

TDM®



# GREEN DOOR™

## Building Products

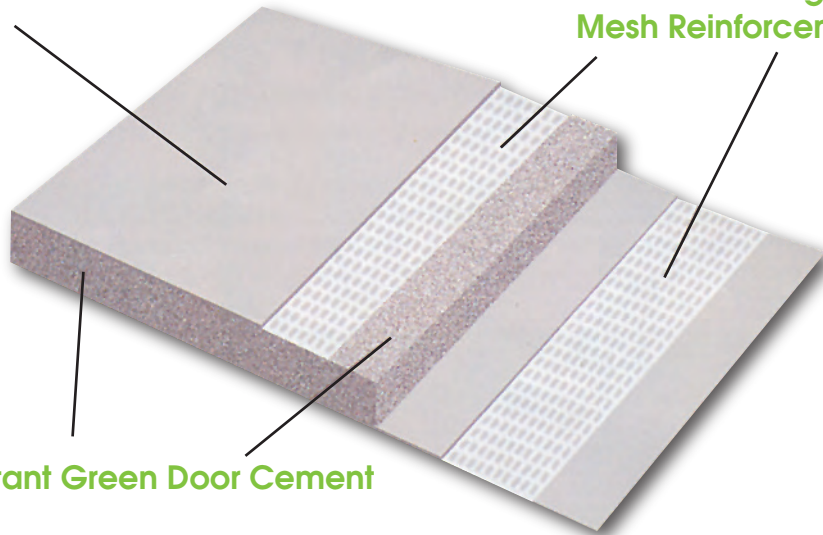
### THE FUTURE OF BUILDING PRODUCTS

TDM Green Door™ board is an innovative new product that is about to take the South African construction market by storm. The environmentally-friendly board, which has been tested in international laboratories, is exceptionally clean and easy to use. It displays improved fire, water and mould resistance and is lighter, but more durable than boards traditionally used. These characteristics make it highly suitable for use in drywalls and partitions, ceilings and fascias. In addition, it is highly cost-effective.

-  **Fire resistant**
-  **Water resistant**
-  **More insect resistant**
-  **More mould resistant**
-  **Environmentally friendly design**
-  **Stronger**
-  **Cost Effective**
-  **Score and Snap**

Smooth Slurry Finish

Platinum Fibreglass Mesh Reinforcement



Fire Resistant Green Door Cement

Textured Underside Suitable for Tiling



# WHY



The world we live in is changing – increasingly, communities and governments are demanding products with sound environmental credentials. TDM Green Door™ has been designed to have minimal ecological impact in terms of toxins, wastage and green house gas emissions. It is asbestos free and low energy in its production.



As building codes and regulations become progressively more stringent, particularly in the area of fire performance, TDM Green Door™ more that meets the challenge. TDM Green Door™ is completely non-flammable to the extent that it is often used as a furnace liner. TDM Green Door™ has Fire Resistant properties tested to numerous international standards and has achieved a rating of “non-combustible” (BS 476: Part 4). TDM Green Door™ also attains the highest and safest ratings for flame spread and fire propagation.



Unlike similar products, TDM Green Door’s performance will be unaffected by water absorption and as such it is suitable for use in damp areas or external applications. Additionally as TDM Green Door™ is inorganic it will never support mould or mildew growth.




TDM Green Door™ provides the builder with a high impact panel when compared to commonly used materials in similar applications. This makes it ideal for damage-prone areas. Its bending resistance and tensile strength makes TDM Green Door™ the right choice for structural sheathing; additionally its load capacities will handle both residential and commercial structures when used as a flooring underlayment.



The specific properties of TDM Green Door™ offer the potential for substantial savings. In many cases only one sheet of TDM Green Door™ will be needed to achieve fire ratings, where other products may require 2 or more (of greater thickness) to meet the same standards. It will also allow the elimination of steps in construction, whilst not compromising on quality workmanship such as the direct application of base coat to TDM Green Door™; eliminating the need for external insulation; Construction time and labour costs can also be cut with the lightweight and user-friendly TDM Green Door™.

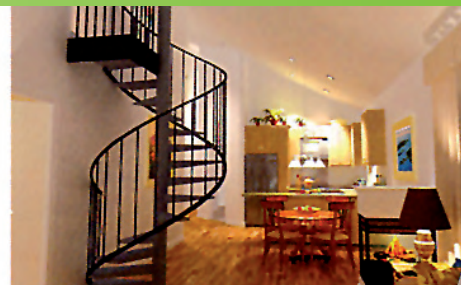
**TDM Green Door’s all-round capabilities don’t end there. If you are looking for a product that has good sound insulation, is impervious to infestation from termites and other insects, holds its stability through variations, will not delaminate, is lightweight and exceptionally easy to use then TDM Green Door™ should be at the top of your list.**

Value	 Building Products	Gypsum Wallboard	Plywood	Cement Board	Calcium Silicate
Flame Spread	0	LOW	HIGH	0	0
Smoke Development	NONE	LOW	HIGH	NONE	NONE
Water Resistant	YES	NO	NO	LIMITED	LIMITED
Mould / Mildew Resistant	YES	NO	NO	YES	YES
Termite Resistant	YES	YES	NO	YES	YES
Thermal Insulation	GOOD	OK	GOOD	LOW	LOW
Impact Strength	HIGH	LOW	HIGH	HIGH	MEDIUM
Combustability	NON	FACING	BURNS	NON	NON
Structural	YES	NO	YES	YES	YES
Product Handling	Light/Robust	Light/Fragile	Light/robust	Heavy/Robust	Heavy/Fragile
Cost	LOW	LOW	MEDIUM	HIGH	HIGH

# WHERE

A much improved alternative to gypsum wallboard and cement board, TDM Green Door™ has a huge range of possible applications allowing it to be used in virtually any location that construction panels are needed.

- Fire Walls/Doors
- Structural sheathing
- Shaft Liners
- Substrate for ceramic tiles, decorative laminates, coatings & insulated systems eg. EIFS
- Fixed and floating floors
- Steel structure fire protection
- Drywall & Partitions
- Ceilings
- Fascia
- Soffits
- Acoustical Walls



# HOW

Working with TDM Green Door™ will not be a frustrating experience. Using similar techniques as one would employ for gypsum, cement board and other such sheathings means you will enjoy ease of use but with an array of product improvements and cost savings.

TDM Green Door™ is a non-hazardous product, although when cutting or sawing some dust will be produced; these particles are inert but standard precautions such as dust mask or working in a well ventilated area are advised.

Transportation and handling of the light weight TDM Green Door™ is hassle free. The impact resistant and durable nature of the product means less damage than in comparable panels. If preferred, gloves can be used for handling.

# WORKING



**Drilling:** Place scrap board under drilling location for a clean hole. Low, normal or high speed drills can be used.



**Cutting:** Support the board and use a fine toothed or power saw with smooth face up. For shapes, a pad, keyhole or coping saw can be used.



**Planing & Sanding:** Edges can be planed or smoothed with a surform rasp or file. Use conventional papers for sanding.

# FIXING



**Stapling:** 6mm TDM Green Door™ can be stapled with 16 gauge, 6mm crown x 25mm long rust-proof staples. (Do not use staples if fire resistance is required)



**Nailing:** Nail 12mm or more from the edge of the board. Rust-proof nails are recommended and avoid using round or lost head nails. Nail heads may be driven flush or slightly below surface.



**Screwing:** Screw 12mm or more from the edge of the board. Countersink 9 and 12mm is need. Use No. 6 or No. 8 wood or self-rapping screws.



**Jointing:** Use tight butt joints or leave a gap and use proprietary fillers. After filling joints and screw holes can be sanded smooth.

# DECORATING



**Plastering:** TDM Green Door™ can be decorated without plastering. If a skim finish is desired, fix rough side out, apply sealing coat and allow to dry. Follow with a second coat. Apply gypsum plaster while this coat is wet and tacky.



**Tiling:** 9 or 12mm TDM Green Door™ board should be supported at maximum 400mm centres in both directions and fixed at 200mm centres using stainless steel screws. Seal tiling surface as for plastering. Seal back surface with sealer such as chlorinated rubber paint.



**Painting & Sanding:** Any conventional emulsion and water based paint can be used and anti-alkali primers are not necessary. A universal primer is recommended. stain with normal woodstains.



**Papering:** Size board to seal against suction and improve slip, then hang papers or vinyls in the normal way.

## DIMENSION TOLERANCE

Thickness	+/- 0.2mm
Width	-1.0mm, +1.0mm
Length	-1.0mm, +1.0mm
Diagonal	-1.0mm, +1.0mm

## DIMENSION TOLERANCE

Description	Unit	Test Result	Standard
Density (Average)	g/cm <sup>3</sup>	0.7 – 0.8	SABS 266
Bending Strength	Mpa	11.2	SABS 266
Impact Strength	kJ/m <sup>2</sup>	4.5	SABS 266
Screw Pull	N/mm	47.7	SABS 266
Swell Index	%	0.34	SABS 266
Moisture Content	%	7 +/- 3	SABS 266
Fire Performance		Non-combustible	BS 476 Part 4
Flame Spread		Class 1	BS 476 Part 7
Fire Propagation Index		0.1	BS 476 Part 6
Alkali-Erosion Resistance		Positive	
Salt-Erosion Resistance		Positive	
Acid-Erosion Resistance		Positive	
Thermal Conductivity	W/Mk	0.25	
Asbestos Check		Not Detected	

### Sound Insulation:

TDM Green Door™ 6mm board

Partition wall thickness 90mm, filled with mineral wool (40db)

## CONTACT US

**TDM**®



GREEN  
DOOR™

Building Products

### TDM (Pty) LTD

11 Chesterfield Road, Willowton, 3201  
PO Box 1173, Pietermaritzburg, 3200  
KwaZulu-Natal, South Africa  
Tel: 033 397 7200 • 033 397 7273  
Email: info@tdm.co.za

### TDM – Western Cape

Capricorn Park, Muizenberg  
Retief Rautenbach – 082 902 6136

**Website: [www.tdm.co.za](http://www.tdm.co.za)**