



Bosco seal PU-X

POLYURATHANE BASED LIQUID APPLIED WATERPROOFING MEMBRANE

TECHNICAL DATA SHEET

BENEFITS

- Easy and fast application
- Provides a seamless waterproofing membrane
- Highly resistant to abrasion, water etc.
- Mechanical properties unaffected by UV and other weather conditions. (Consult Bostik for optimum results)
- Crack bridging capability $\geq 2\text{mm}$
- Provides excellent thermal resistance over a temperature span of -40°C to $+90^{\circ}\text{C}$
- Resistant to salty water, aqueous solution, diluted bases and acids, with and without appropriate topcoat. (Consult Bostik Technical Dept.)
- Fills the non-structural capillary cracks by decreasing water absorbency of the concrete construction
- Suitable onto the old bituminous membranes and asphalt felts (e.g. APP and SBS), PVC, EPDM with special primers (Consult Bostik Technical Dept.)

PRODUCT DESCRIPTION

Bostik Bosco seal PU-X is one component, ready to use, highly elastic, cold applied polyurethane waterproofing which cures into a membrane with excellent abrasion, mechanical, chemical, thermal, and UV resistance.

APPLICATIONS

- For waterproofing roofs in both new construction and refurbishment projects (exposed or concealed).
- For cool roofing for energy efficiency.
- For waterproofing flower beds and planter boxes.
- For waterproofing parking areas, as part of vehicular traffic system.
- For waterproofing bridge decks, balconies, bleachers and terraces.
- For waterproofing wet areas such as toilets, bathrooms, kitchens as an under tiling membrane.

CONSUMPTION

Approximately $1.5\text{--}2\text{ kg/m}^2$ in two coats depending on the application and smoothness of the surface. The coverage amounts are theoretical, and it is recommended to do coverage-controlled sample application, before treatment.



DIRECTIONS OF USE

- After application of appropriate primer, using brush or roller consistently cover the whole area with Bostik Bosco seal PU-X as described in the following pages (coating system).
- 2nd coat must be applied within 18 hours (not later than 48 hours). If application is done by airless system, then below requirements should be respected:
 - minimum pressure: 220bar
 - minimum output: 5.1 L/min
 - minimum nozzle diameter: 0.83mm (0.033 in)
- Ensure that the coating layers overlap by at least 3 inches beyond all previously applied detailing strips.

TECHNICAL DATA

PROPERTY	RESULTS	TEST METHOD
Form	Liquid	-
Colors	Grey, white	-
Density	1,4kg/lit	ASTM D1475 / DIN 53217
Viscosity	3500-5500 cps	ASTM D 2393
Solid Content	85% by weight	ASTM D 1259
Tensile strength	5-8 MPa	ASTM D412 / EN-ISO-527-3
Elongation	>600%	ASTM D412 / EN-ISO-527-3
Water Vapor Transmission	0.8 gr/m ² -hr	ASTM E96
Crack Bridging Capacity	≥2mm	EOTA TR-008
Hardness, Shore A	60	ASTM D 2240/ DIN 53505
Adhesion to Concrete	≥2MPa	ASTM D4541
Service Temperature	-40°C to 90°C	In-house Lab
Application Temperature	Between 5°C to 35°C	In-house Lab
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	passed (2000 hours)	ASTM G53
Thermal resistance (100 days @ 80 °C)	passed	EOTA TR011

*Technical Data are approximate values only. They are provided according to a temperature of +20°C and relative humidity of 50%.

SURFACE PREPARATION

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm²) with a minimum pull strength of 1.5N/mm². Substrate moisture should not exceed 5% (use moisture meter or polyethylene test in accordance of ASTM D 4263). New concrete structures need to dry for at least 28 days.

The substrate must be clean and free from all traces of loose materials, old coatings, curing compounds, release agents, laitance, oil grease etc. It should be saturated surface dry (SSD) condition.

Structurally unsound layers or surface contaminants must be mechanically removed by abrasive blast tracking, shot blasting, scarifying, or grinding. Substrates heavily impregnated with oil must be cleaned by torching, using suitable solvent or degreaser substance.

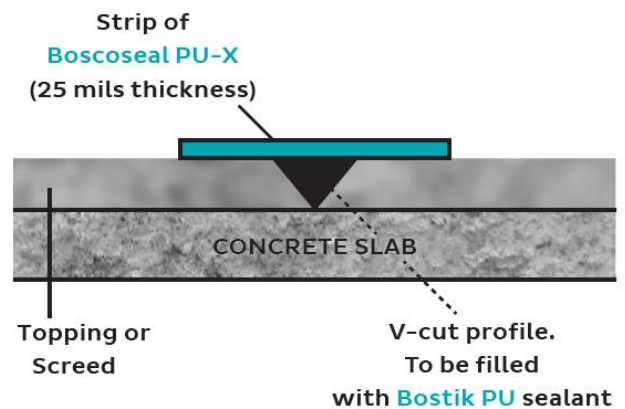
Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

All ducts, loose and friable material must be completely removed from all surfaces before application of product; preferably by brush and/or vacuum.

- Substrate moisture should be at most 5%.
- Concrete slab must be minimum of 4 weeks old.
- Minimum substrate temperature +5°C.
- Maximum substrate temperature +35°C.
- Maximum air humidity 85% r.h.
- Observe dew point temperature.
- For best result, maximum thickness of **Bostik Boscoseal PU-X** is 0.5 mm dry film thickness per layer.
- Newly applied surfaces should be protected from water minimum of 6 hours.

For New Construction: (exposed-type roof deck application)

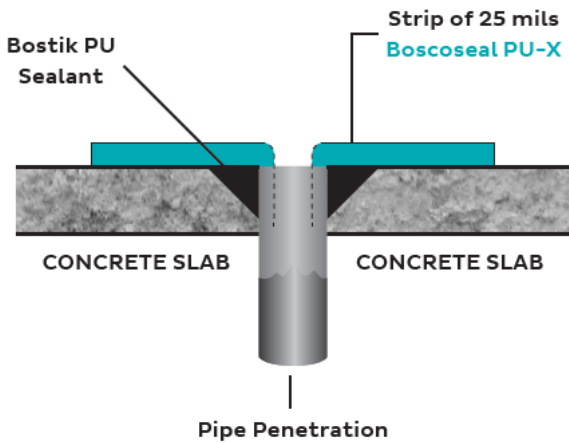
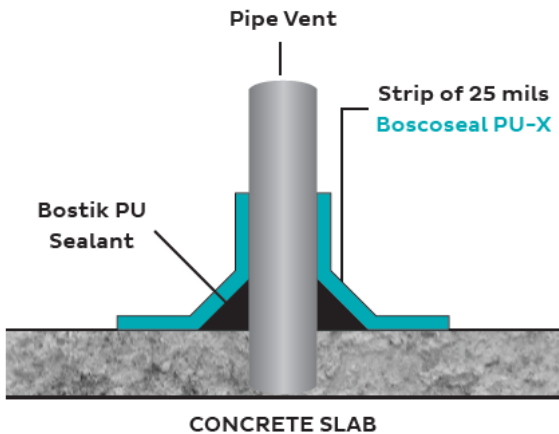
1. For a well-prepared and mechanically sound concrete slab, apply necessary concrete topping, screed or self-leveling compound to attain desired slope-to-drain surface level. For areas with a thickness below ½ inch, apply Bostik Addmix 57 as adhesion enhancer (see the separate TDS for more information).
2. Anticipate cold joints during screeding/topping pouring. With these joints, create a Vcut profile using concrete grinder or router with the size of approximately 2 inches on both edge diagonally, as shown in the illustration below:
3. Apply Bostik PU sealant to fill completely the V-cut profile, about 1.5 inches in depth. Once the sealants is cured, create a strip of 25 wet mils Bostik Boscoseal PU-X, 3 inches on each side.



For existing and retrofitting works:

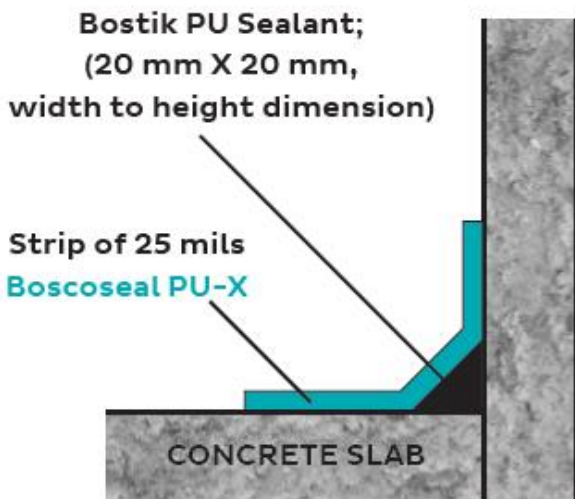
1. Wherever necessary, apply Bostik screed to attain desired slope-to-drain floor level and avoid possible water ponding.
2. If there is dynamic crack beyond 1/16 inch, create a V-cut shape profile using concrete grinder or router with the size of approximately 2 inches on both edges diagonally.
3. Apply Bostik PU Sealant, allow the sealant to cure and apply strips of 25 wet mils Bostik Boscoseal PU-X, 3 inches on each side.

For pipe vent or penetration:



1. Seal the gap between pipe and slab using Bostik PU Sealant for about 2 inches in diameter.
2. Apply a strip of 25 wet mils Bostik Boscoseal PU-X, 3 inches on each side of the sealant around the pipe.
3. Consult Bostik Technical Dept. for appropriate primer, depending on pipe type.

For flashing and wall application:



1. Apply Bostik PU sealant as shown above with approximately 20mm width and 20mm height in all corners where the floor meets the wall.
2. After the sealant has cured, create a strip of 25 wet mils Bostik **Bostik Boscoseal PU-X** measuring 3 inches on each side.

Mixing

Bostik Boscoseal PU-X does not require any mixing, simply use directly from bucket after stirring the product using a drill with low speed (approximately 500 rpm). Stirring time at least 2-3 minutes until homogeneous mixture is achieved.

Priming

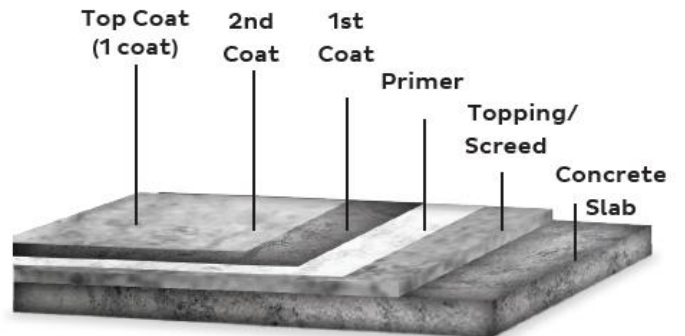
For porous substrates like concrete, cement mortar, or wood, use Boscoseal Primer 1C, then apply **Bostik Boscoseal PU-X** after 2-6 hours when the primer is still a little bit tacky. For non-porous substrates like metals, ceramic tiles, use Boscoseal EpoPrimer 2C, then apply **Bostik Boscoseal PU-X** within 6-24 hours (not later than 4 days). Boscoseal EpoPrimer 2C can be also used over strong, sound concrete surface to seal pinholes or/and as a vapor barrier.

For more details please consult Bostik Technical Dept.

COATING SYSTEM

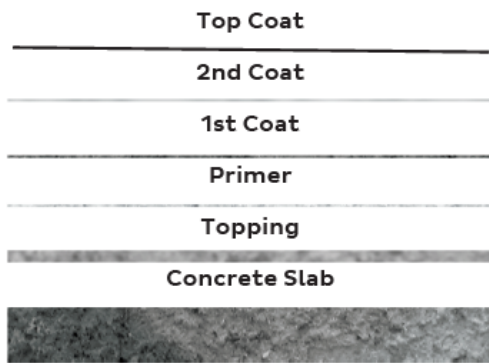
1. Maintenance or Occasional Pedestrian Traffic System

	Product	Consumption	Thickness per Coat	Yield per 25 kg (17.9L)
1st Coat	Boscoseal PU-X	0.4 L/m ²	20 wet mils (16 dry mils)	48m ²
2nd Coat	Boscoseal PU-X	0.4 L/m ²	20 wet mils (16 dry mils)	48m ²

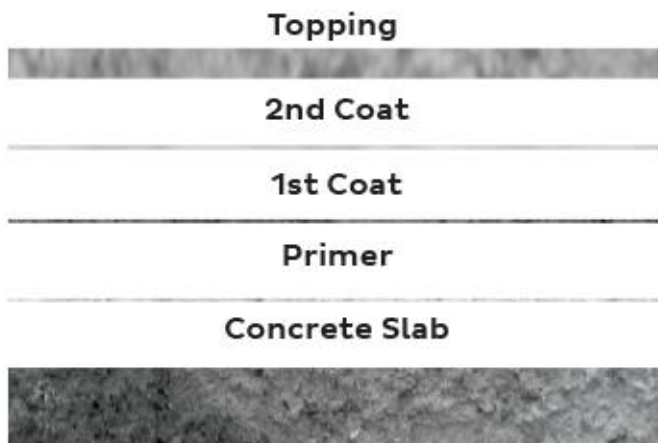


2. Medium Pedestrian Traffic (or for Concealed /Buried System)

	Product	Consumption	Thickness per Coat	Yield per 25 kg (17.9 L)
1st Coat	Bosco seal PU-X	0.5 L/m ²	25 wet mils (20 dry mils)	36m ²
2nd Coat	Bosco seal PU-X	0.5 L/m ²	25 wet mils (20 dry mils)	36m ²



OR



For heavy traffic systems e.g car parking deck, roof deck with heavy equipment installed etc., consult Bostik for more information

IMPORTANT NOTES:

For aesthetic/decorative, excellent abrasion resistance, and UV stability requirement, apply Bostik Bosco seal Top Coat (See TDS for more details) for optimum results.

CURING DETAILS

TEMPERATURE	RAIN RESISTANT AFTER	READY FOR FOOT TRAFFIC	FULL CURE
+10°C	12 hours	24 hours	8 days
+20°C	5 hours	12 hours	7 days
+30°C	4 hours	10 hours	6 days

CLEANING

Clean tools and equipment using BOSTIK solvent (for other types of solvent, please consult Bostik Technical Dept.)

COLORS

Light grey, white

PACKAGING

25kg, 6kg, 1kg

SHELF LIFE

- The product must be protected from water, frost and adverse weather conditions.
- It should be kept dry and cool on wooden pallets at between +10°C and +25°C in moisture free conditions.
- Opened packaging should be closed immediately after use and consumed within 24 hours Maximum 3 pails should be stocked on each other.
- Shelf life is 12 months conditional to complying with abovementioned storage conditions.

HEALTH AND SAFETY

On contact, uncured membrane causes irritation. Gloves and protective goggles must be worn during stirring, application, and use. Avoid contact with skin, eyes and avoid breathing in vapor. If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, do not induce vomiting. Give a glass of water. If skin contact occurs, remove contaminated clothing and wash skin thoroughly for a minimum of 15 minutes and see a doctor.

Please read MSDS (Material Safety Data Sheet) before application.

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