



VITAL TECHNICAL SDN. BHD.

Technical Data Sheet

VT-440

VitalShield

- Cementitious Waterproofing



Issuance date: 31/03/08

Revision date: 15/07/20

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# VT-440 VitalShield

## Cementitious Waterproofing

### APPEARANCE

Component A:  
Grey premix powder  
Component B: Milky  
liquid

### COLOR

Cement grey  
(after mixing)

### PACKAGING

5 kg/ set  
(4 kg powder + 1 kg  
latex)  
(4 sets/ carton)  
25 kg/ set  
(20 kg powder + 5 kg  
latex)

### SHELF LIFE

12 months

### STORAGE

Store under cover, in dry  
and cool place with  
temperature not  
accessing +30°C.  
Protect from freezing.

### APPLICATION TEMPERATURE

5 °C – 40 °C

### DESCRIPTION



VT-440 Vitalshield is a rigid cement based of two components polymer modified waterproof coating. It is formulated with specially selected and graded fine quartz and high quality polymer to create brushable, smooth slurry with excellent bond and adhesion to most substrates.

It seals pores voids and cracks of substrates and yet provides a breathable coating which allows water vapor transmission.

TECHNICAL DATA	Specific Gravity	: 1.9 – 2.2 (after mixing)
	Solvent	: Not present
	pH (25°C)	: 11 – 13

### ADVANTAGES

- Excellent water resistance for both positive and negative side application.
- Being cementitious, it has similar expansion as concrete and become part of the structure after cured.
- Provides a tough, durable, seamless and flexible film and protects concrete from corrosive salts and atmospheric gases, and offer attractive textural finish for decorative purpose.
- Coating is breathable, allowing transmission of water vapor from interior of the building.
- Puncture resistance due to the hardness and strength of the cementitious base

### APPLICATION





- It is used to provide water and damp proofing coats to concrete structures, bricks and masonry works, plasters etc.
- Used in underground retaining walls, tunnels and basements.
- Foundation walls and footing subjected to ground moisture can also be protected by it.

### PREPARATION

- Remove loose plaster, if any. All the cracks above 0.7 mm width should be properly sealed.
- The surface should be structurally sound and free from oil, grease and loose particles.
- For new concrete, it should be wait for at least 14 days before applying the VT-440 Vitalshield.
- Prior to the application, the surface of concrete should be thoroughly wetted or damped but residue water must be removed. The application temperature should be between 15 °C to 45 °C.

### APPLICATION DIRECTION

1. Use clean containers for mixing. Mix materials with mechanical mixing equipment.
2. Mix only the amount of material that can be applied within limited "open time". Do not re-work set or hardened material; remove such material from the site.
3. Pour about 2/3 of the component B into the container. Slowly add the powder (component A) to the liquid while stirring and mix to a smooth paste free from lumps of undispersed powder.
4. Dilute to a brushable consistency using the remaining liquid (component B). Less liquid may be used if a stiffer mix is required. Do not add additional water.
5. While the surface is damp, apply the VT-440 Vitalshield to the surface with a brush, roller or spray at the minimum rate of 0.8 kg per sq meters. The base coat will be cured to dry at least for 24 hour.
6. For the permanent sealing and waterproofing result, it is necessary to apply two coats or more, with the first coat allowed to dry before applying the second coat at the right angles on the first coat
7. The coverage for 25 kg per set of VT-440 Vitalshield is about 1.5 kg/m<sup>2</sup> to 2.0 kg/m<sup>2</sup>.
8. All tools should be cleaned with water immediately after use. Clogged brush can be cleaned by soaking in very hot water with a little detergent. Cured material can only be removed mechanically.

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- SPECIAL NOTE**
- All data and information is based on the non-tinted, white color formulation.
  - **IMPORTANT!** Color may vary slightly from batch to batch. Check the color and “box” this product on jobsite. Color may vary with texture, lighting and sheen. Verify color before applying.
  - **ALGAE AND FUNGUS RESISTANCE:** This paint contains an agent that inhibits the growth of algae and fungus on the surface of this paint film. However, no paint can completely prevent the growth of algae and fungus under circumstances ideal for its growth; therefore, Vital Technical assumes no responsibility for algae and fungus development.

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**CAUTION** Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Avoid breathing vapours. Wash hands thoroughly after handling. Wear protective gloves and eye protection. **IF IN EYES:** Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If skin irritation or a rash occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Keep out of reach of children. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

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