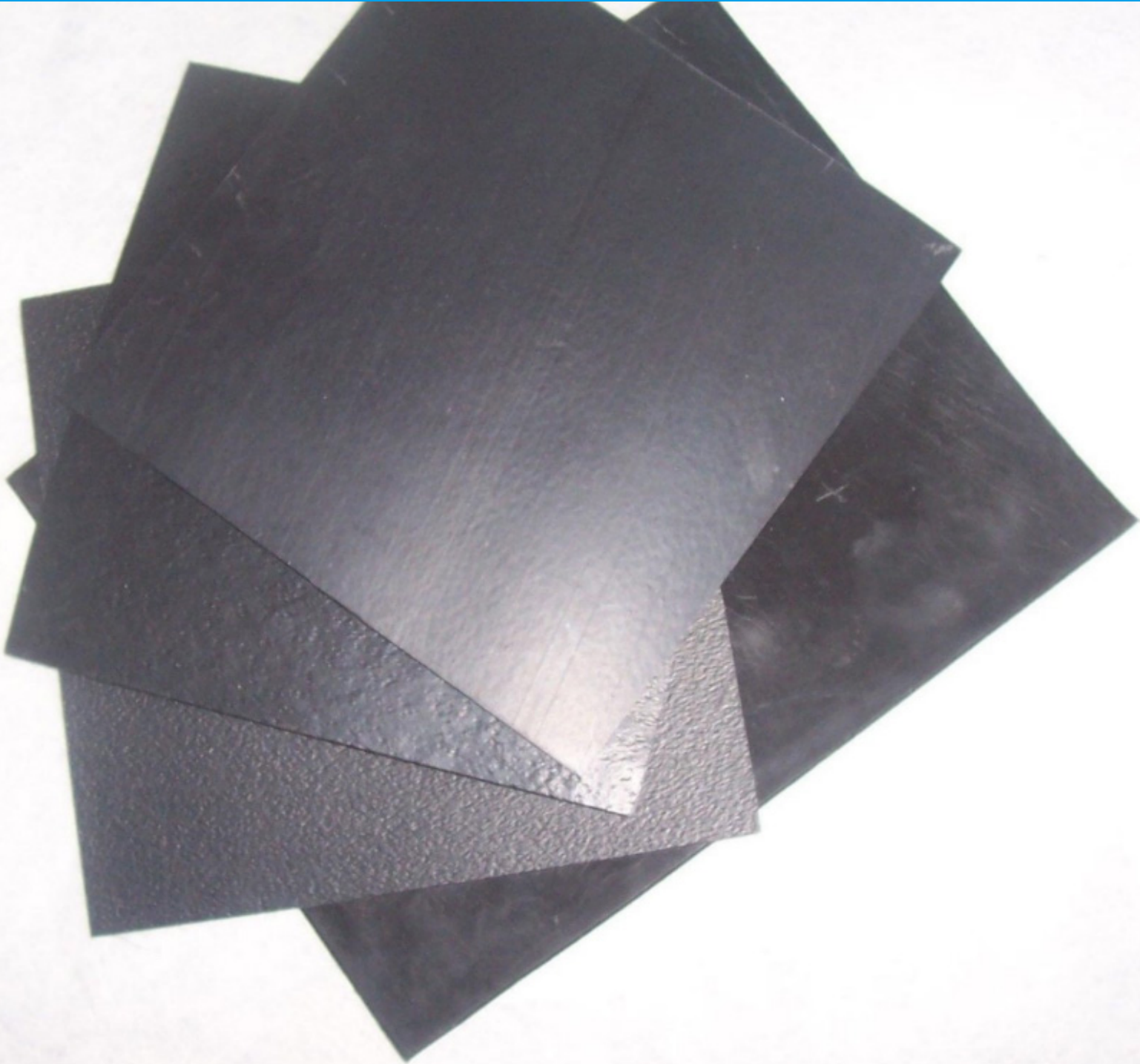




WALCOOM

Walcoom Corporation



GEOMEMBRANE PRODUCTS

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GEOMEMBRANE PRODUCTS

"Walcoom is a trustworthy supplier can offer various geomembrane products to make the foundation become more strength."

For over 20 years, Walcoom Corporation has provided many geomembrane products to customers to stabilize the foundation in many places. We have precision machine, professional teams and adequate experience to provide the high quality geomembrane products and services.

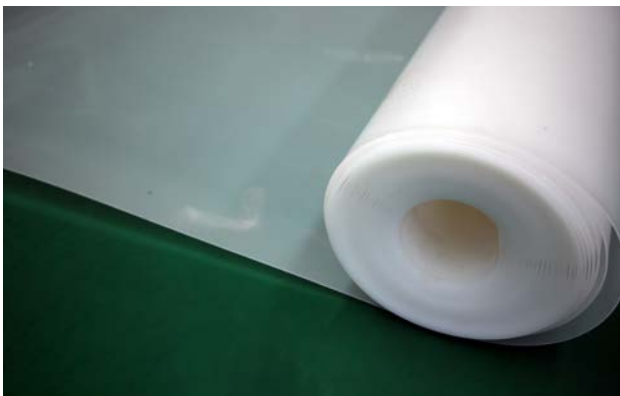
Geomembrane Products are widely used to stabilize the foundation and prevent infiltration. The geomembrane products are widely used in underground engineering, so it must have corrosion resistance and low temperature resistance. Our geomembrane with high impervious coefficient is widely used in dam, tunnel, pond and many other places. In addition, our products with anti puncture ability is not easy to be damaged by branches and stones during construction. We have various materials of geomembrane for you to choose. We also provide hot melt gasket to install them.

Feature

- High impervious coefficient.
- Weather resistance, high and low temperature resistance.
- High tearing resistance.
- Convenient construction, easy to install.
- Corrosion resistance, acid and alkali resistance.
- Anti puncture ability, good protective performance.
- Good aging resistance.

Package

Geomembrane rolls can be packed with black plastic film or plastic woven bag, and then put them on wooden cases or pallets. We can pack according to your request.



A roll of geomembrane



Geomembrane rolls in plastic woven bag

GEOMEMBRANE PRODUCTS

Application

- River bank
- Sewage treatment system
- Agriculture
- Highway
- Landfill
- Subway
- Reservoir
- Artificial lake
- Tunnel
- Railway
- Roofing
- Slope
- Dam
- Aquaculture
- Expressway
- Bridge
- Basement
- Municipal engineering



Geomembrane in pond



Geomembrane in artificial lake



Geomembrane in embankment



Geomembrane in highway

Geomembrane

Geomembrane is a kind of geotechnical material that is widely used to stabilize the foundation and prevent water infiltration in slope, river bank, landfill and many other places. We have five kinds of products that are made of different materials. For example,

HDPE geomembrane is made of high density polyethylene. It has strong anti seepage and isolation performance.

LDPE geomembrane is made of low density polyethylene. Compared with HDPE geomembrane, it has better mechanical strength, elasticity and flexibility.

EVA geomembrane has better anti permeability as a new type of synthetic polymer waterproof coiled material. You can choose the suitable one to meet your needs.



Specification

● HDPE Geomembrane

- **Material:** High density polyethylene.
- **Width:** ≥ 2000 mm.
- **Length:** ≥ 40 m.
- **Color:** Green, black, white, or as your customized.

Table 1: HDPE Geomembrane Technical Index

Number	Item	Index								
		0.30	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
1	Thickness (mm)	0.30	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
1	Density (g/cm ³)	≥ 0.940								
2	Tensile yield strength (vertical and horizontal) (N/mm)	≥ 4	≥ 7	≥ 10	≥ 13	≥ 16	≥ 20	≥ 26	≥ 33	≥ 40
3	Tensile breaking strength (vertical and horizontal) (N/mm)	≥ 6	≥ 10	≥ 15	≥ 20	≥ 25	≥ 30	≥ 40	≥ 50	≥ 60
4	Yield elongation (vertical and horizontal) (%)	-	-	-	$\geq 11\%$					
5	Elongation at break (vertical and horizontal) (%)	$\geq 600\%$								
6	Right angle tear load (vertical and horizontal) (N)	≥ 34	≥ 56	≥ 84	≥ 115	≥ 140	≥ 170	≥ 225	≥ 280	≥ 340
7	Anti-puncture strength (N)	≥ 72	≥ 120	≥ 180	≥ 240	≥ 300	≥ 360	≥ 480	≥ 600	≥ 720
8	Carbon black content (%)	2.0%–3.0%								
9	Carbon black dispersibility	10 data in the 3 not more than one, 4, 5 is not allowed								

● LDPE Geomembrane

- **Material:** Low density polyethylene.
- **Width:** ≥ 2000 mm.
- **Length:** ≥ 40 m.
- **Color:** Black or as your customized.

Table 2: LDPE Geomembrane Technical Index

Number	Item	Index								
		0.30	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
1	Thickness (mm)	0.30	0.50	0.75	1.00	1.25	1.50	2.00	2.50	3.00
1	Density (g/cm ³)	≤ 0.939								
2	Tensile breaking strength (vertical and horizontal) (N/mm)	≥ 6	≥ 9	≥ 14	≥ 19	≥ 23	≥ 28	≥ 37	≥ 47	≥ 56
3	Elongation at break (vertical and horizontal) (%)	≥ 560%								
4	Right angle tear load (vertical and horizontal) (N)	≥ 27	≥ 45	≥ 63	≥ 90	≥ 108	≥ 135	≥ 180	≥ 225	≥ 270
5	Anti-puncture strength (N)	≥ 52	≥ 84	≥ 135	≥ 175	≥ 220	≥ 260	≥ 350	≥ 435	≥ 525
6	Carbon black content (%)	2.0%–3.0%								
7	Carbon black dispersibility	10 data in the 3 not more than one, 4, 5 is not allowed								

● EVA Geomembrane

- **Material:** Ethylene vinyl acetate.
- **Thickness:** 1.0, 1.2, 1.5, 1.8, 2.0 mm, or more than 0.5 mm.
- **Width:** 1.0, 1.1, 1.2, 1.5, 2.0 m.
- **Length:** More than 20 m.
- **Color:** Black or as your customized.

Table 3: EVA Geomembrane Technical Index

Item	Test	Resin series index			
1	Tensile break strength (MPa)	Normal temperature	10	16	14
		60 °C ≥	4	6	5
2	Elongation at break (%)	Normal temperature	200	550	500
		-20 °C ≥	15	350	300
3	Tear strength	kN/m ≥	40	60	40
4	Impervious property, 30 min (no infiltration)		0.3 MPa	0.3 MPa	0.3 MPa
5	Bending temperature at low temperature (°C ≤)		-20	-35	-35
6	Heating telescopic volume (mm)	Extend ≤	2	2	2
		Shrink ≤	6	6	6
7	Hot air aging (80 °C × 168 h)	Fracture tensile strength retention rate (% ≥)	80%	80%	80%
		Elongation at break retention rate (% ≥)	70%	70%	70%
8	Alkali resistance (saturated OH (Ca) ² solution at room temperature × 168 h)	Fracture tensile strength retention rate (% ≥)	80%	80%	80%
		Elongation at break retention rate (% ≥)	80%	90%	90%
9	Artificial weathering	Fracture tensile strength retention rate (% ≥)	80%	80%	80%
		Elongation at break retention rate (% ≥)	70%	70%	70%

● **ECB Geomembrane**

- **Material:** Ethylene vinyl acetate copolymer.
- **Thickness:** 1.0, 1.2, 1.5, 1.8, 2.0, or more than 0.5 mm.
- **Width:** 1.0, 1.1, 1.2, 1.5, 2.0 m.
- **Length:** More than 20 m.
- **Color:** Black or as your customized.

Table 4: ECB Geomembrane Technical Index

Item	Test	Value
1	Tensile strength (Pa)	≥ 16
2	Elongation at break (%)	≥ 550%
3	Tear strength (kN/m)	≥ 60
4	Impervious property	0.3 MPa no infiltration
5	Low temperature bending (°C)	-35 °C

● **PVC Geomembrane**

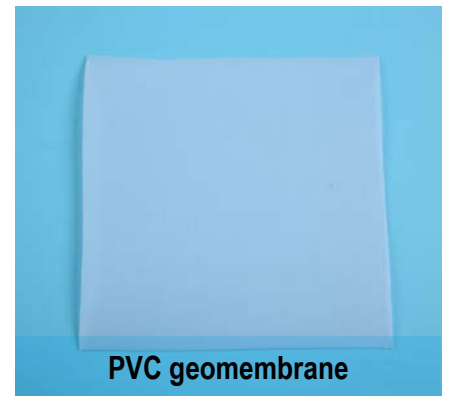
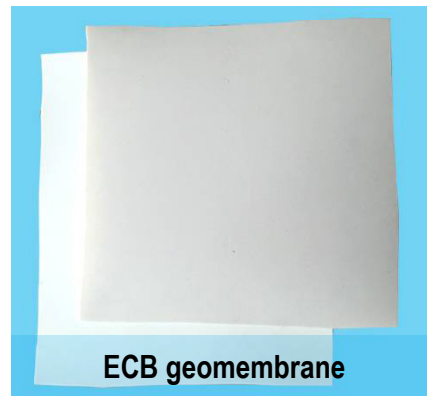
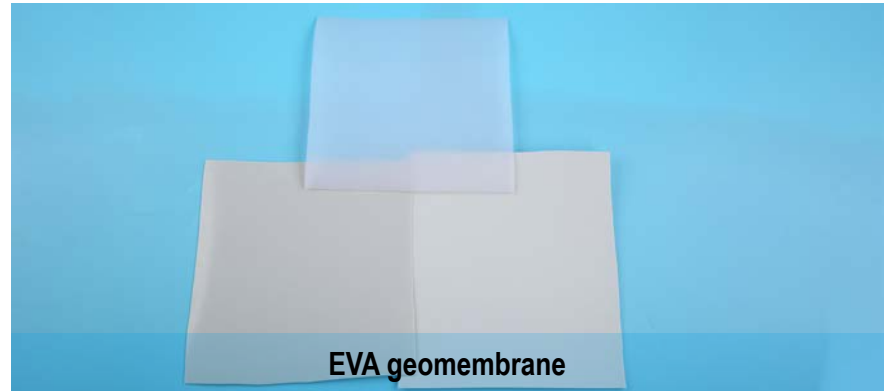
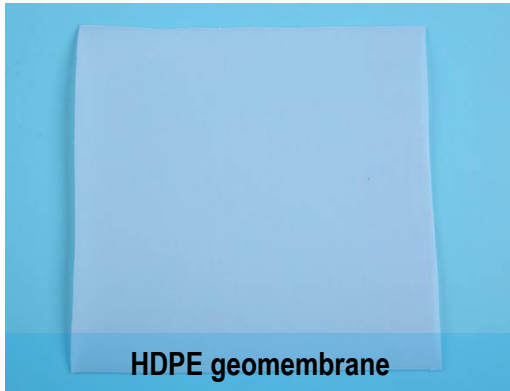
- **Material:** PVC resin.
- **Thickness:** 0.30, 0.50, 0.60, 0.80, 1.00, 1.50, 2.00 mm.
- **Width:** 2000 mm or more than 2000 mm.
- **Color:** Black or as your customized.

Table 5: PVC Geomembrane Technical Index

Number	Item	Index	
1	Density (g/cm ³)	1.25–1.35	
2	Tensile strength (vertical and horizontal), (MPa)	≥ 15/13	
3	Elongation at break (vertical and horizontal), (%)	≥ 220%/200%	
4	Tear strength (vertical and horizontal), (N/mm)	≥ 40	
5	Low temperature bending (-20 °C)	No cracks.	
6	Dimensional change rate (vertical and horizontal), (%)	≤ 5%	
7	Permeability coefficient (cm/s)	≤ 10 ⁻¹¹	
8	Permeability coefficient (cm ³ × cm)	By design or contract	
9	Heat aging treatment	Exterior	No bubbles, no adhesion, no holes.
		Relative change in tensile strength (%)	≤ 25%
		Relative elongation at break, (%)	≤ 25%
		Low temperature bending (-20 °C)	No crack.

- **Standard:** GB/T 17643, CJ/T 234, CJ/T 276, JTT/ 518.

GEOMEMBRANE PRODUCTS



Hot Melt Gasket

Hot melt gasket is a kind of accessories that is used to install and fix the geomembrane and geotextile fabric. It is welded on geomembrane or geotextile by the hot air welding plastic gun. Compared with traditional sling type installation, it will not cause damage to the geomembrane. It is widely used in tunnel, so it is also called the tunnel geomembrane for hot melt round gasket. We have two types of hot melt gasket. One is stomatal type, another is no stomatal type. You can choose the suitable one according to different construction conditions.

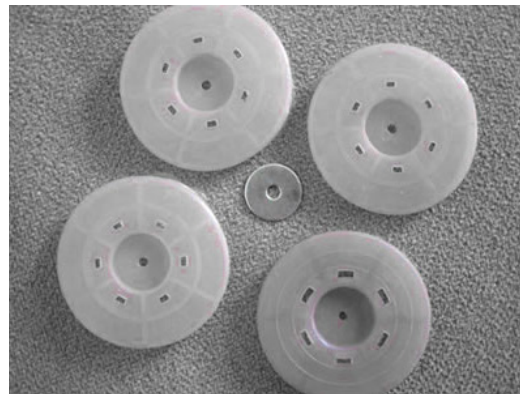


Specification

- **Material:** PVC, EVA, PE or other plastic.
- **Diameter:** 65, 70, 80 mm.
- **Color:** Black, white, red. Other colors also can be customized.
- **Type:**
 - **Stomatal type.**
 - **No stomatal type.**



Stomatal type hot melt gasket.



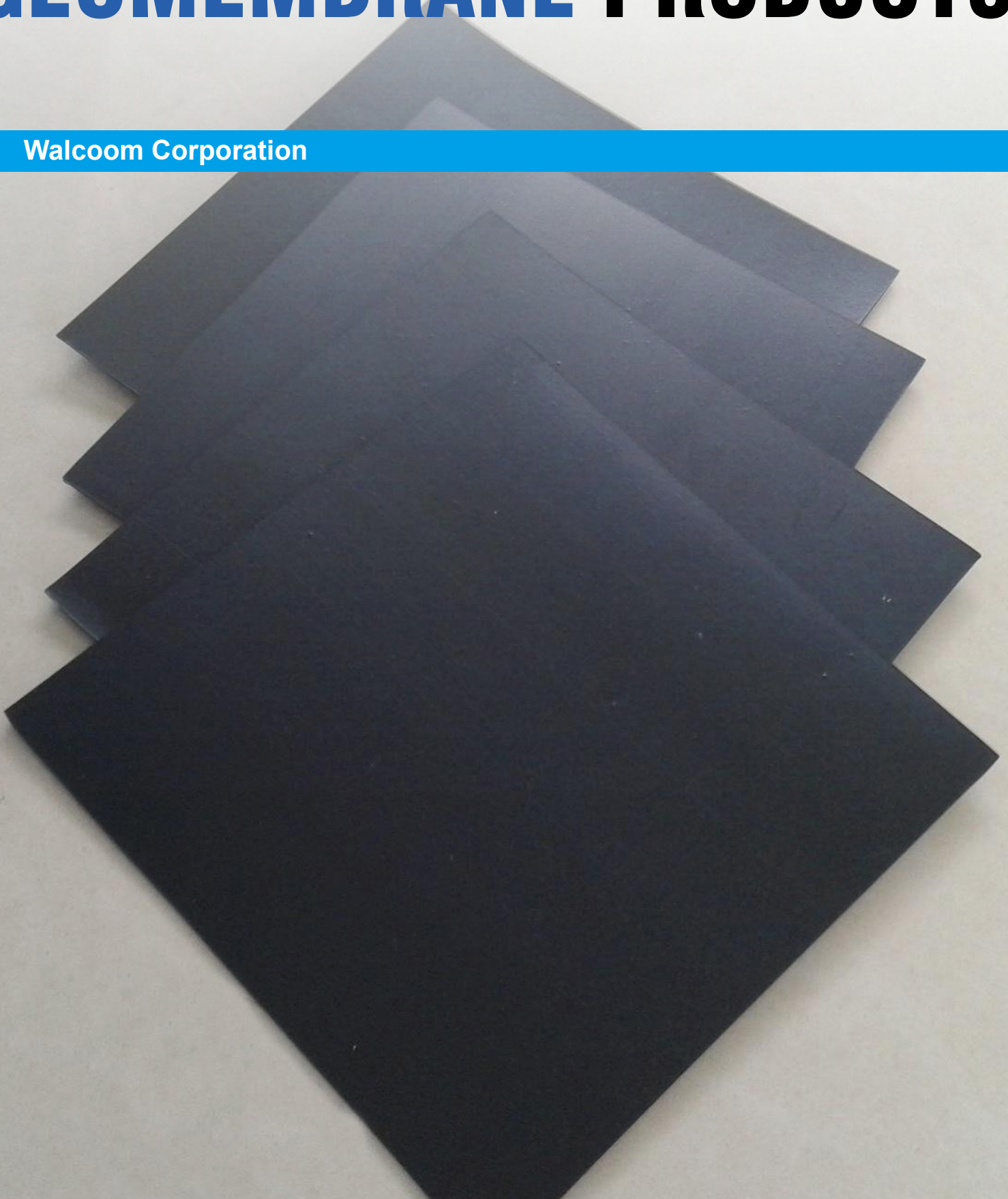
No stomatal type hot melt gasket.

Hot Melt Gasket Installation Tips

- Hot melt gasket can't be used in flammable and corrosive gas environment.
- Hot melt gasket should be installed in accordance with the plum blossom shape.
- In the tunnel excavation face, using nail gun to fix hot melt gasket on the geomembrane. When welding the hot melt gasket, direction from the bottom to the top clockwise or counter clockwise direction.
- When heat welding, 60 percent of the hot air should be aimed to the hot melt gasket to avoid damage the geomembrane.
- The hot welding time should controlled in 5 to 10 seconds. You can adjust according to the actual environment. The time should not be too long.
- When welding, workers should not use circular electric iron to melt.
- We should mention that don't hurt workers by the high temperature hot air.

GEOMEMBRANE PRODUCTS

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