

# SOPRAJOINT PLUS

## 20, 40, 75, 100, 125



TECHNICAL DATA SHEET **250523SCANE**

(supersedes 221101SCANE)

### DESCRIPTION

SOPRAJOINT PLUS is a monolithic expansion joint made of EPDM-based synthetic rubber (ethylene-propylene-diene monomer) and composed of two flanges coated on the surface and underface, a stabilized oxidized polyacrylonitrile fabric and an expandable core.

- The SOPRAJOINT PLUS expansion joint is designed to ensure complete waterproofing at expansion joints of buildings and civil engineering structures. It allows movement along three axes (horizontal, vertical, and shear) at the same time.
- The SOPRAJOINT PLUS expansion joint is custom-made to order. There are no limits with respect to length.
- The SOPRAJOINT PLUS expansion joint adapt to various configurations and can accommodate 90-degree, angled, cross, T-shaped and curved transitions, as well as other directional changes continuously, made possible by a vulcanization process.

### RECOMMENDED SUBSTRATES

SOPRAJOINT PLUS expansion joints must be installed on a solid (structural), smooth, and irregularity-free surface. SOPRAJOINT PLUS cannot be installed on an uneven or undulating surface such as brick.

### SURFACE PREPARATION

Surfaces must be clean, dry, and free of any debris, or dust.

### INSTALLATION

#### HEAT-WELDED (*field surface*)

1. Identify the starting point for the installation of the SOPRAJOINT PLUS expansion joint. Unroll the entire roll before installation to ensure proper positioning and accurate measurements.
2. Using a propane torch, heat the base sheet on which the SOPRAJOINT PLUS will be installed.
3. Place or unroll the SOPRAJOINT PLUS on the liquefied bitumen of the base sheet membrane. Apply pressure on the SOPRAJOINT PLUS to maximize adhesion.
4. For SOPRAJOINT PLUS 75, 100, and 125, mechanically fasten the joint flanges every 305 mm (12") on center using SOPREMA SCREWS AND PLATES (50 mm (2") plate).
5. Using a reinforcement strip with a minimum width of 150 mm (6"), overlap the SOPRAJOINT PLUS flange by 75 mm (3").
6. Cover the flanges with a cap sheet membrane all the way up to the edge of the core and apply pressure to the surface.

**Note:** It is recommended that base sheet and cap sheet membranes are installed the same day to prevent the geotextile from absorbing moisture.

**For other installation methods (cold-applied adhesive, hot bitumen, ALSAN RS liquid membrane, and self-adhesive), or for different types of details, refer to the applicable details available on the SOPREMA website as well as in the *SOPRAJOINT PLUS Technical Guide*.**

**FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.**



**SOPREMA.CA 1 877 MAMMOUTH**

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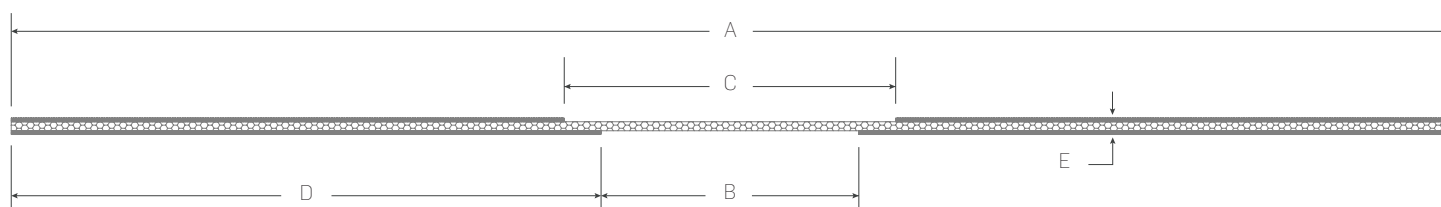
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### GENERAL INFORMATION

Specifications		Expansion joint types				
		SOPRAJOINT PLUS 20	SOPRAJOINT PLUS 40	SOPRAJOINT PLUS 75	SOPRAJOINT PLUS 100	SOPRAJOINT PLUS 125
Weight		1.0 kg/m (0.67 lb/ft)	1.1 kg/m (0.74 lb/ft)	1.3 kg/m (0.87 lb/ft)	1.4 kg/m (0.94 lb/ft)	1.5 kg/m (1.00 lb/ft)
Length		Measurements are taken from the plans and/or evaluated on-site.				
Dimensions <sup>(1)</sup> ,	A	355 mm (14 in)	390 mm (15.4 in)	435 mm (17.1 in)	500 mm (19.1 in)	560 mm (22.0 in)
	B	35 mm (1.4 in)	70 mm (2.8 in)	115 mm (4.5 in)	180 mm (7.0 in)	240 mm (9.4 in)
	C	55 mm (2.2 in)	90 mm (3.5 in)	135 mm (5.3 in)	200 mm (7.9 in)	260 mm (10.2 in)
	D	160 mm (6.3 in)	160 mm (6.3 in)	160 mm (6.3 in)	160 mm (6.3 in)	160 mm (6.3 in)
	E	2.5 mm (3/32 in)	2.5 mm (3/32 in)	2.5 mm (3/32 in)	2.5 mm (3/32 in)	2.5 mm (3/32 in)

(1) : A : Total width of the SOPRAJOINT PLUS; B : Core underface; C : Core surface; D : Flange underface; E : Thickness. See detail below.



### SIMULTANEOUS MOVEMENTS IN THREE AXIS

Type of movements	Expansion joint type				
	SOPRAJOINT PLUS 20	SOPRAJOINT PLUS 40	SOPRAJOINT PLUS 75	SOPRAJOINT PLUS 100	SOPRAJOINT PLUS 125
Horizontal	± 30 mm (± 1.2 in)	± 60 mm (± 2.4 in)	± 100 mm (± 4 in)	± 150 mm (± 6 in)	± 200 mm (± 8 in)
Vertical	± 25 mm (± 1 in)	± 50 mm (± 2 in)	± 85 mm (± 3.4 in)	± 125 mm (± 5 in)	± 170 mm (± 6.7 in)
Shear <sup>(1)</sup>	± 20 mm (± 0.8 in)	± 40 mm (± 1.6 in)	± 75 mm (± 3 in)	± 100 mm (± 4 in)	± 125 mm (± 5 in)

(1) : Shear stress is the principal force that must be considered when designing a building or a structure. This calculation must be carried out by a structural engineer.



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NOTE : All products manufactured by SOPREMA Inc. comply with the description and properties indicated in the technical data sheet that was current at the date of manufacture.  
This technical data sheet applies to products sold on the Canadian market only.

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### PROPERTIES

Properties	Standards	SOPRAJOINT PLUS
Hardness, <i>shore A</i>	ASTM D2240	45 ± 5
Tensile strength	ASTM D412 C	10 MPa (145 lb/ft <sup>2</sup> )
Elongation at break	ASTM D412 C	> 700%
Tear resistance	ASTM D624B	>10 N/mm (57 lb/in)

(All values are nominal)

### RESTRICTIONS

- Avoid extended contact with mineral oils, benzene, fuels and aromatic compounds, such as toluene.

### STORAGE AND HANDLING

- SOPRAJOINT PLUS expansion joints must be sheltered from inclement weather and damaging substances.
- If the products are stored outdoors, cover them with an opaque protection cover.

FOR MORE INFORMATION, REFER TO THE INSTRUCTIONS ON THE LABEL AND RELEVANT SAFETY DATA SHEET (SDS).



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