applications, which receive heavy vehicle traffic, such as forklifts or steel wheeled carts. To fill interior random cracks, damaged control joints, or new control joints on horizontal concrete. Semi-rigid, allowing small slab movement, yet strong enough to protect the vertical edges of concrete from spalling under extreme loading. Interior and Exterior (exterior applications when little joint or crack movement from thermal cycling will occur.) Exposure to ultraviolet light may cause slight discoloration, however the physical properties are unaffected.

- Industrial Facilities
- Warehouse Floors
- Manufacturing Facilities
- Commercial and Retail Facilities
- Food Processing Facilities

PERFORMANCE

- Moisture Insensitive
- Semi-Rigid to protect joint edges
- 100% Solids, Contains No VOC's
- Can be Polished without Smearing
- Meets USDA & FDA Requirements
- Meets the USGBC's LEED® requirement of IEQ Credit 4.1
- Return Project to Service in 60 Minutes
- Cures From 30°F to 130°F
- Odorless, No Toxic Vapors
- Resistant to Petrochemicals
- Easy-to-shave
- Long shave window

PHYSICAL PROPERTIES

Color A+B		Tintable
Viscosity (mixed)		Self Leveling
Mix Ratio (by volume)		1:1
Gel Time 100 grams at 74°F		50-60 seconds
Tack Free (thin film) @ 74°F		5 mins
Initial Cure		15 mins
Final Cure		60 mins
Elongation %	ASTM D-412	200
Tensile Strength, psi	ASTM D-412	1,400
Shore "A" Hardness	ASTM D-2240	85-88 A
Tear Strength, Die B	ASTM D-624	150
VOC Content (A & B)		0

APPLICATION RECOMMENDATIONS

Surface must be clean and sound. Remove dust, grease, curing compounds, waxes, foreign particles and disintegrated materials. **BULK MIXING**
For bulk mixing, use a one to one ratio metered pump. Only component "B" side needs to be stirred before being loaded into pump. Do not allow material to reside in static mixing head or nozzle for more than 30 seconds or nozzle blockage may result.

PACKAGING

22 oz. Cartridges
10 gal. Kits

SHELF LIFE

1 year in original unopened container.

STORAGE

Recommended storage temperature is between 75°F to 85°F. Do not store below 55°F or above 85°F.

CONSISTENCY

Pourable, self-leveling liquid.

POT LIFE

Approx. 50-60 seconds (100 gram mass)

APPEARANCE

Off white/ivory color, Add tint pack for color.

Custom Color Matching Available



JOINT COVERAGE PER GALLON

Consider approximately 15% for waste - uneven joint depth and width, overflow of material, nozzle waste, etc...

Width h →	1/8"	3/16"	1/4"	3/8"	1/2"	3/4"	1"
← Depth							
1/8"	123	821	616	411	308	205	15
1/4"	616	411	308	205	154	103	77
1/2"	308	205	154	103	77	51	39
3/4"	205	137	103	68	51	24	26
1"	154	103	77	51	39	26	19
1-1/2"	103	68	51	34	26	19	13
2"	77	51	39	26	19	13	10
2-1/2"	62	41	31	21	15	10	7
3"	51	34	26	17	13	8	6
4"	39	26	19	13	10	7	5

Cartridge coverage: 1 gallon = 128 oz. Multiply gallons by 128 oz., divide by cartridge size. 22 oz. cartridge example: 10 gals. x 128 oz. = 1280 oz. ÷ 22 oz. = 58 cartridges.

LIMITATIONS

- Do not thin ... solvents will prevent proper cure.
- Not for sealing cracks under hydrostatic pressure.
- Material is a vapor barrier after cure.
- Minimum age of concrete must be 28 days, depending on curing and drying conditions prior to applications.

CHEMICAL RESISTANCE

Test Procedure; ASTM D-1308 @72°F

R=Recommend

RC=Recommend Conditional =some swelling or discoloration

N=Not Recommend

1=Some discoloration only

Chemical	Result
Acetic Acid 10 %	R
Acetone	RC
Battery Acid (Sulfuric Acid)	RC
Brake fluid	R
Chlorine (2,000 ppm in water)	R
Citric Acid	R
Gasoline	R
Hydraulic Oil	R-1
Methanol (5%) Gasoline	RC
Motor Oil	R-1
Toluene	RC

CLEAN UP

Cured product may be disposed of without restrictions. Excess liquid 'A' and 'B' material should be mixed together and allowed to cure, then disposed of in the normal manner. Cured materials may be stripped or peeled from plastic tools and containers. It is recommended that metal tools be cleaned within one hour of use by cutting or peeling cured material from tool.

SAFETY AND HANDLING

SDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand product Safety Data Sheets provided. Long sleeved overall or disposable overalls, rubber gloves, splash shields, rubber or leather boots should be worn. Do not use near high heat or open flame. Do not take internally. Keep out of the reach of children.

FIRST AID

Remove any contaminated clothing. For eye contact, flush immediately with plenty of water for at least 15 minutes; contact physician immediately. For respiratory problems, remove person to fresh air. For skin contact, remove epoxy immediately with a dry cloth or paper towel. Wash area of contact thoroughly with soap and water. Solvents should not be used because they carry the irritant into the skin. Wash contaminated clothing prior to re-use. Cured products are innocuous

WARRANTY

SASE warrants its products to be free of manufacturing defects and that they will meet SASE's current published physical properties when applied in accordance with SASE's directions and tested in accordance with ASTM and SASE's standards. There are no other warranties by SASE of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. SASE shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, including any warranty of merchantability or fitness for a particular purpose or from any other cause whatsoever.



Joint Filling in Newly Placed Concrete Floors

The role of a semi-rigid joint filler is to protect slab joint edges from damage caused by hard-wheeled traffic. For maximum effectiveness, the filler should completely span the joint and bond tightly to the joint walls. When concrete is placed, it always contains more water than is required for cement hydration. This extra water slowly evaporates through the slab surface, causing the slab to shrink. As the panels shrink, the joints between them widen. A joint initially cut at 1/8" (3 mm) may eventually open to 3/16"–1/4" (5–6 mm) or larger.

Concrete shrinkage typically follows this pattern:

- **First 30 days** – about 20–30% of total shrinkage
- **Next 335 days** – about 50–60% of total shrinkage
- **At one year** – about 70–90% of total shrinkage

This means joints are widening even as fillers are being installed and continue to move afterward. It's common to see joint filler separate from the joint within a few days due to the gap expanding beyond the filler's ability to stretch. Failures may be adhesive (loss of bond) or cohesive (tearing of the filler itself).

Shrinkage is also influenced by environmental factors such as temperature and humidity. A prime example is found in refrigerated spaces: cold temperatures cause concrete to contract, while refrigeration reduces ambient humidity and speeds evaporation. In freezers, a 1/8" (3 mm) joint may open up to 3/8" (9.5 mm) or more.

Because shrinkage and movement continue for an extended period, waiting for all slab movement to finish before filling is not realistic. The best practice is to delay joint filling until the joints have reached a more stable width.

Recommendations

1. New Industrial Floors

According to ACI and PCA, joint filling should be postponed 60–90 days after slab placement, and longer if conditions permit. For non-climate-controlled buildings, longer delays are especially beneficial. If the structure will eventually be temperature controlled, wait until the HVAC system is operational and the slab has stabilized.

2. Refrigerated Environments

Always postpone filling until the space has reached its permanent operating temperature. ACI floor committees recommend holding that temperature for at least 5 days in coolers and 14 days in freezers before filling.

3. Retail Stores

Retail projects are often built rapidly, leaving little opportunity for joint filling deferral. If joints are filled too early, separation will be more pronounced. To minimize this, joint spacing should be reduced so that movement is distributed across more joints, limiting separation at any single joint.

Filling Older Floors

In some cases, joints are not filled until 6–18 months after placement, as in speculative buildings where tenants are not yet secured. In these situations, the concern shifts from initial shrinkage to seasonal expansion and contraction:

- **Filling in summer:** Joints are at their tightest. When winter arrives, joints open and filler separation is likely.
- **Filling in winter:** Joints are at their widest. When summer heat and humidity arrive, slabs expand, compressing the filler and sometimes forcing it out of the joint.

For best performance, joints in mature slabs should be filled in moderate months (March–May or September–October). If the building will be temperature controlled, fill only after the HVAC system has been running for several weeks to stabilize conditions.

Minimum Wait Before Filling

Although it is always preferable to wait as long as possible, project demands may require early joint filling. ACI/PCA guidelines recommend a minimum of **28 days** after placement. This ensures that the joint walls are dry enough for proper adhesion between filler and slab.

Built for Performance

FlexJoint 85 cures into a tough, flexible surface that stands up to constant foot traffic day after day. After full cure, FlexJoint 85 maintains excellent integrity under repeated pedestrian use.