

Onduline



# Fondaline, the durable solution for protecting walls and improved ground water drainage.

# PROTECTION FOR FOUNDATION WALLS

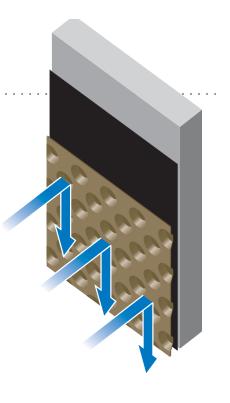
Applying Fondaline to your foundation walls is Onduline's guaranteed optimum protection for the parts of your house which are under ground.

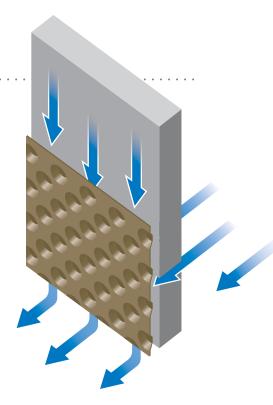
By forming a protective shield on foundation surfaces and making the walls more robust, Fondaline makes the building safer. In actual fact, if damp is the main cause of rust in steel, it can cause serious damage to foundation materials and, as a result, to the stability of the building.

Tough yet flexible, Fondaline is very easy to apply. It prevents roots from getting at walls, withstands high pressure, chemical agents which are naturally present in the ground and is effective up to a depth of 5 metres.



Fondaline is a Polyethylene High Density membrane (PEHD) which, by virtue of its semi-conical contours, forms a gap between the structure and the wall. It creates a drainage system through ventilated gaps which protect the sunken wall. Initially, it absorbs hydrostatic pressure from the surface and below ground, then evacuates it via an underground channel and evaporation ducts. This way, ground water does not infiltrate the foundations and leaves surfaces undamaged.





# 3 areas of application in the residential sector













# EXTERNAL FOUNDATION WALLS

Positioned between the ground and the exterior surface of the foundations or basement, Fondaline protects walls against damage caused by underground water coming to the surface. It creates an effective barrier and channels water for improved drainage towards the exterior of the structure.

Fondaline forms a structurally independent layer which offers better resistance to degradation from the ground than traditional solutions.

#### **Benefits**

- Prevents cracks forming in underground walls.
- Collects and channels underground water to prevent it from penetrating inside the basement and foundations.
- Protects the damp-proof membrane against backfill.
- Breaks capillaries and directs water outside the structure.
- Provides optimum ventilation for basement walls, thanks to air flow between membrane and wall.
- · Greatly enhances wall drying.
- Improves thermal insulation.

# INTERNAL FOUNDATION WALLS

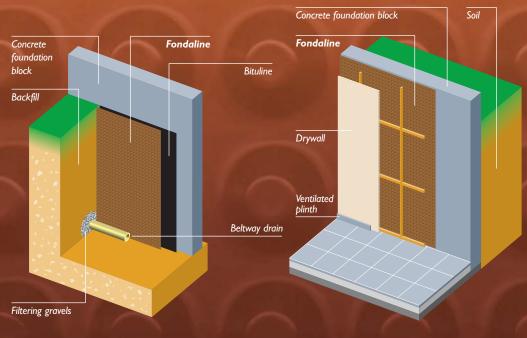
Fondaline can be applied to new constructions as well as the renovation of existing walls which have already been affected by damp.

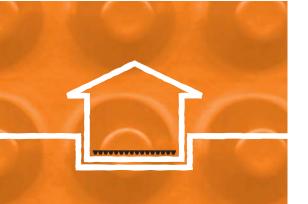
The ventilated gap drainage technology effectively regulates damp pressure through the walls and, by virtue of the existing air ducts throughout the building, natural ventilation enables the walls to breathe.

By considerably reducing the risk of condensation inside the structure, Fondaline creates a more robust building environment.

#### **Benefits**

- Protects walls against infiltration of water.
- The polyethylene mesh creates an isolated surface which ensures walls remain in an excellent condition.
- By creating a flow of air along the damp surfaces, Fondaline stabilises pressure and helps dry out the walls.
- Ventilation ducts can be installed at floor and ceiling level for optimum insulation.





# INTERNAL FLOORS

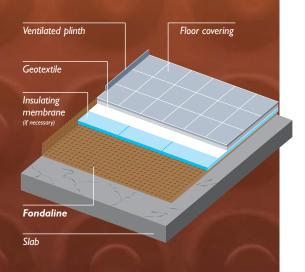
Water infiltration in flooring is a recurrent building problem which has serious consequences on a construction site and a building as a whole. Fondaline is the perfect answer to these problems.

Thanks to the Fondaline technology which withstands the build up of hydrostatic pressure, floors remain in a sound and solid condition.

The system can be directly integrated to the structure's internal ventilation by using ventilated skirting/baseboard or Fondaline's waterproofing technology in the wall lining.

#### **Benefits**

- Equalises damp pressure between the floor base and covering.
- Protects floor covering against damp.
- · Can withstand heavy loads.
- Improved underfoot comfort by reducing dowel impact on suspended floors.



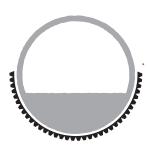
# Underground constructions





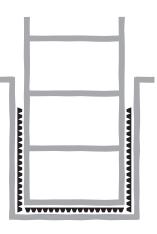
# **TUNNELS**

Through its ability to evacuate runoff, Fondaline is a key factor in waterproofing tunnels and other civil engineering projects.



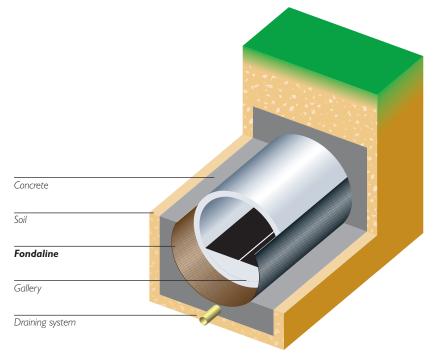
# TUBBING

Thanks to its drainage system channelling hydrostatic pressure, Fondaline protects foundations by stopping water rising by capillary action and infiltrating the concrete.



# CAR PARKS

Withstands high pressure and effective up to a depth of 5 metres, Fondaline is the ideal solution to conserve damp-proofing for underground levels and car parks in particular. For perfect insulation, Fondaline should be installed around the whole building, so that there is no contact between the walls and the ground.



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## Easy to install - effective immediately after installation

Fondaline has two differently coloured sides, making it easy to apply the black side to foundation walls. Due to its low weight, its flexibility and durability, it can be applied up to a depth of 5 metres.



## **Protection and safety**

The Fondaline texture in High Density Polyethylene has been specially designed to protect underground levels and foundations from impacts during excavations and ground movements. In addition to its acoustic attributes, the membrane can withstand roots and high pressure (250 kN/m²).



## Waterproof

Thanks to its semi-conical contours which enable permanent water drainage, Fondaline protects your walls against damp and prevents the appearance of cracks and moisture.



## Adaptable

Available in different sized rolls, and thanks to its finesse and flexibility, Fondaline can be applied everywhere, including hard to reach angles.



600 FONDA

## Thermal resistance

Fondaline can withstand low and high temperatures (-30°C / 80°C).



## Chemical resistance

Fondaline withstands all chemical agents which are naturally present in the ground. In addition, it is neutral and resistant to rainwater.



## **Economical method**

With a reputation in the waterproof materials sector, Onduline offers a cost-saving solution tailored to meet your requirements.



#### 20 year guarantee against degradations in normal usage conditions

Fondaline ensures effectiveness and peace of mind for 20 years.



# ■ Technical specifications

	UNIT	SURFACE WEIGHT 500g/m <sup>2</sup>	SURFACE WEIGHT 600g/m <sup>2</sup>
Composition		High Density Polyethylene	
Colours		Twin-coloured, black side facing wall, brown against backfill	
Height of contours	mm	8	
Density of contours	Nbre/m²	1850	
Length of rolls	m	20	
Height of rolls	m	0,50 - 1,00 - 1,50 - 2,00 - 2,50 - 3,00 - 3,50 - 4,00	
Pressure resistance ①	kN/m²	150	> 250
Traction resistance ②	kN/m²	6,01	8,64
Extension at breaking point ®	%	45,40	43,60
Resistance to tear from nail 4	N	200	326
Temperature stability	°C	-30 / +80	
Volume of air space	I/m²	5,50	

① Test report n° 182859 NF EN 604

# **■ Packaging**

ROLL DIMENSIONS	SURFACE AREA in m <sup>2</sup> / PALLET	NUMBER OF ROLLS / PALLET
0,50 x 20 ml	480	48
1,00 x 20 ml	480	24
1,50 x 20 ml	360	12
2,00 x 20 ml	480	12
2,50 x 20 ml	600	12
3,00 x 20 ml	720	12
3,50 x 20 ml	840	12
4,00 x 20 ml	960	12

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