

DMX FlexSheet™

Professional Grade
Foundation Wrap



BETTER SCIENCE • BETTER PRODUCT

DMX
PLASTICS LIMITED

How Does Water Get Into The Basement?

When wet soil comes into contact with unprotected concrete, the concrete acts like a sponge, and actually sucks the moisture in, this is known as **CAPILLARY SUCTION**.

Rainwater that permeates the soil and makes its way towards the basement foundation, is forced against the concrete through **HYDROSTATIC LOAD**, which is the force of the soil against the foundation.

HYDROSTATIC LOAD, pushes water to the concrete, and it can penetrate even the smallest crack in an unprotected concrete foundation.

Therefore, to prevent basement leaks, water must not be permitted to come into contact with an unprotected concrete foundation.

Why Is Tar Not Effective?

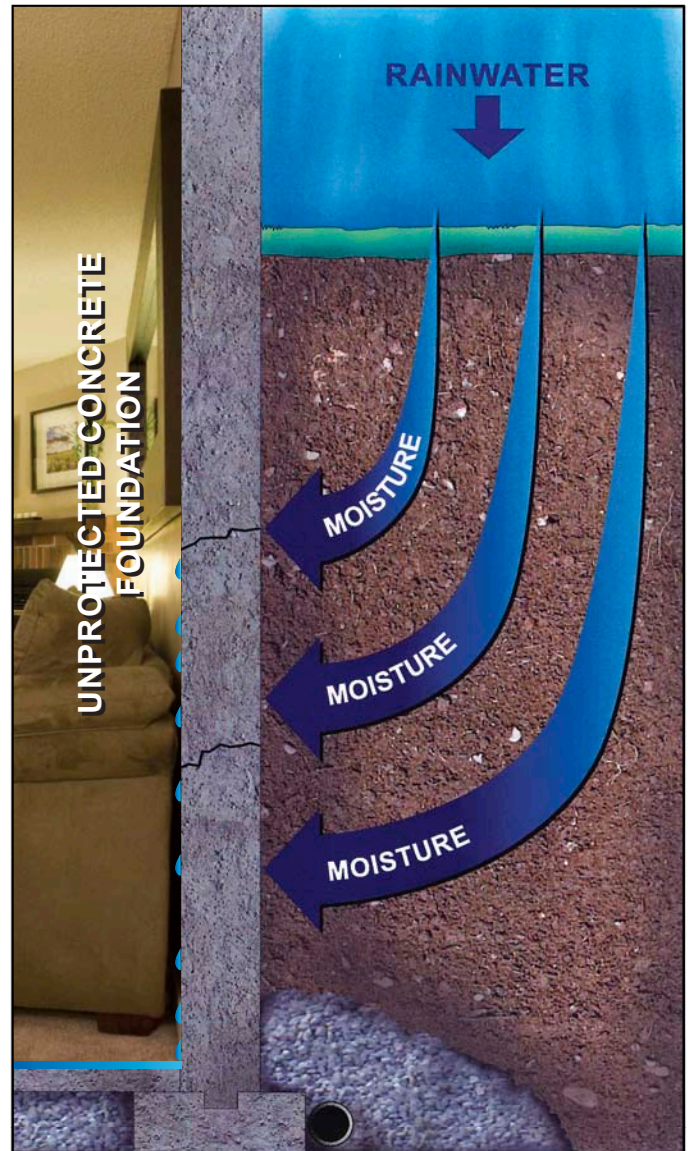
Traditionally, concrete basements have been dampproofed with a coating of tar, which is sprayed on the foundation.

When concrete cures, it cracks, this is very normal for concrete.

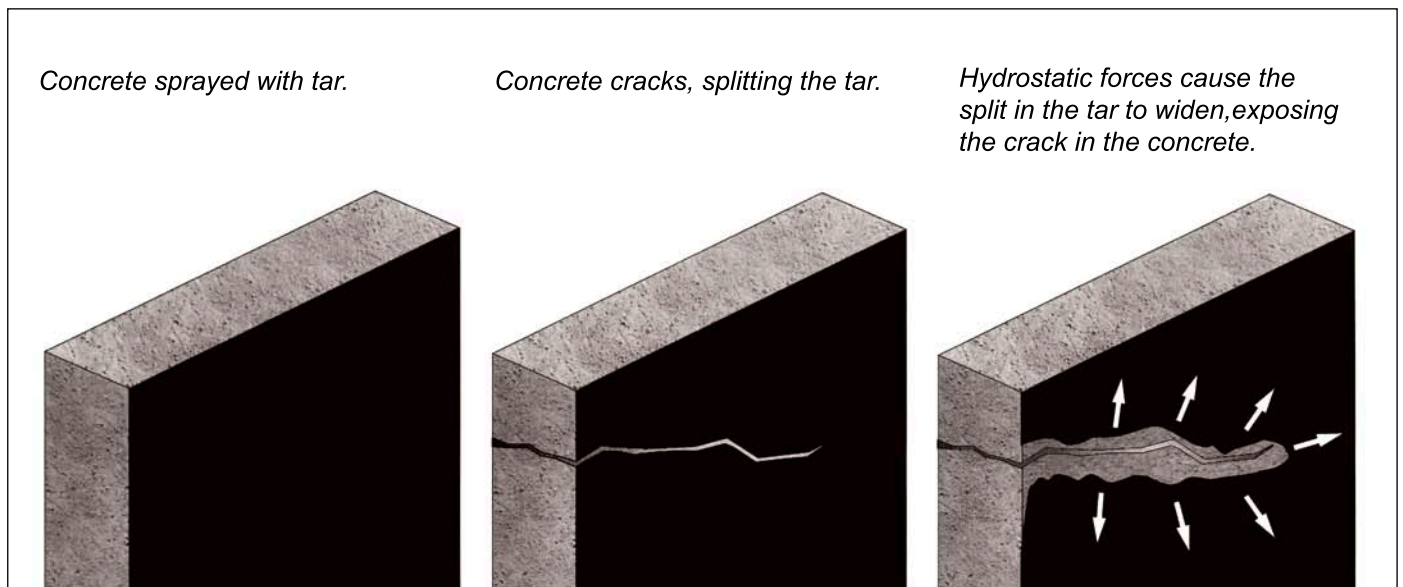
When the concrete cracks, it also splits the layer of tar that is covering it (as tar has very low tensile strength), causing entry ways into the basement, for the moisture in the soil.

Once the tar splits apart, it cannot repair itself again, in fact, the **HYDROSTATIC LOAD** can often cause the splits to widen, thereby further exposing the concrete.

Also, during backfill, rocks and stones in the soil will often damage the layer of tar, thereby, limiting its effectiveness as a dampproofing medium.



*Rainwater that moves towards the basement foundation is forced against the concrete through **HYDROSTATIC LOAD**.*



Concrete sprayed with tar.

Concrete cracks, splitting the tar.

Hydrostatic forces cause the split in the tar to widen, exposing the crack in the concrete.

How Does DMX FlexSheet™ Work?

DMX FlexSheet™ is made from an Impact Enhanced High Density Polyethylene Compound known as SL365.

SL365 has excellent impact and tensile properties, making it the ideal raw material for DMX FlexSheet™.

Most importantly, SL365 is inert, it will not harm the environment, and it does not emit hazardous chemicals into the soil around the house, like tar.

DMX FlexSheet™, is a dimpled sheet, the dimples are approximately 8 mm high, spaced in a symmetrical design of about 20 mm throughout the sheet, from top to bottom.

The reason for the dimples is twofold:

1. When DMX FlexSheet™ is applied to the wall, the dimples face the concrete foundation, this creates an AIR GAP of 8 mm (1/4") between the foundation wall and DMX FlexSheet™.
2. The dimples are designed to withstand the HYDROSTATIC LOAD of the soil.

When installed in accordance with our Installation Manual, DMX FlexSheet prevents water in the soil from coming into contact with the concrete foundation, thereby effectively eliminating the effect of CAPILLARY SUCTION.

Even if water somehow gets behind the DMX FlexSheet™, it will simply flow down to the footings, as there will be no HYDROSTATIC LOAD, pressing the water against the concrete foundation.

When the concrete foundation cures and sets, even the biggest cracks will be protected by DMX FlexSheet™, as it covers the entire foundation like a protective blanket.

DMX FlexSheet™, being made of SL365, is also able to withstand the impact of rocks and stones, effectively protecting the foundation during backfill.



DMX FlexSheet™ applied to foundation wall eliminates the effects of Capillary Suction and Hydrostatic Load.



DMX FlexSheet™ can be easily installed in all types of weather.



What Makes DMX FlexSheet™ Different From Other Air Gap Membranes?

	Requirements	DMX (*13169-R)	Platon (*12266-R)	Delta-MS (*12658-R)	SuperSeal (*13099-R) (Imported)
Thickness (mm)	min. 0.6 in flat area min. 0.5 in dimple area	0.9 1.1	Pass 0.48	0.7 0.5	0.685 0.687
Weight (g/m ²)	min. 500	878	Pass	590	639
Impact load	min. 12 of 15	30 of 30	Pass	15 of 15	15 of 15
Static puncturing (rating of 3)	min. 5 of 6	12 of 12	Pass	6 of 6	6 of 6
Cold bending	no visible cracking	no visible cracking	no visible cracking	no visible cracking	no visible cracking
Water vapour permeability (g/m ² /d)	max. 4	pass	Pass	3.4	3.3
Original					
- Tensile strength (kN/m width)	min. 10	MD 21.2	Pass	MD 13.11, XD 12.63	MD 13.5, XD 14.8
- Elongation(%)	min. 25	MD 102.4	Pass	MD 37.5, XD 34.2	MD 472, XD 533
Heat aging					
- Dimensional change (%)	±1	Width -0.2 Length -1.3	-1.25	MD -0.68, XD -0.22	MD - 1.77, XD -0.20, Av 0.99
- Tensile strength (%)	80% of original	MD 99%	Pass	MD 13.95(>100%), XD 14.12(>100%)	MD 106, XD 103
- Elongation(%)	70% of original	MD 74%	Pass	MD 30.3(81), XD 30.8(90%)	MD 111, XD 100
Compressive strength (kN/m²)	min. 100	419	Pass	132	153.3

*CCMC approval number

Benefits To The Installing Contractor

- No more hazardous chemicals on the construction site, you can work safely and comfortably.
- No waiting for foundation walls to cure or dry, you can install DMX FlexSheet™ as soon as the forms are removed.
- DMX FlexSheet™ can be installed in all weather, rain or shine.
- No investment in special spray equipment required, just a hammer is all you need to install DMX FlexSheet™.
- Easy to put on, an average home of 1,000 sq.ft. takes just one hour to install correctly.
- DMX is the only vertically integrated manufacturer of Air Gap Membranes, we make the raw material as well as DMX FlexSheet™, this gives you the highest quality membrane at the best prices in the business – always!



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Benefits To The Builder

- No more costly callbacks to fix leaks in the basement.
- No waiting for ideal weather conditions, DMX FlexSheet™ can be installed in all types of weather, which means that homes can be finished quicker.
- No hazardous chemicals on the site.
- Happy homeowners!

CCMC Approval Numbers

13169-R (Rigid Polyethylene Dampproofing Membrane)

13182-R (Foundation Drainage Systems)



Represented By: