



WATERPROOFING SYSTEMS

GECO WALL APP
Waterproofing membrane



DESCRIPTION

Pre-fabricated waterproofing membrane made of distilled bitumen and elasto-plastic polymers (APP). GECO WALL is specifically developed to waterproof foundation and retaining walls, guaranteeing excellent adhesion and workability. Reinforced with a woven non woven single strand composite polyester, providing good mechanical characteristics and excellent dimensional stability. GECO WALL is protected on the upper surface by a woven non woven polypropylene mat. On request a special polypropylene film finish on the upper face is available.

METHODS OF APPLICATION

- Prepare the surface with a bituminous primer either by brush or airless, approx. 200/400 g/m².
- Position the pre-measured rolls on the vertical application surface, making sure to mechanically fix the upper portion with the appropriate bar and nails.
- The membrane is normally applied by gas torch or hot air, making sure to provide for side & head laps, respectively of 10 & 15 cm.
- It is always recommended to apply on the external surface of the membrane a dimpled faced protection sheet with drainage functions such as our FONDPLAST (or similar).
- Also lay at the bottom of the excavation and over an excess portion of the dimple sheet an appropriate perforated drainage tube.

For further information and news it is recommended to consult the GECO technical literature; our Technical office is always available to evaluate particular problems and to provide the necessary assistance to best apply our waterproofing membranes.

ADVANTAGES

UPPER FACE FINISH WITH WOVEN NON WOVEN POLYPROPYLENE MAT

The particular upper face finish provides multiple advantages, of which:

- improved aesthetics;
- increased tear resistance: useful with mechanical fixing, reduces deformation when fixed with nail and washer;
- facilitates joining of overlaps: the polypropylene mat is perfectly compatible with the waterproofing mass and improves adhesion between the layers (for example with the FONDPLAST dimple sheet for protection & drainage).

GECO WALL (APP)

The atactic polypropylene obtained from the polymerization of the propylene has a perfect compatibility with the bitumen to which it confers:

- better dimensional stability;
- better UV resistance;
- better heat resistance.

Technical Characteristics	Measure units	Reference norm	P	Tolerance
Type of compound			APP	
Type of reinforcement			Polyester	
Upper face finish			Polypropylene mat / Polypropylene film (on request)	
Lower face finish			PE film	
Length	m	EN 1848-1	10	-1%
Width	m	EN 1848-1	1	-1%
Mass	kg/m ²	EN 1849-1	4	±10%
Cold flexibility	°C	EN 1109	-10	
Flow resistance	°C	EN 1110	120	
Shear resistance L / T	N/5 cm	EN 12317-1	450/350	-20%
Tensile strength L/T	N/5 cm	EN 12311-1	600/400	-20%
Elongation at break L/T	%	EN 12311-1	35/35	-15
Nail tear strength L/T	N	EN 12310-1	150/150	-30%
Static puncture resistance	kg	EN 12730	15	
Dynamic puncture resistance	mm	EN 12691	1000	
Dimensional stability	%	EN 1107-1	-0,5	
Fire resistance		EN 13501-5	F ROOF	
Fire reaction		EN 13501-1	F	
Watertightness	kPa	EN 1928	60	

TECHNICAL DATA SHEET



APPLICATION

- On cementitious surfaces and similar apply, by roller or airless, bituminous primer, approx. consumption 200/400 g/m².
- Position the membrane sheets staggered, making sure to provide side laps of 10 cm; the membranes must be applied to the substrate fully bonded by means of a gas torch or specific hot air machine.
- Apply the HDPE dimpled faced protection & drainage sheet, allowing an excess of approx. 40 cm along the lower part of the excavation, making sure to mechanically fix the higher extremity of the sheet with the appropriate bar and nails.
- Lay at the bottom of the excavation and over an excess portion of the dimple sheet an appropriate perforated drainage tube.
- After having laid an appropriate bed of drainage material over the tube, back fill.


RECOMMENDATIONS

To best use the technical characteristics of bituminous membranes and guarantee the maximum performance and durability of the jobs where they are used, some simple but fundamental rules must be respected.

- The rolls are to be stored in an upright position, indoors in a dry and ventilated area, away from heat sources. Absolutely avoid the stacking of rolls and pallets for storage or transport to avoid possible deformations which may compromise a perfect installation. It is recommended to store the product at temperatures above 0°C.
- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.
- The application surface must be smooth dry & clean.
- The application surface must be previously treated with a suitable bituminous primer to eliminate dust and enhance the adhesion of the membrane.
- In situations of application on vertical surfaces superior to 2 meters or on very sloped substrates, apply suitable mechanical fixings to the head laps, after which they will be sealed when torching the head laps.
- The application must be done at temperature higher than +5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.
- For information concerning storage and application of Geco membranes, please refer to the "Installation manual".

FIELDS OF USE

EN13969 RETAINING WALLS 0958-CPR-2045/1

CERTIFICATION 	N. LAYERS			METHOD OF APPLICATION					TYPE OF APPLICATION			TYPE				
	SINGLE LAYER	DOUBLE LAYER	MULTILAYER	TORCH	HOT AIR	MIXED (TORCH/AIR)	COLD BOND GLUE	MECHANICAL FIXING	THERMOADHESIVE / SELF-ADHESIVE	FULLY BONDED	PARTIALLY BONDED	LOOSE LAID	COMPLEMENTARY LAYER	TOP LAYER	HEAVY PROTECTION	ANTI-ROOT
GECO WALL APP P 4 KG/MQ	X	X	X	X				X		X			X	X		