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SPECIFICATION FOR

**EXTRA HEAVY DUTY HPI;
CONCRETE WATERPROOFING
& CORROSION PROOFING
INGREDIENT**

EVERDURE **CALTITE***

REQUIREMENT:

Heavy-duty integral waterproofing, damp-proofing & corrosion-proofing of structural concrete, without application of membranes, tanking or separate surface-treatments. Suitable for use in all concrete structures subject to water under pressure and/or severe damp/wet conditions. Corrosion-proofing of structural concrete against chlorides from marine environments, reclaimed land or sulphate-bearing soil/groundwater, and to protect concrete floors and toppings subject to acids or other aggressive materials. Waterproof renders & toppings. Prevention of leaching/salt stains from tile mortars, renders etc.

For Membrane-Free, waterproof **CALTITE** Concrete Roof and **CALTITE** Jointless Floors, ask for separate Detailed Technical Specifications. It is recommended that Roof and Floor drawings be checked at our Technical Service Offices - (see below).

PRODUCT TO USE:

Everdure **CALTITE**

Hydrophobic Pore-Blocking Ingredient (HPI)

HOW TO SPECIFY - CONCRETE:

"All concrete (*specify sections*) shall be waterproofed / corrosion-proofed by the addition **Cementaid Everdure CALTITE Hydrophobic Pore-blocking Ingredient (HPI)** or proven equal & approved, dosed at the rate of up to 30 litres per cubic metre of concrete or as directed by manufacturer for specialised requirements. A High Range Water Reducing Agent (HRWRA), such as Cementaid SUPERPLASTET F or proven equal & approved, should be included at the rate of 0.5 - 1.5% by wt. of cement, reducing water content accordingly to preserve the specified slump. The **[water+CALTITE]:cement** ratio should not exceed 0.45, and the concrete shall further have a corrected 30-minute absorption value of not greater than 1.0% (one percent) as measured by BS1881: Part 122: 1983, except that the age at test shall be 7 days. The Ordinary Portland Cement (OPC) content of **CALTITE** waterproofed concretes should optimally be not less than 335kg per cu.m., or as per manufacturers' recommendations for blended cements."

| Mix | Min. Total Cementitious | Min. OPC |
|-------------|-------------------------|----------|
| OPC only | 335 | 335 |
| OPC / PFA | 380 | 300 |
| OPC / ggbfs | 400 | 160 |

NOTE 1: CALTITE provides approx. 15 mins retardation of set. Separate retarding admixtures may increase retardation. Trial mix(s) are recommended to confirm specified parameters. Test specimens to be kept moist always.

NOTE 2: Dose rates; **Cementaid** authorised representatives may recommend higher or lower dose rates than 30 litres/m³ of **Caltite**, to meet requirements for specialised performance, service conditions and/or design-life.

RENDERS & TOPPINGS - Specification:

"All (*render or toppings - specify mix*) shall contain 2 litres of **CALTITE** integral waterproofer per 20kg bag of cement used in the mix, or as directed by manufacturer for specialised requirements. The water content shall be adjusted to preserve the required workability/slump."

EFFECTS:

BBA-certified in substructures 300mm thickness or greater compliant with BS8102:1990, Type B, Grade 4 (vapour-proof). **Everdure CALTITE** reverses concrete's normal capillary "wicking" or absorptive action, producing instead concrete with a iniformly Hydrophobic Matrix™ and capillary pore-blocking components throughout. These combined effects expel water and any contained salts or acids, and prevent their re-entry, including under hydrostatic pressure. The hydrophobic interior of **CALTITE** concrete controls transmission of dampness without applied membranes or barriers, and is unaffected by acidic or salt solutions in contact with its surface. The action of aggressive salts or acids is thus confined to the extreme outer surface, where only minor wear can occur. More than 50 years proven successful performance.

ADVANTAGES:

CALTITE allows the construction of fully waterproof / habitable structures, including deep basements, tunnels below water table, trafficable roofs, suspended pools and landscaped decks, without the past need for applied tanking or waterproofing membranes. This results in significant performance advantages with very very substantial time & cost savings, as well as eliminating long-term maintenance & costs. The Hydrophobic Matrix™ allows damp-free rectification of placement flaws (e.g. const. joint, crack, etc.) by simple grout injection.

WHERE RECOMMENDED:

Basements / habitable substructures, swimming pools, lift-wells, car-parks, tunnels, other sub-structures in contaminated and / or wet ground or subject to hydrostatic pressure. Industrial / chemical / food processing floors, trafficable and/or landscaped concrete roof & podium decks, and locations where ground-water / reclaimed land or service-environment may contain organic acids, sulphates, chlorides or other harmful salts. Jetties & wharves, boat ramps and all concrete in a marine environment where long-term maintenance-free service-life is required. All damp or wet environments, where transmission of dampness or absorption/ingress of water & contained salts or acids is undesirable.

APPLICATION: CONTACT CEMENTAID FOR APPLICATION SERVICE



AUSTRALIAN OWNED EXPORTERS TO THE WORLD

INDUSTRIAL FLOOR SPECIFICATIONS • CONCRETE WATERPROOFING & CORROSION-PROOFING ADMIXTURES
OIL & SOLVENT PROOFING • SURFACE TOUGHENING & DUSTPROOFING • ANTI-CORROSION IMPREGNATIONS
RAPID HARDENING • RETARDING • GEL CONTROL AGENT • MORTAR AND DAMPCOURSE ADMIXTURES, etc.

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The information and recommendations herein are, as a result of experience and testing, accurate to the best of the seller's knowledge. However, as the proposed use and the circumstances surrounding such use are not known to the seller, it does not guarantee or warrant the product's suitability in any particular instance and shall not be liable for any loss or damage consequent upon any use whatsoever unless the seller has otherwise stipulated the product's suitability for a particular use in writing signed by a Director of the seller.