

## **PVC WATERPROOF MEMBRANE**

### **I . Product Description**

The PVC waterproofing rolls formulas are based upon polyvinyl chloride resin with other assistants added to provide flexibility and stability such as anti-oxidant,, absorbent of ultraviolet light, plasticizer and plastic filling agent.

#### **Characteristics**

- With high tensile strength and elongation ,the product allow substrate to move with changes in the temperature without cracks.
- The rolls available in broad width can be welded by hot-air with high efficiency and are easy to repair and maintain even after many years.
- Good vapor diffusion ,easy discharge of condensate and moisture from the ground
- Root-proof ,chemical-resistance & ageing-resistance
- Climate-resistance: flexibility at -20□ & no flowing at high temperature
- Cold and easy installation ,high mechanization during the process of the installation

### **II . Technical Specifications**

Sheets of single-layer and laminated sheets with fibre felt or fibre as reinforced layers are supplied in our company. The products are available in width of 1.0m, 1.2m, 1.5m & 2.0m and in thickness of 0.5mm, 1.0mm, 1.2mm, 1.8mm & 2.0mm and in length of more than 20m.

### **III . Physical Properties**

NO.	items		rusult
1	Tension (Mpa) ≥		12.0
2	Fracture elongation (%) ≥		250
3	Heating size transformation (%) ≤		2.0
4	Cold bending		-25□ No crack
5	Perforation resistance		Water impermeability
6	Binding property with cutting (N/mm) ≥		3.0/breaking membrane
7	Hot air ageing	appearance	No crack, no bubble, no cohering, hole
		Tension strength (%)	±20
		Pull lengthening at break (%)	
		Cold bending	-20℃No crack
9	Chemistry corrosion resistance	Tension strength (%)	±20
		Pull lengthening at break (%)	
		Cold bending	-20℃No crack
10	Phytotrons accelerating ageing	Tension strength (%)	±20

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		Pull lengthening at break (%)	
		Cold bending	-20°C No crack

### **IV. Installation**

Three operating methods can be applied in the installation.

- After being deployed ,the PVC sheets should be stuck with the adhesive which is coated on the whole surface or parts of the ground under request. Lengthways adjacent sheets should be overlapped at least 50mm. The end of a roll and the beginning of the next roll are connected through butt jointing with PVC strip of single-layer in width of at least 20cm lapped over it. For easy installation the sheets should be folded once in middle. Coating with paint-roller on the surfaces of the rolls and the ground separately is needed. 3.5 minuets later, steel roller pressure over the sheets should be applied during the process in such way for mating well both surfaces. The roll can be stuck to the ground half by half. A heat gun is used to weld the seams and it should be inserted between the two surfaces, heating the surface of each to a molten state before a pressure over it.
- When the rolls are needed in a area with four sides , operating method of the roll can be referred to the one mentioned above. Further more, the four edges of the sheets should be stuck with adhesive.
- Fixing of the sheets with setscrew is also adapted . In such way the sheets should be spreaded first .10cm seam width is required for lengthways lap of which 5cm width is for the washer which is set under the sheets. Holes of diameter less than that of the setscrew are drilled with percussive driver according to the predetermined space between. The washer can be fastened with screwdriver. PVC strip of single-layer of at least 20cm width is required to lap over and seal the seams.

#### **Welding**

Welding burner and the welding direction should form an angle of 45 degree. A space about 0.5cm should be

Kept between the welding burner and the steel roller pressure, which should not move too fast. If the welding burner of 20mm width is used, the both sides of the strip should be welded in width of at least 15mm. If the welding burner of 40mm width is applied, the middle of the strip of 25mm width should be welded into molten state for good continuity of the contact sheets. The width of the welding bead should be in accordance with our instructions to ensure good installation and high efficiency.

### **V.Application**

PVC sheet forms an effective barrier to liquid water or water vapor in the roof construction for industrial and civil engineering, underground engineering such as subway & tunnel, water conservancy such as water pools & ditch, shelter, grain depot, land filling, dyke, sewage treatment and basement.

slip resistant surface providing added protection againt impact damage - suitable for open plant roof areas.