

**Gundlle**  
PLASTICS GROUP

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**Termite and watertight  
when you need it.**

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**Gundlle**<sup>®</sup>  
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Patent Pending



# GUNDLE PLASTICS GROUP INTRODUCES ITS NEW DUAL PURPOSE MEMBRANE

## Termite and waterproof

### When you need it

Gundle **A.T. (ANTI TERMITE) DPC (DAMP PROOF COURSE) AND USB (UNDER SURFACE BED)** membranes are dual purpose SABS membranes which can be used for all damp and waterproofing applications and is termite resistant.

It has been a long standing myth that termites can not eat through a plastic membrane.

Gundle research has shown that termites can and do breach plastic membranes as shown in the picture below.

As a result of its field research, Gundle has developed an anti termite membrane to protect structures from termites



# THE GUNDLE SABS CO-EXTRUDED ANTI TERMITE AND DAMP PROOFING MEMBRANES

Multi-layer co-extrusion has the following advantages:

- It has a cross-linking effect between the different layers, which gives the sheeting added strength.
- Each layer can have a different formulation. For instance: one layer can contain an insecticide to repel termites.

## GUNDLE QUALITY

All Gundle products comply with the national building regulations and are accepted by all municipalities and government departments.

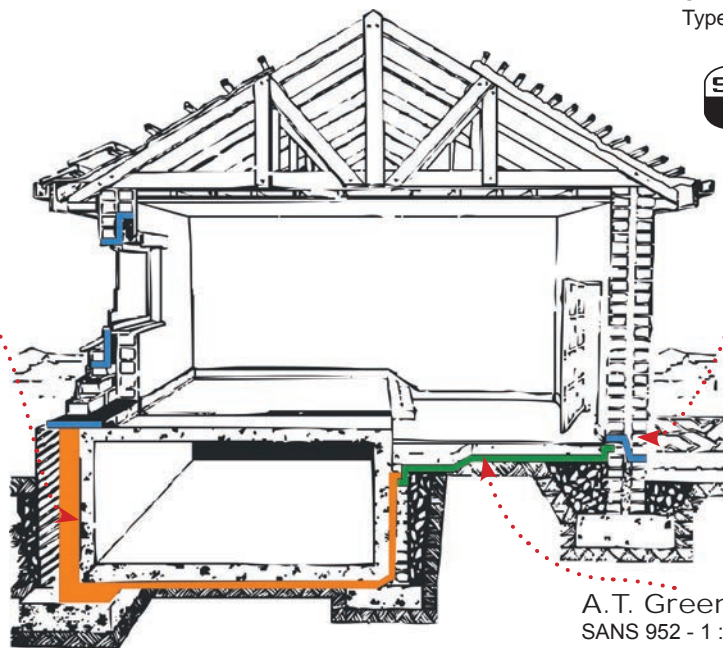
Gundle API has one of the most sophisticated and well equipped test laboratories in S.A. to ensure conformance with SABS and ISO standards. The quality of Gundle products has become a benchmark in the industry.

## GUNDLE API CERTIFIED PRODUCTS - ANTI TERMITE AND DAMP PROOFING MEMBRANES

AT. Hyperlastic Orange® 3 Layer  
SANS 952 - 1 : 2011  
Type A



A.T. Brikgrip® DPC  
SANS 952 - 1 : 2011  
Type B



A.T. Green® USB  
SANS 952 - 1 : 2011  
Type C



# SABS STANDARD

## SANS 952 - 1 : 2011

### ANTI TERMITE AND DAMP PROOFING CO-EXTRUDED MEMBRANES

The following is an extract from the SABS 952 specification covering co-extruded films.

MECHANICAL AND PHYSICAL PROPERTIES FOR CO-EXTRUDED (3 LAYER) FILM	Property	Requirement			Test method subsection
		Film type			
		A A.T. Hyperlastic Orange	B A.T. Brikrip DPC	C A.T. Green USB	
	<b>Thickness*</b> , $\mu\text{m}$ , min.	250	375	250	6.5.1 OR 6.5.2 as relevant
	<b>Tensile properties</b>				
	a) Breaking strength, N/mm of width, min.	3,75	3,76	2,16	6.6
	b) Elongation at break, %, min.	350	350	200	6.6
	<b>Puncture resistance</b> , N/mm of thickness, min.	30,5	25,0	35,0	6.7
	<b>Tear strength</b> , N/mm of thickness, min.	53,5	43,0	75,0	6.8
	<b>Resistance to accelerated weathering</b> , % property retention, min.				
	a) Breaking strength	50	50	50	6.10
	b) Elongation at break	50	50	50	6.10
	<b>Water vapour transmission rate</b> , $\text{g}/\text{m}^2\cdot 24\text{ h}$ , max.	1,6	1,9	2,9	6.11
	<b>Water penetration under hydrostatic pressure</b>	Nil	Nil	Nil	6.12

# A.T. BRIKGRIP® DPC 3 LAYER 375

## SANS 952 - 1 : 2011 TYPE B

### DAMP PROOF COURSE (ANTI TERMITE)

**A.T. Brikgrip® DPC 3 LAYER 375** micrometer damp proof course is best utilised in preventing rising damp in walls. It prevents efflorescence and flaking of the wall covering. It will not absorb water and is chemically inert. Flexibility is retained between -45 and 78 degrees Celsius and the material does not extrude under pressure. Tear and puncture resistance are excellent, it is also termite resistant.

### SPECIFICATION

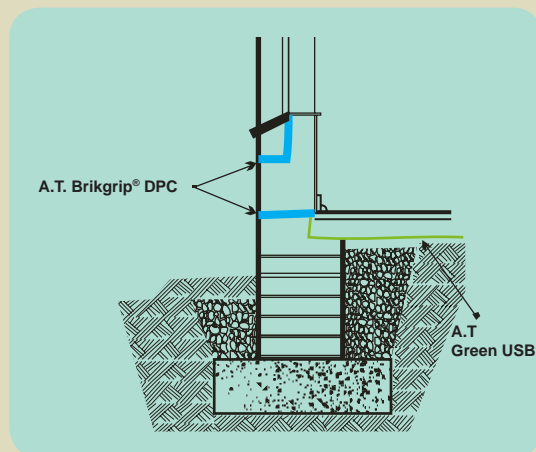
The damp proof course shall consist of **A.T. Brikgrip® DPC 3 LAYER 375** micrometer bearing SANS 952 - 1 : Type B well

lapped at joints and intersections and bedded and joined in cement mortar. The blue layer must face downwards when laid.

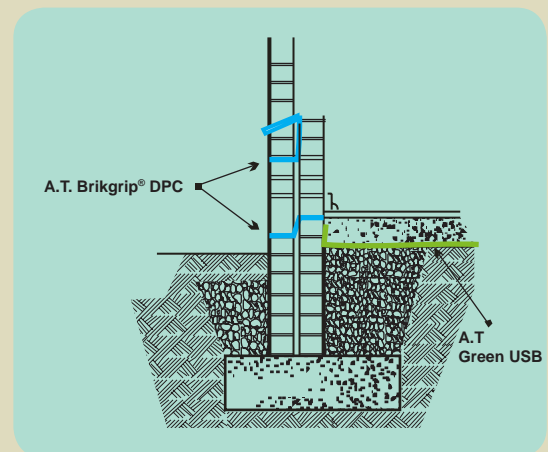
### BENEFITS

- Anti Termite
- Prevents rising damp
- Will not absorb water
- Easy to handle
- Chemically inert
- Excellent breaking strength
- Excellent puncture resistance
- Convenient widths

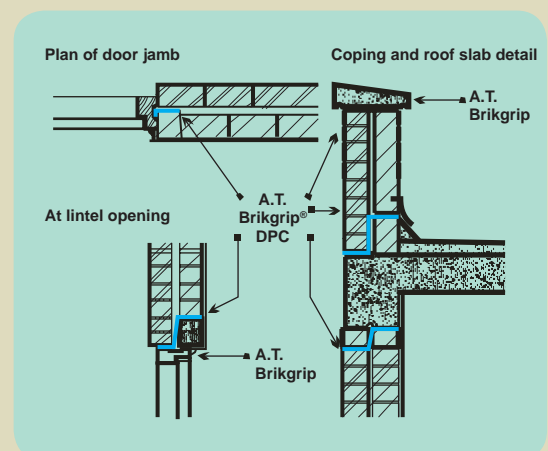
### SOLID WALL CONSTRUCTION



### CAVITY WALL CONSTRUCTION



### CAVITY WALL. PLAN OF DOOR JAMB. COPING & ROOF SLAB DETAIL



# USB GREEN 3 LAYER 250<sup>®</sup> TERMITE AND DAMP PROOFING MEMBRANE

## SANS 952 - 1 : 2011 TYPE C

### UNDER-SURFACE BEDS

**A.T. GREEN USB 3 LAYER 250** micrometer is co-extruded, consisting of the following: Outer layer - Black low-density polyethylene containing carbon black, which is a natural ultra-violet inhibitor. Middle layer - Black low-density polyethylene. Outer layer - Green low-density polyethylene, which allows for easy identification on site and has a superior puncture resistance and is termite resistant.

Note: Because of their high carbon content, **A.T. GREEN USB 3 LAYER 250** micrometer can also be used where SABS black sheeting is specified, as it exceeds the minimum specification required for SABS black.

### SPECIFICATION

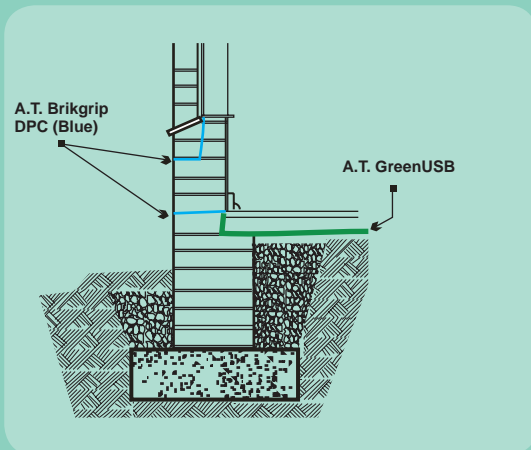
One layer of **A. T. GREEN USB 3 LAYER 250** micrometer damp proof sheeting bearing SANS 952 - 1 : 2011 shall be laid in the widest practical widths to minimise joints

and shall be taped down at the overlaps. The green face contains an anti termite insecticide and must be laid in contact with the soil.

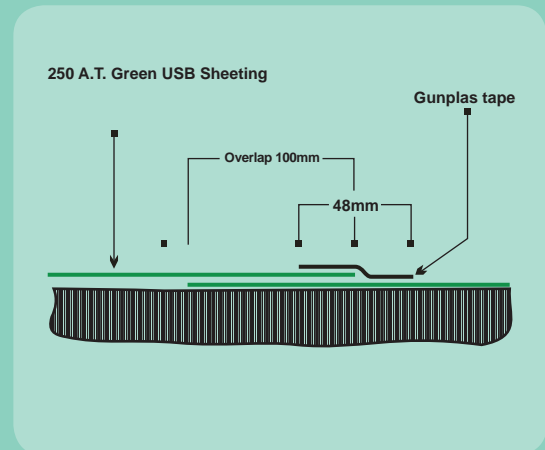
### BENEFITS

- Repels termites
- Prevents rising damp
- Prevents contamination of concrete
- Prevents efficiency loss of under-floor insulation
- Specially formulated as a damp-proof membrane
- Good puncture resistance
- Good tear strength
- Wide widths

### SOLID WALL CONSTRUCTION



### INSTALLATION OF CO-EX MEMBRANES



# TERMITES IN SOUTH AFRICA

Termites are herbivores feeding mainly on dead plant material for the cellulose and lignin content. Subterranean termite species live mostly in the soil and become pests when their foraging activity extends into man-made structures. Damage is caused by the foraging caste i.e the workers. Members of the fungus growing termite sub-family, *Macrotermitinae*, particularly of the genera *Macrotermes* and *Odontotermes*, are the most important subterranean wood destroying species infesting buildings in Southern African. The particular species involved tend to reflect their distribution in relation to human settlement. In South Africa *Odontotermes badius*, *Macrotermes natalensis* and *Odontotermes latericius*, in that order, are the most important species infesting buildings and in Pretoria, are in descending order of importance, responsible for 87%, 9% and 3% of building infestations. In 96% of cases termite nests are located under the buildings. *Odontotermes badius* not only has an extremely wide distribution throughout the region, including most of the areas of dense human population, but also appears well adapted to nesting under buildings. Furthermore, the absence of conspicuous surface mounds permits the unwitting construction of buildings over active colonies, a factor that accounts for 23% of infestations in South Africa. Colonization takes place after erection of buildings in 73% of cases in South Africa and in unprotected buildings, periodic and independent infestations take place over the life of the building. In one case in Pretoria, re-infestation took place on average every 4 years over a period of 20 years.

*Macrotermes natalensis* and *Odontotermes latericius*, being less widely distributed in South Africa, infest buildings less frequently than *Odontotermes badius*. The dominance of *Odontotermes badius* and *Macrotermes natalensis*, as destroyers of sound timber in structures, applies to Botswana and much of South Africa, to the Gariiep River, and along the eastern coastal belt as far south as Kei River. Along the arid western coastal belt from van Rhynsdorp in the south through Namaqualand into Namibia, *Psammotermes allocerus* of the family Rhinotermitidae is the chief problem species.

*Macrotermes*



*Odontotermes*



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	<b>(T)</b>	(041)	451 2780/1		
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