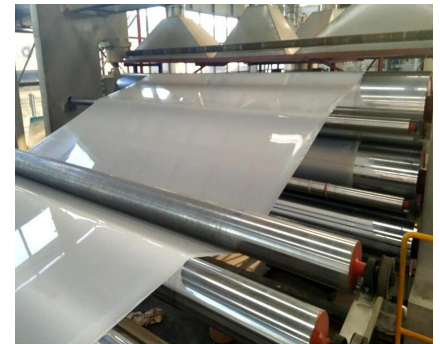




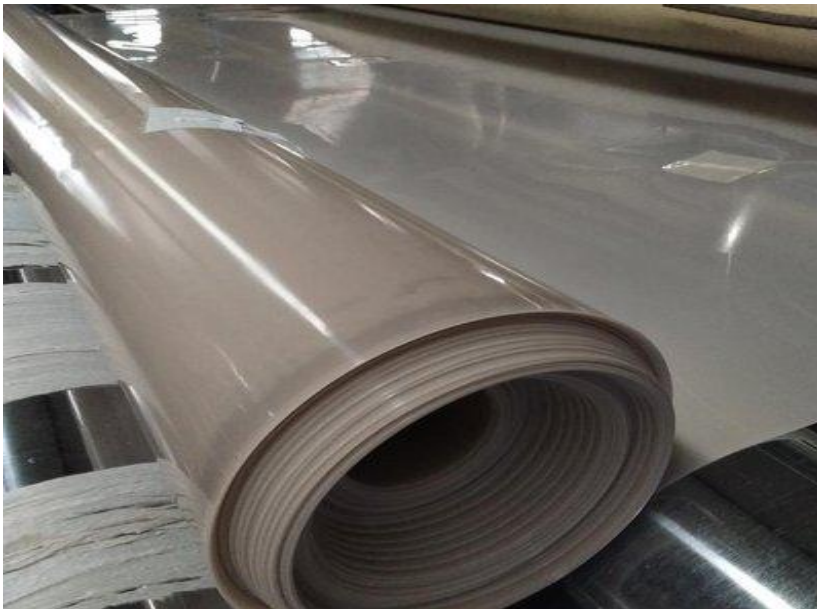
## PVC (Polyvinyl Chloride) Waterproof Board

PVC waterproof board, also known as polyvinyl chloride waterproof board, is a polymer waterproof material with excellent performance, which is widely used in the seepage prevention of major projects, such as subway, sewage dam and tunnel, road and railway foundation, etc., mainly plays the role of seepage prevention and isolation, but also plays the role of strengthening and protection.

PVC waterproof board is made of polyvinyl chloride resin with stabilizer and other auxiliary materials after calendered, laminated, with high quality corrosion resistance, insulation, temperature resistance and impact resistance, high strength, convenient secondary processing, widely used in chemical industry, fertilizer, construction, electroplating, environmental protection water purification treatment and other departments of acid and corrosion resistant structural materials.



[PVC (Polyvinyl Chloride) Waterproof Board]



[PVC (Polyvinyl Chloride) Waterproof Board]

Waterproof board is a plastic roll material that plays a role in preventing water seepage in engineering. It is commonly referred to as waterproof board when the thickness is  $\geq 0.8\text{mm}$ , and when the thickness is  $\leq 0.8\text{mm}$  is called geomembrane. It is a type of anti-seepage material made of polymer as the basic raw material, divided into homogeneous waterproof board and composite waterproof board. Its main function is to prevent liquid leakage and gas volatilization.

### PVC (Polyvinyl Chloride) Waterproof Board Features:

- Long service life, aging resistance, ground materials can be used for more than 30 years, underground up to 50 years;
- High tensile strength, high elongation, small size change in heat treatment;
- Good low temperature flexibility, good adaptability to environmental temperature difference;
- Good root penetration resistance, can be made into planting roof;
- Convenient construction, welding, solid and reliable, environmental protection and pollution-free;
- Strong chemical corrosion resistance, suitable for special occasions;
- It has good plasticity, and the fine parts of the corners are convenient and quick to handle;
- Good perforation resistance;
- Easy maintenance and low cost.

Drainage Products: PVC (POLYVINYL CHLORIDE) WATERPROOF BOARD

## APPLICATION

- (1) Anti-seepage of subway, sewage dam, tunnel, road and railway foundation.
- (2) In the field of construction, PVC waterproof board is used for waterproof treatment of roofs, basements, kitchen and bathroom.
- (3) In the field of transportation, PVC waterproof board is used for waterproof and anti-corrosion protection of bridges and tunnels.

## SPECIFICATIONS OF PVC (POLYVINYL CHLORIDE) WATERPROOF BOARD

TECHNICAL INDICATORS OF PVC (POLYVINYL CHLORIDE) WATERPROOF BOARD GB12952-2003

Number	Item	Type I	Type II
1	Breaking strength (Mpa)≥	8	12
2	elongation at break (%)≥	200	250
3	Heat treatment size change rate (%)≤	3	2
4	Low temperature bending	-20°C No cracks	-25°C No cracks
5	Permeability resistance	0.3MPa 24h impermeable	
6	Perforation resistance	Impermeable to water	
7	Adhesion in shear state	≥3.0 N/mm Or break at the joint	

TECHNICAL INDICATORS OF PVC (POLYVINYL CHLORIDE) WATERPROOF BOARD

Tested Features	Minimum Required Value	Test Result	Unit	Test Method
Waterproofing	impermeable	impermeable	—	EN 1928 (B)
The end of the aging water resistance	impermeable	impermeable	—	EN 1926 ve EN 1928 (A)
Determination of visible defect	perfect	perfect	—	EN 1850-2
Value of tensile strength	>15	>18	N/mm <sup>2</sup>	EN 12311-2
Value of elasticity	>250	>300	%	EN12311-2
Static Load Resistance Value	>20	>22	Kg	EN 12730 (B)
Value of Impact Resistance	>450	>800	mm	EN 12691 (A)
Tear Strength Value	>300	>330	N	EN 12310-1
Reaction to Fire	E Class	E Class	—	EN 13501-1
Value of joint strength	>600	>800	N/50mm	EN 12317-2
Determination of Water Vapor Permeability	25500 ± 7500	25500 ± 7500	μ	EN 1931
Junction Where The Value of Peel Strength	>150	>155	N/50mm	EN 12316-2
Dimensional Stability	<2	<2	%	EN 1107-2
Stability of Elasticity in The Cold	<-25	<-25	°C	EN 495-5

## PROJECTS CASE OF PVC (POLYVINYL CHLORIDE) WATERPROOF BOARD



[Subway in Niger]



[Landfill in Mali]

### CONSTRUCTION PRECAUTIONS

- Foundation treatment: Clean the paving surface, ensure that the substrate is flat, the soil is solid, and there are no unevenness, cracks, sharp objects, stones, iron wires, wooden sticks, etc. Within the anti-seepage range, the grass and tree roots should be removed, and weed control agents should be sprayed. On the contact surface with the membrane, a layer of sand or clay with small particle size should be laid as a protective layer, and the thickness of the protective layer should not be less than 30 cm. Lay in a certain direction, but do not pull too tightly. Leave a certain amount of expansion and contraction to adapt to the deformation of the substrate. When laying waterproof boards, it is necessary to adjust the direction of each unit to facilitate the welding of two units. After laying the waterproof board, it should be pressed with a sandbag to prevent wind and sand from affecting the next step of edge welding.
- Waterproof board welding: Joint treatment is a key construction procedure, usually using hot welding method. The connected surfaces are heated to melt, and then fused into one through pressure. For the laid waterproof board, the edge joints must be free of oil stains, moisture, dust, etc. Before welding, the two edges of the joint should be adjusted to overlap a certain width, which is generally 6-8 cm and flat without wrinkles.
- Joint treatment is a key construction procedure, usually using hot welding method. The surface of the joint is heated to melt, and then fused into one through pressure.

- PVC waterproof board is suitable for roof waterproofing;
- PVC waterproof board is suitable for urban garbage landfill;
- PVC waterproof board is suitable for coal ash dam treatment;
- PVC waterproof board is suitable for liquid storage anti-seepage;
- PVC waterproof board is suitable for water transmission;
- PVC waterproof board is suitable for oil transportation;
- PVC waterproof board is suitable for solid waste storage yard anti-seepage;
- PVC waterproof board is suitable for nderground warehouse;
- PVC waterproof board is suitable for pile membrane cofferdam;
- PVC waterproof board is suitable for tunnels, embankments, dams.

