

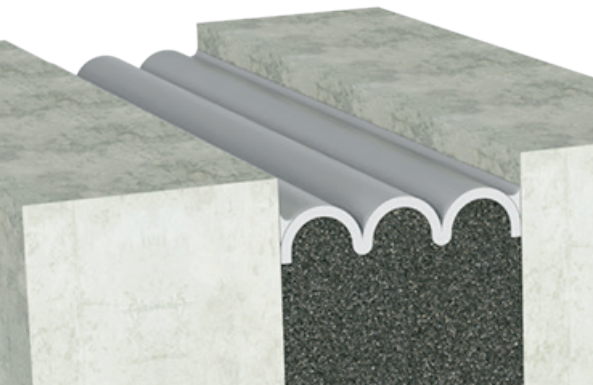
## Precompressed Foam Systems (PCF™)

D.S. Brown Precompressed Foam is a monolithic, open-cell polyurethane foam used as a bridge expansion joint seal. The foam seal is impregnated with acrylic resin and topped with silicone to ensure a watertight seal. It is installed using an epoxy adhesive.

### Advantages

- Fast and Convenient – PCF™ is packaged in a precompressed state which allows the seal to quickly be placed to the correct depth in the joint.
- Ease of Installation – Installed with simple equipment, PCF™ seals are easy to install in bridges, roadways, upturns, sidewalks, around columns, and other transitions.
- Flexible – Movement up to +/- 60% from nominal joint width.
- Versatile – Can be used in a new joint or a retrofit.
- Self-Supporting Installation – PCF's outward forces eliminate the need for backer rod or alternate support systems.
- Functions in Extreme Conditions - Temperature service range from -40 to 190 degrees F.

### Sizing



Precompressed Joint Foam Catalog ID	Nominal Joint Width (inches)	Nominal Material Height (inches)	Maximum Movement from Nominal (inches)
PCF-050	0.50	2	+/- 0.30
PCF-075	0.75	2	+/- 0.45
PCF-100	1.00	2	+/- 0.60
PCF-125	1.25	2	+/- 0.75
PCF-150	1.50	2	+/- 0.90
PCF-175	1.75	2	+/- 1.05
PCF-200	2.00	3	+/- 1.20
PCF-225	2.25	3	+/- 1.35
PCF-250	2.50	3	+/- 1.50
PCF-275	2.75	3	+/- 1.65
PCF-300	3.00	3	+/- 1.80
PCF-325	3.25	3	+/- 1.95
PCF-350	3.50	3	+/- 2.10
PCF-375	3.75	3	+/- 2.25
PCF-400	4.00	4	+/- 2.40
PCF-450	4.50	4	+/- 2.70
PCF-500	5.00	4	+/- 3.00

### Installation Overview

PCF™ Seals are designed to be installed at the nominal joint width listed in the sizing table.

The faces of the joint should be clean and free of spalled concrete. For best results, the precompressed foam should be kept above 70°F for 24 hours before installation. Do not install material if temperatures are below 40°F or are expected to fall below 40°F. Combine both parts of the epoxy adhesive and mix until a consistent color is achieved. Apply a 1/16" to 1/8" thick layer of the epoxy adhesive to both joint faces. Cut the plastic wrapping along the cardboard to release the precompressed foam. Once the precompressed foam has expanded to the nominal joint width, place it in the joint, 1/2" below the deck surface. Use silicone caulk gun to install a silicone bead between the foam seal's silicone top and the joint face.

**Please see installation manual for full PCF product installation instructions**

**Precompressed Foam System (PCF™)**

**Foam Typical Physical Properties**

Property	Value	Test Method
Compressive Force at 50% Compression	1.5 psi	ASTM D3574 Test C
Constant Deflection Compression Set at 75% Compression	9%	ASTM D3574 Test D
Tensile Strength	16 psi	ASTM D3574 Test E
Elongation	140%	ASTM D3574 Test E
Low Temperature Flexibility	No visible deleterious effects	ASTM C711
Recovery at 50% Compression	98%	ASTM D545
Stress at 50% Compression	0.5 psi	ASTM D545
Density	9 lb/ft <sup>3</sup>	ASTM D545
Accelerated Weathering	No cracking or discoloration, 3,000 hours	ASTM G155/C793
Movement Range	+/- 60%	ASTM E1399

**Epoxy Adhesive Typical Physical Properties**

Pot life (2-gallon unit)	15-25 minutes
Gel time	30 minutes
Consistency	Non-sag paste
Compressive modulus (ASTM D695)	120,000 psi
Bond Strength Hardened to Hardened Concrete 14 days (dry cure) (ASTM C882)	3,250 psi
Mix Ratio by volume	1A:1B
Solids	100%

**Silicone Typical Physical Properties**

Property	Value	Test Method
Flow, sag, or slump	None	ASTM C639
Extrusion Rate	20-35 sec per 20 g at 60 psi	
Specific gravity	1.35	
Skin Time (at 77°F, 50% RH)	30 to 60 min	ASTM C679
Tack-Free Time (at 77°F, 50% RH)	60 to 90 min	ASTM C679
Cure Time (at 77°F, 50% RH)	7-14 days	
Full Adhesion (at 77°F, 50% RH)	14-21 days	

