



FLEXCOAT W500

Single Component Liquid Applied Acrylic Waterproofing Membrane

單組份液態應用式丙烯酸防水塗膜

1.0 Description

FLEXCOAT W500 is a high performance elastomeric, single component, moisture curing acrylic copolymer meeting low VOC requirement as specified by law of HKSAR regards 'the Air Pollution Control (Volatile Organic Compounds) Regulation'; FLEXCOAT W500 is supplied in the form of a ready-to-use paste for the waterproofing of both horizontal and vertical surfaces. Once dry, it becomes a flexible film with excellent UV resistance and weatherability. Because of its excellent UV resistance property, FLEXCOAT W500 is an ideal material for totally exposed roofing and External Wall facade system, i.e. FLEXCOAT W500 serves as finishing coat and not to be covered by onward C/S screed or Tiles etc. It is not recommended to apply FLEXCOAT W500 as inverted roofing system or covered by other materials. While Flexcoat Sandwich System W500 is a Fire retarding membrane meeting with BS476, pt7, it also an ideal sound and thermal insulation layer to building structure or flashing system. It is paintable by Acrylic painting system to provide excellent decorative effect.

2.0 Technical Data

* Based on Test Report No.: 040123ST40695 from MaterialLab, a Recognized Laboratory under HOKLAS Accreditation Scheme.

	Value	Test Method	Equipment
Adhesion Strength (without PRIMER)	0.75 - 1 N/mm ²	ASTMD454:95	Pull-off Tester T-017-05
Water Absorption %	2.31 %	ASTMD570-81	T-025-06
Tensile Strength	2.34 N/mm ²	ASTMD412-92	UTM: T-019-2
Elongation at Break (%)	152%	ASTMD412-92	UTM: T-019-2
Q-U-V Accelerated Weathering Test	PASSED	ASTMG53-88	-
Hardness Scale (Shore A)	63	ASTMD2240-00	Hardness Tester T-102-1
Fire Resistance	Class 1	BS476 pt7	-
VOC Content	11g/L	USEPA Method 24 & SCAQMD Method 303-91	- - -
Other In House Testing			
Crack Bridging	> 2mm	ASTMC836-89	-
Water Vapour Transmission	34.288/m ² /24hrs	ASTME96-94	-
Crack Time	12 hrs	-	-
Application Temperature	5°- 40°C	-	-
Fire Resistance	zero	AS1530 part 3	-
Smoke evolved	4	AS1530 part 3	-
Flash Point	Water Based	-	-

3.0 Typical Application

Flexcoat W500 is a single component product curing by absorbing air moisture to form flexible film. After completing its curing process, it becomes an high performance coating for waterproofing new or old roofs, corrugated roof, Terraces, precasting joints, chimney stacks gutter, facade, cracks expansion joint, etc. Flexcoat W500 can be applied onto most types of substrate: asphalt, concrete, roofing felt, asbestos, iron sheeting, slate, clay tiles, gutters etc.

4.0 Application Details**4.1 Horizontal Surface** (Flat roof, Tiled pitch roof, corrugated sheet roof, terrace roof, gutter, expansion join, etc)**4.11 Surface Preparation:**

- A) All surface should be sound, clean, dry, free of dust, oil, grease or other contamination. Loose matter should be removed by abrasion, compressed air or high pressure water.
- B) Concrete Surface should be either light steel towel finished or being made flat by a layer of cement/sand screed Sufficient time for curing of C/S should be given before laying FLEXCOAT W500)
- C) All shrinkage and inactive/ non- structural cracks under 1.6mm (1/16-inch) should be pretreated with one coat of Flexcoat W500.
- D) All right angle joints between parapet wall and slabs should be treated with cementitious fillet.
- E) For chalky substrate or those area where required improvement for better adhesion with FLEXCOAT W500, one coat of SEALCOAT W501 could be applied as primer coat and allow at least 45 min for cure before application of “Flexcoat W500” System.

4.12 Laying of Waterproofing System:

- A) 2 coats of “FLEXCOAT W500” + one layer of “MPMESH A900” in between coat with film thickness of not less than 1mm. (Subject to the surface conditions, “MPMESH A900” may not be required in some applications.)
- B) It can be applied by roller, brush or towel.

4.2 Vertical surface (façade, external wall, parapet etc.)**4.21 Surface preparation:**

Following the step A, B, C, as specified in above issue no. 4.11

- C) Any active cracks must be bridged with 25mm wide “reinforcing strip” comprised by two coats “FLEXCOAT W500” and one layer “MP Mesh A900” in between coats. (Subject to the surface conditions, “MPMESH A900” may not be required in some applications.)
- D) **For aged and porous substrate**, apply one coat “SEALCOAT W501” (optional) as primer coat to strength and seal up the substrate, please allow at least 45 mins for curing before application of onward FLEXCOAT W500 System. **For new poured concrete**, please allow minimum 14 days completed curing period before application of coating.

4.22 Laying of Waterproofing System:

- A) Apply 2 coats “FLEXCOAT W500” with total thickness of not less than 0.5 mm.
- B) It can be applied by roller, brush etc.
- C) It can be applied by using special roller to obtain a texture appearance.
- D) It can be covered by other acrylic paints. Please consult technical department of Master Proofer for suitable choice of paint.

5.0 Material Coverage

Horizontal surface (2 coat + 1 layer MP mesh):

@2.0kg/m² approx.

Vertical surface (2 coat not less than 0.5mm):

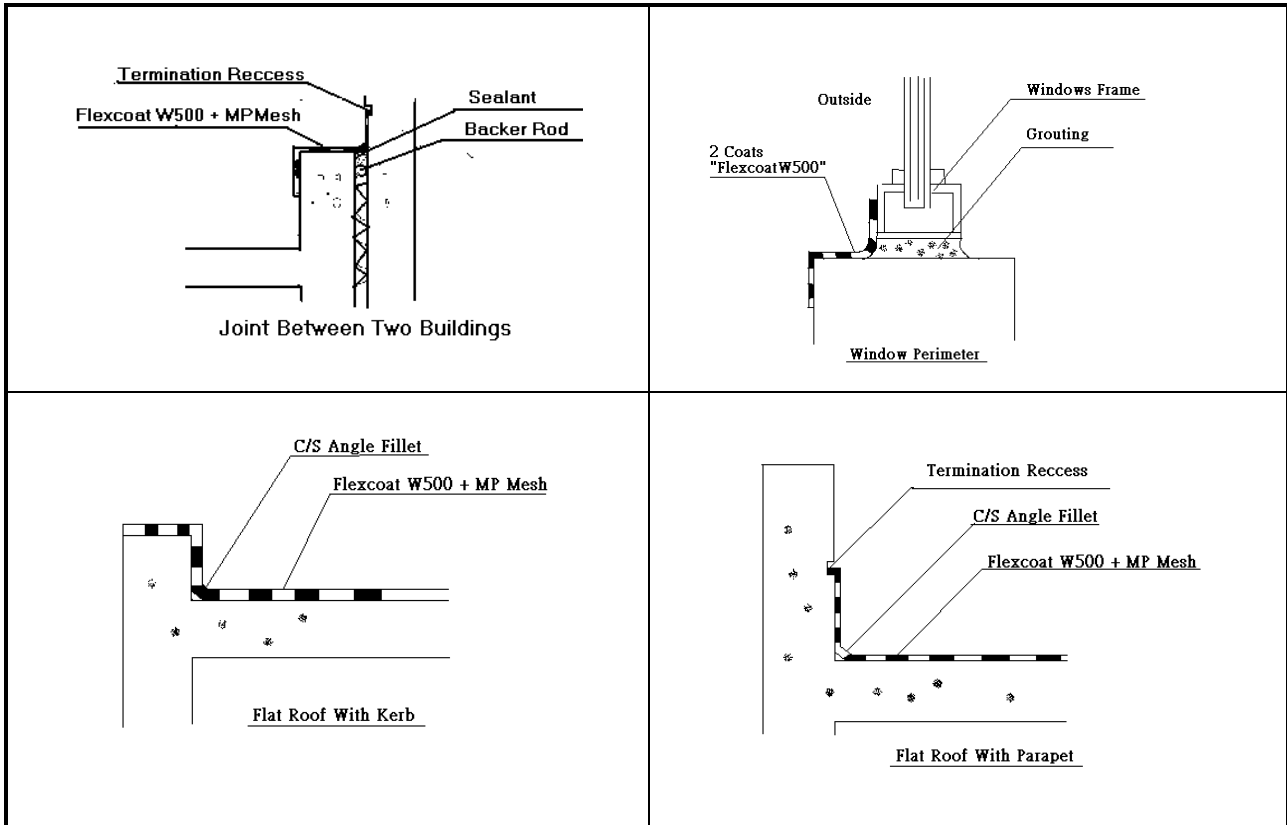
@0.8kg/m² approx.

Actual consumption may be varying from surface conditions.

6.0 Health and Safety

FLEXCOAT W500 is water- based material. It is non-toxin and no safety label.

7.0 Typical Diagrams



8.0 Packaging

5kg/Drum / 20 kg/Drum is generally available at your nearest Master Proofer’s operation office.

9.0 Technical Advisory Notes

1. For liquid applied membrane, it may sometimes encounter problem of “Blisters” due to trapped air on rough concrete or moisture vapour which are sometimes practically unavoidable. Provided that the blister are in low scale and they are not punctured, it is unlikely to affect the overall performance of the system.
2. Primers are sometimes required to improve the adhesion between FLEXCOAT W500 and surface substrate, likes bituminous surface, non-ferrous metal and exceptionally porous substrate. Applicator should consult our technical office for necessary recommendation.
3. FLEXCOAT W500 is suitable for exposed roofing system only. In case of covered roofing system is required, it is recommended to consider another products of LABOND Range: Thanecoat W300 or W302. Please refer to our product brochure or call our Marketing Office for details.

END

FLEXCOAT W500

Acrylic Waterproofing

環保水溶性高效丙烯酸防水塗膜

1 清理地面
 Floor Cleaning



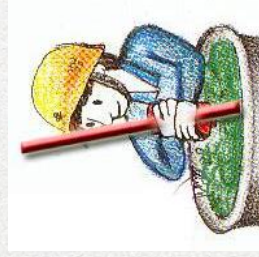
2 填平凹凸面
 Re-leveling Uneven Surface



3 掃上低油
 Apply Primer



4 拌均物料
 Homogeneous Material



5 用毛卷施工
 Apply By Tool



酸防水塗膜

