



«FLEX 9000» DOORS, WINDOWS & SIDINGS

DESCRIPTION

Durable thermoplastic architectural one component sealing compound for multiple exterior uses. Dries by solvent evaporation.

INTENDED USES

Used to seal joints between two perpendicular surfaces subject to thermal movement. For sealing outdoor joints around door and window frames and sidings.

Good adhesion to concrete, masonry, painted or stained wood, natural, painted or anodised aluminum, steel, galvanized steel, metal, fibreglass and vinyl (PVC).

The performances of «FLEX 9000» as well as its easy use make it an ideal choice for numerous exterior utilisations, for both professional users and handymen.

- REMARKS:**
- Do not use in contact with surfaces such as asphalt or tar products and insulation panels (polystyrene, etc.) which can be damaged by solvents;
 - Does not withstand immersion (tank) or abrasion (foot traffic).

ADVANTAGES

- ⇒ Professional quality and long life expectancy.
- ⇒ Multipurpose with a good adhesion on numerous building materials.
- ⇒ Ease of application, does not generally require priming.
- ⇒ Rapid skin formation on which dust will not adhere.
- ⇒ Can be applied on vertical, horizontal or overhanging surfaces without subsiding or sagging.
- ⇒ No staining of surrounding surfaces.
- ⇒ Remains flexible with a superior and permanent elasticity up to -30°C (-22°F).
- ⇒ Can be stretched out to 900% (ASTM D-412) without getting cracked.
- ⇒ Does not require painting; however it can be painted over 24 hours after application (latex paint).
- ⇒ Withstands weathering, ultraviolet rays and exterior temperature changes.

STORAGE AND APPLICATION TEMPERATURE

«FLEX 9000» does not deteriorate below freezing point. Anyhow, since its viscosity increases when the temperature drops, it is recommended to store it in a dry place where the temperature is between 10°C (50°F) and 30°C (86°F) to make its use always possible. Under these conditions, the sealed cartridges could be preserved for 3 years.

«FLEX 9000» can be applied either in winter or in summer. Anyhow, to make its use easier, the product must be at a temperature higher than 5°C (40°F).

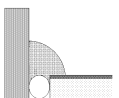
SURFACE PREPARATION

There must be a free space between the two materials to permit their dimensional variations. Once applied, the sealant caulks the aperture. It will get compressed or stretched out depending on the movement of the materials.

To determine the size of the joint, one must take into consideration the expansion or the contraction the materials will be subjected to with humidity and temperature variations. It must also be noted that some materials have greater dimensional variations than others.

If possible, apply «FLEX 9000» whenever the size of the aperture between the materials is in-between.

When the joint covers an aperture of 6 mm (1/4 in.) or larger, the joint must be sustained by a backing rod in polyethylene. The diameter of the backing rod must be approximately 3 mm (1/8 in.) wider than the width of the joint to permit compression.



New metal and solvent resistant oily surfaces must be washed with acetone and dried up. Scrape rusty metal with a metallic brush prior to cleaning.

Surfaces sensitive to solvents such as vinyl or dirty plastic materials must be washed out with a soapy solution, then rinsed and dried up.

Concrete and masonry must be scraped with a metallic brush so as to get a sound, firm, clean, stainless surface.

If the application of «FLEX 9000» is to be made at a temperature lower than 5°C (40°F), the surface must be at a temperature at least 3°C (5°F) higher than dew point. The surfaces must be free of frost or ice.

If an old sealant or putty is present, it must be taken off.

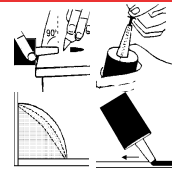
The surface must be in a seemingly new, firm and clean state. It must also be free of creosote, oil, grease, wax, silicone or silicone based product, asphalt or bitumen based product (coating, adhesive, etc.), rust, any loose or foreign material or any material soluble in solvents.

REQUIRED PRIMER

«FLEX 9000» does not generally require priming on most building materials such as: steel, galvanized steel, natural, painted or anodised aluminum, concrete (28 days old), fibreglass, masonry, painted or stained surfaces including wood, vinyl sidings and windows and many common building materials.

APPLICATION

Cut the nozzle of the cartridge at right angle (90°), a little narrower than the width of the desired joint. Pierce the aluminum patch sealing the cartridge inside the nozzle. Use a caulking gun and apply with a uniform and adequate pressure so as to give the joint a convex form. «FLEX 9000» must not be smoothed or formed to avoid tensions in the product during drying time. During the extrusion of «FLEX 9000», the angle between the gun and the joint to be made must be approximately 45°.



Pull the tip of the gun away from the joint, as illustrated. Make sure the sealant comes into contact with each surface on a width of at least 3 mm (1/8 in.).

Example of minimal required widths for «FLEX 9000» joints with various exterior materials per 10 feet lengths:

Steel, aluminum, concrete and painted or stained wood:	1/4 in.	(6 mm)
Brick or masonry:	1/4 in.	(6 mm)
Vinyl (PVC):	1/2 in.	(12 mm)

COVERAGE

Linear metres per 300 mL cartridge:							Linear feet per 300 mL cartridge:				
Depth (mm)	6	8	10	12	14	16	Depth (in.)	1/4	3/8	1/2	5/8
Width (mm) 6	11	8	6.4	5.3	4.5	4	Width (in.) 1/4	31	20.7	15.5	12.4
8	8	6	4.8	4	3.4	3	3/8	20.7	13.8	10.3	8.3
10	6.4	4.8	3.8	3.2	2.7	2.4	1/2	15.5	10.3	7.7	6.2
12	5.3	4	3.2	2.7	2.3	2	5/8	12.4	8.3	6.2	5

TECHNICAL GUIDE

GENERAL APPEARANCE:	Thixotropic and homogeneous paste, free of lumps and easy to extrude.
COLOURS:	Consult the colour guide.
COMPOSITION:	Thermoplastic rubber, synthetic resins (binder), titanium dioxide (clear excepted), colour pigments (clear excepted), no inert charge (pigment), promoter of adhesion (agents), solvents (volatile material) and other additives.
CLEANER (wet product):	Use mineral spirits.
CLEANER (dry product):	Use a putty knife and mineral spirits or another effective solvent; take care not to affect the other surfaces with too strong a solvent.
CLEANER (skin contact):	As soon as possible, wash with mineral oil, then wash carefully with soapy water, and rinse.
CLEANER (dry product surface):	If surface seems to have yellowed, greyed or faded, a contaminant may have deposited on the product surface. Use a cleaner for vinyl surfaces containing Sodium Tripolyphosphate (STPP) or another strong water-based cleaner.
FLAMMABILITY:	At application: flammable; Dry: combustible.
FREEZE-THAW STABILITY:	«FLEX 9000» is not deteriorated by freeze.
VISCOSITY:	1 000 000 cps.
APPLICATION METHOD:	Manual or pneumatic caulking gun.
APPLICATION SURFACE:	Outdoor vertical and horizontal joints.
EASE OF APPLICATION:	CAN/CGSB-19.0-M77 method 3.1: 400 g/min (easy).
BLEEDING OF SEALING COMPOUNDS:	CAN/CGSB-19.0-M77 method 9.2: pass (does not bleed).
VERTICAL JOINTS SAGGING:	CAN/CGSB-19.0-M77 method 7.1: inferior to 5 mm.
MINIMAL APPLICATION TEMPERATURE:	Surface: -25°C (-13°F); Product: 5°C (40°F).
MAXIMAL APPLICATION TEMPERATURE:	Surface: 40°C (100°F); Product: 30°C (86°F).

TECHNICAL GUIDE (continued)

MINIMUM SIZE:	Width and depth:	6 mm (1/4 in.).
MAXIMUM SIZE:	Width:	16 mm (5/8 in.).
	Depth:	10 mm (3/8 in.).
STANDARDS:	Though no standard presently exists for thermoplastic rubber-based sealants, «FLEX 9000» surpasses the elasticity and adhesion traction criteria after cyclical treatment of the latest edition of the repealed CGSB standards: 19-GP-5M (acrylic and solvent). 19-GP-14M (butyl); CAN/ONGC-19.13-M87 (category 25) (silicone, polyurethane, polysulfide, 1 part); CAN/ONGC-19.17-M90 (acrylic latex); CAN/ONGC-19.24-M90 (silicone, polyurethane, polysulfide 2 parts).	
SERVICE TEMPERATURE:	Minimum:	-30°C (-22°F);
	Maximum:	50°C (122°F).
HARDNESS (shore A):	CAN/ONGC-19.0-M77 method 8.2:	40.
ULTIMATE ELONGATION:	ASTM D-412:	900%.
LOW TEMPERATURE FLEXIBILITY:	CAN/ONGC-19.0-M77 method 11.1:	-30°C (-22°F) pass.
TENSION STRENGTH:	ASTM D-412:	3 MPA (435 psi).
ADHESION PEEL STRENGTH:	CAN/CGSB-19.0-M77 method 14.6	
	Aluminum:	6.4 KN/m;
	Concrete:	6.3 KN/m.
UV RESISTANCE:	ASTM C-793:	excellent.

RESTRICTIONS

Does not adhere to polyethylene, polypropylene, recycled plastic, Teflon or other comparable materials.

Make sure the joint variation does not exceed the «FLEX 9000» elasticity.

When «FLEX 9000» is painted, the paint may crack if «FLEX 9000» supports a movement higher than the paint elasticity.

The drying time of «FLEX 9000» depends on temperature, relative humidity and ventilation.

The shelf life is diminished by warehousing over 25°C (77°F).

Not for joints submerged in water for prolonged periods of time.

Adhesion on material not specifically mentioned cannot be guaranteed. It is up to the customer to make his own performance tests or to consult our technical department.

SAFETY PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Before using «FLEX 9000», consult its material safety data sheet (MSDS).

Use outdoors only. Avoid using in areas where the solvents evaporating from «FLEX 9000» could affect food or any other product sensitive to odours. «FLEX 9000» contains flammable solvents. CONTENTS MAY CATCH FIRE. MAY IRRITATE EYES AND SKIN. Do not smoke. Do not get in eyes, on skin or on clothing. Use only in a well-ventilated area. Keep away from flames, such as a pilot light, and any object that sparks, such as an electric motor. Wear eye/face protection or chemical splash goggles. Use chemical-resistant, impervious gloves. **FIRST AID TREATMENT:** If swallowed, call a Poison Control Centre or doctor immediately. Do not induce vomiting. If in eyes, rinse with water for 15 minutes. If on skin, rinse well with water. **Disposal:** Consult your municipality to dispose in conformity with regulations.

WARRANTY

PPG Architectural Coatings Canada, Inc. warrants performance of its products to its intended use if properly applied in accordance with the label directions and the specifications of the technical data sheet. Having no control over the application methods and conditions or the circumstances related to its use, no other warranty, expressed or implied, statutory or otherwise is given. This limited warranty extends only to the original purchaser of the product and is not transferable or assignable. If the product fails to conform to this limited warranty, we will, at your option, furnish replacement product or refund the purchase price. This limited warranty excludes (1) labour or costs of labour for the application or removal of any product and (2) all other direct, indirect, incidental, special or consequential damages.