CM-700wp

CEMENT MODIFIER

PRODUCT DESCRIPTION:
Obaproof CM-700wp cement modifier is belonged to the copolymer of styrene, being modified from MMA, and butadiene, Obaproof CM-700wp is environmentally friendly and low VOC material. When added into cement and mortar, it will permeate into the gap between cement and aggregate to fulfill its function of filing pore space, that will create finer texture in cement and mortar and further enhance waterproofing and durability for cement and mortar. Plastering on the surface of engineering cement, it not only adhere firmly with concrete, but also can protect concrete from the osmosis of water contents and to avoid the corrosion of reinforcement and aging of the cement. Application on the joint between new and old cement can cure the light powder dust on the construction surface and further enable the film adhesion between the waterproof layer and construction surface so as to enhance the adhesive strength for the waterproof material.

USES:
Obaproof CM-700wp is for higher strength floor screeds and improved flexibility and resistance to cracking. Obaproof CM-700wp also can be used as a bonding agent between new and old concrete.
Areas of application include:
- Waterproofing primer
- Bonding agent
- Manhole liners
- Angle fillets
- Repair mortar
- New and old concrete bonding agent
- Multi-purpose adhesive

ADVANTAGES:
- Low VOC
- Environmentally Friendly
- Good mechanical and chemical properties
- Strengthen the water resistance, anti-impact, and water resistance for cement and mortar, and further enhance its anti-slip and anti-bending features
- Enable the filling element with good compatibility and dispersibility
- Low bubbling
- Anti-freezing
- Less dusting
- Non-toxic
- Superb adhesive strength
- Can be apply directly on damp or wet surfaces
- Flexural strength
- Ultimate adhesive strength
- Impermeability
- Compressive strength
- Improved concrete properties
- Non-corrosive
- Non-flammable

TECHNICAL & PHYSICAL DATA:

• Form	Liquid
• Appearance	White
• Density (kg/Ltr)	1.01
• Solids content (%)	> 45
• Application Temperature	Minimum 5°C
• Mixing Ratio : CM-700wp : Water	1 : 3
• Chemical Resistance (10% HCOOH, 60°C, 24 hrs)	No change on the surface of the sample
• Shelf Life	1 year when unopened and undamaged
• Storage Condition	Store in a dry cool place
• Packaging	4kg & 18kg pail

IMPORTANT NOTICE:
Minimum ambient and substrate temperature is 5°C.

CM-700wp

CEMENT MODIFIER

Green Label Test Data

Heavy Metals : (EPA 3025 / EPA 6010B : ICP)	
a. Cadmium (Cd)	Not Detected
b. Lead (Pd)	Not Detected
c. Total Chromium (Cr)	Not Detected
d. Mercury (Hg)	Not Detected
Volatile Organic Compounds (ISO 11890-2) (g/L)	17.67
Total Halogenated Organic Solvent (ISO 11890-2) (%)	Not Detected
Total Aromatic Organic Solvent (ISO 11890-2) (%)	Not Detected
Epichlorohydrin (ISO 11890-2) (%)	Not Detected
N-Methyl Pyrrolidinone (ISO 11890-2) (%)	Not Detected
Formaldehyde (High Performance Liquid Chromatography) (%)	Not Detected
Alkyl Phenol Ethoxylate (LCMS-MS) (%)	Not Detected
Flash Point o (ASTM D3828-07a) (C)	>61

INSTRUCTION FOR USE

SURFACE PREPARATION

All the surfaces must be clean, free from grease, oil, laitance, and remove all the dirt and contaminants, which might affect adhesion. The impurity outside the structure body should be cleaned thoroughly.

APPLICATION

Use Obaproof CM-700wp for quality modification of cement and mortar.
Obaproof CM-700wp is suitable for modification of mortar. Under the hydrolysis medium, the emulsion is belonged to a stable dispersed polymer. When use, the said emulsion can improve the combined characteristics of the softness with mortar. Add Obaproof CM-700wp into mortar, which is softened first and then cured, and then becomes hard, wear resistance, and anti-bending as a durable substance.

BONDING AGENT / PRIMER

Dilute 1 portion of Obaproof CM-700wp permeable primer with 3 portions of clean water and then plaster directly to the surface to be waterproofed, in order to improve the bonding strength.

CEMENT MODIFIER

Patching, repair mortar and render.
Cement: 50kg • Sand: 150kg •
Obaproof CM-700wp: 5kg • Water: 15kg

CLEANING

Tools and equipment just can be clean with clean water immediately, after use.

SAFETY

Impervious gloves and barrier cream should be used when handling these products. Eye protection should be worn. In case of contact with eyes, wash thoroughly with plenty of water and seek medical advice if symptoms persist. If contact with skin occurs, it must be removed before curing takes place. Wash off with an industrial skin clearer followed by plenty of soap and water. Do not use solvent. Ensureadequate

TECHNICAL DATA SHEET

WP-200HD

ACRYLIC BASED WATERPROOFING UV COATING

PRODUCT DESCRIPTION

Obaproof WP-200HD is a water-based acrylic liquid membrane. It is a liquid type coating and cure to form as a seamless, elastic, heat proof, anti hair line crack and waterproofing layer.

ADVANTAGE

- WATERBASED
- LOW VOC
- APPLICABLE ON EXPOSE AREA
- ANTI HAIR LINE CRACK
- HIGH ELONGATION
- WEATHER PROOF
- GOOD BONDING STRENGTH
- WATERPROOF
- SEAMLESS

APPLICATION AREA

- RC FLAT ROOF
- CAR PORCH ROOF
- BATHROOM
- AIRCON LEDGE
- BALCONY & YARD
- EXTERNAL WALL
- METAL ROOF & GUTTER
- EXPOSE AREA WITH SLOPE

APPLICATION TOOLS

- BRUSH
- ROLLER
- HIGH PRESSURE SINGLE HOSE SPRAY MACHINE.

STORAGE:

Material to be stored in the cool dry place.

TECHNICAL DATA

- Appearance: Milky white emulsion
- Solid content: 70%
- Density: 1.2
- Elongation at break ASTM412: > 482.8%
- Crack bridging: 1.2mm
- Tensile strength ASTM412: 6.5Mpa
- Tear strength ASTM D624: 54kgf/cm^2
- Coverage:
  Wall: 0.5Kg/m^2/Coat
  Floor: 0.75 Kg/m^2/Coat
  With fiberglass/mesh: 0.85Kg/m^2/Coat.
  Minimum in 2 Coats application.
- Dry film thickness:
  Wall: 0.8mm (1kg)
  Floor: 1.2mm (1.5Kg)
  With fiber net:1.5mm (1.7kg)
- Colours: Grey & White

SAFETY

- Applicator are recommended to wear gloves, mask and goggles during application.
- In case of contact, wash the affected area with water and soap.
- No food or beverages allowed during application.
- Keep the material away from children.

NOTICE:
To apply the Obaproof WP-200HD as expose type waterproofing system, a lay to fall RC or cement screed without water ponding & an additional layer of fiberglass net or fiberglass mesh reinforcement will maximize the performance of the material.

TECHNICAL DATA SHEET

WP-200HD

ACRYLIC BASED WATERPROOFING UV COATING

SITE VISIT AND INSPECTION: Prior to waterproofing installation, arrange a visit to project site. The applicator shall inspect and certify that concrete surfaces are in acceptable condition to receive waterproofing treatment before proceed to the application, make sure that concrete surfaces are sound and clean, and that form release agents and materials used to cure the concrete are compatible with waterproofing treatment. For expose type application, a lay to fall RC slab or cement screed are recommended.

DEFECTS EXAMINED, TOUCH UP AND REPAIR: Examine defects such as honeycombing, rock pockets, faulty construction joints and cracks. Such defects to be repaired by cement grout, patching mortar or epoxy grout.

STRUCTURAL PONDING TEST (IF ANY): Before any waterproofing treatment, a minimum 24 hours of structure ponding test are strongly recommended, fill up the water at least up to the construction joint in the vertical wall area, monitor and repair the leaking area by PU grouting injection, this simple step helps the performance of waterproofing for long term.

SURFACE PREPARATION: Clean the dusty surfaced, remove cement ash and trashed, ensure the surface is good to received waterproofing.

ANGLE FILLET: Form the angle fillet between vertical and horizon area such as the area between wall and floor slab. The angle fillet can be done by normal cement grout mix with water and sand. The angle fillet required minimum 25mm x 25mm, or 50mm x 50mm will be better.

PRIMER COAT: To apply a layer of primer coat, mix 1 portion of Obaproof WP-200HD with 3 portion of water, slowly mix by the electrical mixer, and apply a thin layer of primer approximately at 0.2kg/m^2 into the surface where to be received waterproofing coating, the primer coat can be apply by using brush, roller, broom or sprinkling by hand but must ensure all the surface is applied accordingly.

1st COAT OF OBAPROOF WP-200HD: After the primer coat, the 1st layer of waterproofing coating Obaproof WP-200HD can be apply after 1 to 2 hours (depend on the weather condition), even the surface are still wet or damp (but not ponding with water). To apply Obaproof WP-200HD, open the cover, stirring the Obaproof WP-200HD slowly by electrical mixer, maximum 10% of water are allow to add in, after the stirring, Obaproof WP-200HD are ready to apply, it can be apply by brush, roller or spray by high pressure single component spray machine at dosage 0.75kg/m^2. Do not apply more than 2kg/m^2/coat or the crack could be found at surface of material and might cause the peeling off after curing.

TREATMENT TO OUTLET (IF ANY): Apply a layer of Obaproof WP-200HD surrounding the outlet, the use of brush would be highly recommended.

FIBERGLASS REINFORCEMENT (IF ANY): After the 1st coat of Obaproof WP-200HD is done, lay and fixed a layer of fiberglass net or mesh on top of it. The fiberglass net or mesh reinforcement are highly recommended for the expose type waterproofing system.

2ND COAT OF OBAPROOF WP-200HD: After the Fiberglass net or mesh to be lay and fix, the 2nd coat of Obaproof WP-200HD can be apply anytime, before apply the 2nd coat, stirring the material is still needed, during the stirring, maximum 10% of water are allow to add in. Same as per above, Obaproof WP-200HD can be apply by brush, roller or spray at dosage 0.75kg/m^2, if there is a fiberglass net in the system, 1kg/m^2 could be consume to ensure the fiberglass net had been fully covered by the 2nd coat of Obaproof WP-200HD.

CURING TIME:
Primer coat: 1 -2 hours.
1ST Coat: 6 - 8 Hours. 2ND Coat: 8 Hours till fully cure.

PONDING TEST: Ponding test are not recommended for all Acrylic base coating, therefore, a maximum 24 hours of ponding are allow if necessary.

PROTECTIVE SCREED (IF ANY): If there is protective screed needed. Do it as soonest as possible to minimize the exposure time of the material in order to keep its best performance.

AB TOP SEAL 119

FLEXIBLE CEMENTITIOUS WATERPROOFING MEMBRANE

PRODUCT DESCRIPTION

Obaproof AB Top Seal 119 is a two-component polymer modified liquid applied flexible cementitious waterproof coating. The two components are simply mixed together to create a workable consistency for easy application. it has superior adhesion to many substrates, including concrete and cement render.

KEY FEATURES

- Flexible and accommodate movements
- Good adhesion to sound substrates
- Applicable to damp substrate
- Abrasion Resistant
- Paintable with elastic paint
- Can be tiled over
- Non-toxic

RECOMMENDED USES

- Watertank, Waste water treatment plants
- Bathrooms, Balconies, Terraces
- Swimming Pools, Pool Decks
- Water-features, Ponds
- Retaining Walls, Planter Boxes, R.C. Gutters
- Outdoor Deckings

SUBSTRATE PREPARATION

All substrates shall be sound, clean and free of dust, excess mortar, oil or other loose particles. Cracks, honeycombs and other defects must be repaired using suitable cement mortar.
For excessively dry substrate, dampen the substrate and keep it continuosly moist for 1 to 2 hours before application. Remove all excess water or standing water and allow the surface to become almost dry to provide an SSD (Saturated Surface Dry) condition before applying the waterproofing coating.

Form	Part A - White Milky Liquid Part B - Green Powder
Binder	Cement
Extender	Selected Fine Silica
Polymer	Acrylic Polymer
Tensile Strength	> 1.5N/mm^2
Adhesion to concrete	> 0.9N/mm^2
Elongation at break	>150%
Crack Bridging	No cracking at 2mm width 0.043
Hardness Shore A	>70
Resistance to water penetration at 0.2 kgf/cm^3 for 6 hours	No Penetration
Toxicity	Non toxic
Pot Life	30 minutes
Set to touch (at 20°C)	Within 2 hours
Final set (at 20°C)	24 hours

AB TOP SEAL 119

FLEXIBLE CEMENTITIOUS WATERPROOFING MEMBRANE

APPLICATION INSTRUCTION

PRIMING
For excessively dry and porous substrate, prime the entire surface with Obaproof multi prime prior application of the waterproofing coating with the rate of 5m² per liter depending of the substrate condition.

MIXING
Mixing ratio of 2 part powder to 1 part of liquid by weight. Mix in a clean container by slowly adding the powder component to the liquid component whilst stirring using a slow speed heavy-duty electric mixer with a suitable paddle. Mix until homogeneous slurry is obtained and make sure that no unmixed powder is left at the bottom of the container. Small amounts may be hand-mixed separately.

PLACING
The mixed Obaproof AB Top Seal 119 can be applied onto the prepared substrate using a bristle brush or roller. Place the material well onto the substrate to achieve full bond. The application of Obaproof AB Top Seal 119 waterproofing coating shall be done in minimum of two (2) layers, the first layer in one direction and the second layer in a direction perpendicular to the first coat. Apply the subsequent layers after 3-6 hours curing of the previous coat.
Minimum 2 layers at approximately 1.0kg/m² per layer.
For areas subject to high water infiltration, apply a third layer at 1.0kg/m².
Allow at least 24 hours curing of the finished coat (subject to 23°C and 50% relative humidity) before laying screed or tilling. Water test can be conducted after the same duration.

RECOMMENDED COVERAGE
1. Ground moisture, bathrooms, balconies - 2kg/m², 2 layers at 1.0kg/m²/layer.
2. Hydrostatic Pressure areas, water tanks, swimming pools - 3kg/m², 2 layers at 1.5kg/m²/layer.

Note : Do not apply more than 2kg/m² of Obaproof AB Top Seal 119 in a single layer.

CURING
Special curing methods are generally not required but some precautions should be taken from rapid drying for application directly under sunlight and windy conditions. Curing of Obaproof AB Top Seal 119 shall be at least 24 hours before trafficking to yield optimum strength.

PACKAGING
Obaproof AB Top Seal 119 is packed in 30 kgs set.
Part A : White liquid, 10 kgs.
Part B : Green powder, 20 kgs.

CLEAN UP
All tools, equipments and surrounding areas can be cleaned with clean water before the product sets. Hardened material has to be mechanically removed.

STORAGE AND SHELF LIFE
Store all materials in a cool dry place, in an elevated condition. Obaproof AB Top Seal 119 has a shelf life of 12 months from date of manufacturing if store properly in original unopened packaging.

HEALTH AND SAFETY
Suitable protection clothing, dust masks, gloves and eye protection should be worn. Continual or extended contact with cement products can cause skin irritation. If skin irritation occurs, flush skin with water for a minimum of 15 minutes. If irritation still persist, consult medical advises.

LIMITED WARRANTY
The information and recommendations relating to the application and end-use of the product are given in good faith and based on tests which we believe to be reliable. However, no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship, whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advise offerred. No guarantee of their accuracy can be made because of the great range of field conditions and variation encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with limited warranty only, and on condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Obaproof be liable to anyone except for replacement of the products or refund of the purchase price.

OBA EASYCOAT WP

CEMENTITIOUS WATERPROOFING COATING

PRODUCT DESCRIPTION

Obaproof Oba EasyCoat WP is cement based waterproofing coating incorporates 2 polymer components. Obaproof Oba EasyCoat WP is an environmentally friendly and low VOC material. It uses to apply directly to concrete and mortar to prevent water infiltration.

USES

Obaproof Oba EasyCoat WP can be used for positive and negative side waterproofing, sealing of hair line cracks and as a protective coating against aggressive chemicals such as carbon dioxide (e.g. in concrete repair work), frost and de-icing agents. The areas of application are including:

- Potable water tanks
- Terraces and balconies
- RC gutters
- Bathroom floors and walls - Basements
- Retaining walls
- Seawalls

ADVANTAGES

- Low VOC
- Environmentally Friendly
- Pre-batched and ready for used
- Mixes and applies easily
- Highly workability
- Good adhesion to sound substrates
- Impermeable
- Increased frost and salt resistance
- Resist carbon dioxide penetration
- Non-toxic
- Slightly flexible

Tensile Strength (kgf/cm²) (ASTM D412 (Die C)	8.3
Elongation (%) (ASTM D412 (Die C)	24.30
Tear Strength (kgf/cm) (ASTM D624)	7.20
Hardness (Shore A) (ASTM D2240)	54
100% Modulus of Elasticity (kgf/cm²) (ASTM D412 (Die C)	5.80
Shear Strength (kgf/cm²) (ASTM D1002)	4.70
Water Vapor Transmission of Material) i. WVT (g/hxm²)(23°C, 50%) - ASTM E96 ii. Permearce (g/sxm² xPa) – Method B	 37 1.98×10^{-5}
Abrasive Test (g) – Taber CS-17, 1000g, 1000 Cycles (ASTM C501)	0.043
Puncture (kgf)	9
Compressive strength @ 28 days (n/mm²) (ASTM E154)	>40
Pot life	30min at 30°C and will be shortened at higher temperatures
Shelf life	6 months when unopened
Storage condition	Store in a dry cool place
Packaging	Part A: 4kg / Part B: 16kg

IMPORTANT NOTES:

- Minimum ambient and substrate temperature is 5°C.
- Never apply more than 5 kg/m² of Obaproof Oba EasyCoat WP in one single layer.
- Apply only to clean, sound substrates – surfaces should be well dampened but free of surface water and leaks.

OBA EASYCOAT WP

CEMENTITIOUS WATERPROOFING COATING

Green Label Test Data

Heavy Metals : (EPA 3025 / EPA 6010B : ICP)	
a. Cadmium (Cd)	Not Detected
b. Lead (Pd)	Not Detected
c. Total Chromium (Cr)	Not Detected
d. Mercury (Hg)	Not Detected
Volatile Organic Compounds (ISO 11890-2) (g/L)	0.63
Total Halogenated Organic Solvent (ISO 11890-2) (%)	Not Detected
Total Aromatic Organic Solvent (ISO 11890-2) (%)	Not Detected
Epichlorohydrin (ISO 11890-2) (%)	Not Detected
N-Methyl Pyrrolidinone (ISO 11890-2) (%)	Not Detected
Formaldehyde (High Performance Liquid Chromatography) (%)	Not Detected
Alkyl Phenol Ethoxylate (LCMS-MS) (%)	Not Detected
Flash Point o (ASTM D3828-07a) (C)	> 61

INSTRUCTION FOR USE

SURFACE PREPARATION

Surfaces must be clean, free from grease, oil and loosely adhering particles. All surfaces must be as flat and level as possible.

Absorbent surfaces have to be thoroughly saturated with water prior to application of first coat of Obaproof Oba EasyCoat WP. However, no loose standing water should be on the surface before application.

MIXING

Under normal circumstances, when the full quantities of both components are mixed together, a consistent mortar will result. Mixing shall be carried out in a clean container by gradually adding the powder component to the liquid component and stirring with slow speed mixer. Use mixture within 30 minutes. 1 set of Obaproof Oba EasyCoat WP can be added <1kg of water for smooth application.

COVERAGE

- Bathrooms, terraces and balconies: 1.0kg/m² per coat.
- For waterproofing coating up to 1m water head: 1.5kg/m² per coat.
- For waterproofing coating more than 1m water head: 2.0kg/m²

Notes:

- Obaproof Oba EasyCoat WP must be applied in minimum 2 coats.
- More coats may be required in areas of extremely high infiltration.

OBA EASYCOAT WP

APPLICATION
Dilute 1 portion of Obaproof CM-700wp permeable primer or 1 portion of Obaproof Oba EasyCoat WP with 3 portions of clean water and then plaster directly to the surface to be waterproofed, in order to improved the bonding.
Apply or plaster first and finish coat of Obaproof Oba EasyCoat WP to construction surface by using brush, roller of spray method. The time interval between coat shall be 4 – 8 hours, and make sure that the first layer of plastering has been dried and formed as membrane.

OVER COATING
After the primer, Obaproof Oba EasyCoat WP can be applying directly provided with areas exposed hot drying winds. For indoor areas, it is recommended that allow approximately 30 minutes after the primer.
For over coating with cementitious materials, allow the second coat to harden for at least 2 days prior to over coating. (For more details, please refer to Technical Department.)

CURING
For optimum performance, Obaproof Oba EasyCoat WP should be allowed to cure for 24 hours before the finishing concrete, tiles etc and during this time precautions must be taken in order to prevent damaging to the coating.

CLEANING
Tools and equipment just can be clean with clean water immediately, after use. Hardener material can only be mechanically removed.

SAFETY
As cement is alkaline and may cause irritation, applicators are recommended to wear gloves and goggles when using Obaproof Oba EasyCoat WP. In case contact with eyes, flush immediately with clean water and seek medical assistance if symptoms persist.

TECHNICAL DATA SHEET

F2-288

HIGH PERFORMANCE CEMENTITIOUS TILE ADHESIVE

PRODUCT DESCRIPTION:
Obaproof F2-288 is a high performance, thin layer, cementitious tile adhesive, supplied ready to use with the addition of water, for bonding ceramic tiles, porcelain tiles and mosaics of every type of floors, walls.

USES
Obaproof F2-288, a product used for bonding ceramic tiles in continuous thin layers, up to 10 mm thick. Due to its excellent adhesion, it can be used in situations where traditional tile adhesives for bonding tiles are not suitable due to the type of tile, the substrate or the specific job situation or location.

Obaproof F2-288 is suitable to bond the following types of tile:
- Ceramic, porcelain, homogeneous tiles
- All type of low and high absorption tiles

Obaproof F2-288 can be used on substrates including:
- Concrete and mortar
- Bricks
- Tiled surfaces (walls and floors)
- Large size tiles
- Under floor heating
- Interior painted walls - if the paint coating is well bonded and sound

Obaproof F2-288 can be used on walls and floors, internally or externally.

EN 12004 requirement for C2TE classification
Tensile Adhesion Strength (BS EN 1348:2007)
- Standard Condition : ≥1.0 N/mm²
- Heat ageing : ≥1.0 N/mm²
- Water Immersion : ≥1.0 N/mm²
- Freeze thaw : ≥1.0 N/mm²
- Open Time (EN 1346:1997) : ≥ 0.5N/mm² at 30minutes
- Slip Resistance (EN 1308:1999) : ≤ 0.5mm

CHARACTERISTICS / ADVANTAGES
- Easy to use with excellent workability and thixotropic consistency
- Obaproof F2-288 can be applied on a vertical surface without sagging or letting the tiles slip, even when heavy tiles are used
- Very good adhesion to most common substrates (concrete, cementitious mortar, stone, bricks, etc.)
- Very good adhesion to existing tiles
- Easy to use with excellent workability and thixotropic consistency
- Tile on tile of existing flooring with tile refurbishment system

SUBSTRATE TEMPERATURE
+5°C min. / +40°C max.

AMBIENT TEMPERATURE
+5°C min. / +40°C max.

MIXING
~ 6.0 to 6.5 litre of water per 25 kg bag

TECHNICAL DATA SHEET

F2-288

HIGH PERFORMANCE CEMENTITIOUS TILE ADHESIVE

CONSUMPTION

This depends on the level, profile and surface roughness of the substrate, the size of the tiles and the technique of placing (simple placing or "back"-buttering).

As a guide, in kilos of powder per m in flat surfaces:

- Mosaics and small tiles : ~ 2.0 - 4.5 kg/m²
- Normal size tiles (200 x 200) : ~ 4.5 – 9.0 kg/m²
- Large size tiles and on external floors (600 x 600 & above) : ~ 9.0 – 13.5 kg/m²

** This may only serve as a guideline. It is highly recommended to run a trial on site to determine the actual coverage.*

SUBSTRATE QUALITY

Ensure all concrete slabs are allowed to cure fully and have a wood float finish. All rendered surfaces must be allowed to cure for at least 7 days prior to commencing tiling. The maximum variation in the plane of the concrete must not exceed 5mm in 3 metres for floors and 4mm in 2 metres for walls. Steel trowel finished concrete surfaces must be mechanically abraded prior to commencement of tiling. Ensure all surfaces are sound, dry and free from excessive movement, oil, dust, grease, wax, curing compounds, release agents and any other loose or contaminating materials. Fibre cement sheets when used as an underlay or wall / floor material must be a minimum of 6mm in thickness. For heavy duty commercial applications it should be a minimum of 9mm thick and all should be fixed in accordance with the manufacturer s instructions and the relevant standards. Compressed fibre cement sheets when used as a floor substrate must be 15mm thick, and when used a wall substrate must be 9mm thick and should be installed in accordance with the manufacturer s instructions and the relevant standards. Gypsum plasterboard sheets when used as a wall substrate must be a minimum of 10mm thick, and installed in accordance with the manufacturer s instructions and the relevant standards.

SUBSTRATE PREPARATION / PRIMING

- Weak concrete and/or cement laitance must be removed.
- Repairs to the substrate, filing of blowholes / voids, etc. must be carried out using appropriate products.
- Allow a waiting time of 24 to 48 hours before the tiling works.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and / or vacuum.
- If the substrate is very porous, and/or if the temperature is high and the relative humidity is low, it is advisable to pre-dampen the surface - do not leave any standing water, please contact Obaproof representative for further information on about the recommended primer for the specific substrate.

TECHNICAL DATA SHEET

F2-288

HIGH PERFORMANCE CEMENTITIOUS TILE ADHESIVE

EXPANSION JOINTS

Expansion/movement joints must be provided to allow for movement between adjacent building components. They should be as follows:

- In external floors where any dimension exceeds 4.5m
- Around fixed elements in the floor e.g. columns
- In internal floors, where any dimension exceeds 9m or 6m if subjected to sunlight
- On wall surfaces at storey heights horizontally and approximately 3m-4.5m apart vertically
- At internal vertical corners
- Around the perimeter of the floor
- Over existing joints in the substrate
- Where two different substrates meet e.g. timber and concrete

Ideally they should be located over movement joints in the structural background and at structural material changes for example the horizontal joint at the bottom of floor slabs, vertical joints at internal vertical corners, and at junctions with columns. Movement joints should go right through the tile adhesive bed to the background and kept free from dirt and adhesive droppings. Movement joints must not be less than 6mm and not wider than 10mm.

• Appearance / Colours	: Grey powder / White powder
• Packaging	: 25 kg bag
• Storage Conditions / Shelf-Life	: 6 months from date of production if stored properly in dry conditions, in undamaged and unopened, original sealed packaging. Not sensitive to frost.
• Chemical Base	: Cementitious mortar modified with specialized polymers
• Density	: Fresh mortar density: ~ 1.70 kg/l (at +25°C)
• Grading	: Dmax: 0.4 mm
• Layer Thickness	: 3 mm min. / 10 mm max.

AB TOP COAT 117

CEMENTITIOUS WATERPROOFING COATING

PRODUCT DESCRIPTION

Obaproof AB Top Coat 117 is cement based waterproofing coating incorporates 2 polymer components. Obaproof AB Top Coat 117 is an environmentally friendly and low VOC material. It uses to apply directly to concrete and mortar to prevent water infiltration.

USES

Obaproof AB Top Coat 117 can be used for positive and negative side waterproofing, sealing of hair line cracks and as a protective coating against aggressive chemicals such as carbon dioxide (e.g. in concrete repair work), frost and de-icing agents. The areas of application are including:

- Potable water tanks
- Terraces and balconies
- RC gutters
- Bathroom floors and walls - Basements
- Retaining walls
- Seawalls

ADVANTAGES

- Low VOC
- Environmentally Friendly
- Pre-batched and ready for used
- Mixes and applies easily
- Highly workability
- Good adhesion to sound substrates
- Impermeable
- Increased frost and salt resistance
- Resist carbon dioxide penetration
- Non-toxic
- Slightly flexible

Tensile Strength (kgf/cm²) (ASTM D412 (Die C)	8.3
Elongation (%) (ASTM D412 (Die C)	24.30
Tear Strength (kgf/cm) (ASTM D624)	7.20
Hardness (Shore A) (ASTM D2240)	54
100% Modulus of Elasticity (kgf/cm²) (ASTM D412 (Die C)	5.80
Shear Strength (kgf/cm²) (ASTM D1002)	4.70
Water Vapor Transmission of Material) i. WVT (g/hxm²)(23°C, 50%) - ASTM E96 ii. Permearce (g/sxm² xPa) – Method B	 37 1.98×10^{-5}
Abrasive Test (g) – Taber CS-17, 1000g, 1000 Cycles (ASTM C501)	0.043
Puncture (kgf)	9
Compressive strength @ 28 days (n/mm²) (ASTM E154)	>40
Pot life	30min at 30°C and will be shortened at higher temperatures
Shelf life	6 months when unopened
Storage condition	Store in a dry cool place
Packaging	Part A: 5kg / Part B: 20kg

IMPORTANT NOTES:

- Minimum ambient and substrate temperature is 5°C.
- Never apply more than 5 kg/m² of Obaproof AB Top Coat 117 in one single layer.
- Apply only to clean, sound substrates – surfaces should be well dampened but free of surface water and leaks.

AB TOP COAT 117

CEMENTITIOUS WATERPROOFING COATING

Green Label Test Data

Heavy Metals : (EPA 3025 / EPA 6010B : ICP)	
a. Cadmium (Cd)	Not Detected
b. Lead (Pd)	Not Detected
c. Total Chromium (Cr)	Not Detected
d. Mercury (Hg)	Not Detected
Volatile Organic Compounds (ISO 11890-2) (g/L)	0.63
Total Halogenated Organic Solvent (ISO 11890-2) (%)	Not Detected
Total Aromatic Organic Solvent (ISO 11890-2) (%)	Not Detected
Epichlorohydrin (ISO 11890-2) (%)	Not Detected
N-Methyl Pyrrolidinone (ISO 11890-2) (%)	Not Detected
Formaldehyde (High Performance Liquid Chromatography) (%)	Not Detected
Alkyl Phenol Ethoxylate (LCMS-MS) (%)	Not Detected
Flash Point o (ASTM D3828-07a) (C)	> 61

INSTRUCTION FOR USE

SURFACE PREPARATION

Surfaces must be clean, free from grease, oil and loosely adhering particles. All surfaces must be as flat and level as possible.

Absorbent surfaces have to be thoroughly saturated with water prior to application of first coat of Obaproof AB Top Coat 117. However, no loose standing water should be on the surface before application.

MIXING

Under normal circumstances, when the full quantities of both components are mixed together, a consistent mortar will result. Mixing shall be carried out in a clean container by gradually adding the powder component to the liquid component and stirring with slow speed mixer. Use mixture within 30 minutes. 1 set of Obaproof AB Top Coat 117 can be added <1kg of water for smooth application.

COVERAGE

- Bathrooms, terraces and balconies: 1.0kg/m² per coat.
- For waterproofing coating up to 1m water head: 1.5kg/m² per coat.
- For waterproofing coating more than 1m water head: 2.0kg/m²

Notes:

- Obaproof AB Top Coat 117 must be applied in minimum 2 coats.
- More coats may be required in areas of extremely high infiltration.

AB TOP COAT 117

APPLICATION
Dilute 1 portion of Obaproof CM-700wp permeable primer or 1 portion of Obaproof AB Top Coat 117 with 3 portions of clean water and then plaster directly to the surface to be waterproofed, in order to improved the bonding.
Apply or plaster first and finish coat of Obaproof AB Top Coat 117to construction surface by using brush, roller of spray method. The time interval between coat shall be 4 – 8 hours, and make sure that the first layer of plastering has been dried and formed as membrane.

OVER COATING
After the primer, Obaproof AB Top Coat 117 can be applying directly provided with areas exposed hot drying winds. For indoor areas, it is recommended that allow approximately 30 minutes after the primer.
For over coating with cementitious materials, allow the second coat to harden for at least 2 days prior to over coating. (For more details, please refer to Technical Department.)

CURING
For optimum performance, Obaproof AB Top Coat 117 should be allowed to cure for 24 hours before the finishing concrete, tiles etc and during this time precautions must be taken in order to prevent damaging to the coating.

CLEANING
Tools and equipment just can be clean with clean water immediately, after use. Hardener material can only be mechanically removed.

SAFETY
As cement is alkaline and may cause irritation, applicators are recommended to wear gloves and goggles when using Obaproof AB Top Coat 117. In case contact with eyes, flush immediately with clean water and seek medical assistance if symptoms persist.