



BUILDING ENHANCEMENT SYSTEMS

BUILDING REFERENCE BOOK

FOR
ARCHITECTS, ENGINEERS,
PLANNERS, CONTRACTORS
&
CONSULTING ENGINEERS

by



OCTABUILD
CONSTRUCTION CHEMICALS

ADMIXTURES

MODIFY CONCRETE PROPERTIES IN MODERN CONSTRUCTION

INTRODUCTION

The use of Concrete Admixtures in construction cannot be overemphasized. Admixtures have variety of properties that can boost the construction of a building, Admixtures are artificial or natural materials added to the concrete besides cement, water and aggregate to improve certain property of concrete during casting or setting or service stage, improves properties of fresh concrete.

FUNCTIONS:

As explained above, Admixtures are added to modify concrete properties. Basic functions and advantages of using Admixtures are detailed below.

- To improve workability of fresh concrete
- To improve durability by entrainment of air
- To reduce water required
- To reduce the early heat of hydration and overcome thermal cracking problem
- To imparts early strength in concrete
- To accelerate setting & hardening & thus to produce high early strength
- To impart water repellent/ water proofing property, watertight
- To cause dispersion of the cement particles when mixed with water
- To offset / reduce shrinkage during setting & hardening
- To cause expansion of concrete and automatic pre stressing of steel
- To improve wear resistance
- To retard setting
- To reduce segregation & bleeding
- To reach high compressive strength

Now days, lots of additives are used in concrete mixes to enhance its properties. Depending on the specific function or action on the concrete property, it can be classified into following.

Octa Crete SP333

Super plasticizing, Extended Workability Concrete Admixture

Octa Crete SP333 is a chloride free, high performance super plasticizing liquid admixture providing prolonged retention of workability. To produce highly workable and high fluidity to concrete also used where a high degree of workability is required, ideal where slump retention is required.

Dosage: Dosage of Octa Crete SP333 is set to meet specific job requirements and determined by site trials. A confirm dosage under a particular situation can vary between 0.30 to 0.75 liter per 50 kg of cement.

Octa Crete SP405

High Range Water Reducing Super Plasticizer

Octa Crete SP405 is a chloride free high performance super plasticizer for concrete admixture based on selected naphthalene which promotes high early strength by permitting substantial reduction in the water cement ratio, high range water reducing at equal consistency, also reduce concrete permeability and thus reduce water penetration and durability, produces major increases in strength at early ages without increased cement content and significantly improve the workability of concrete without increasing water demand.

Dosage: Dosage of Octa Crete SP405 is set to meet specific job requirements and determined by site trials. A confirm dosage under a particular situation can vary between 0.25 to 1 liter per 50 kg of cement.

Octa Crete SP340

Super Plasticizing, Strength Accelerating Admixture

Octa Crete SP340 is a highly fluid self-leveling concrete admixture with very high early and ultimate strengths, significantly improving of site mixed and precast concrete without increasing water demand, minimizes segregation and bleeding and improve pump ability, increases strength at early ages without increased cement content, improves workability and higher cohesion.

Dosage: Dosage of Octa Crete SP340 is set to meet specific job requirements and determined by site trials. A confirm dosage under a particular situation can vary between 0.35 to 1.5 liter per 50 kg of cement.

Octa Crete SP 410

High Performance Super Plasticizer for Slump Retention and High Strength Concrete

Octa Crete SP 410 is a chloride free super plasticizing liquid admixture based on selected lignosulphonates. To improve the effectiveness of water content of a concrete mix, to extend working times of concrete, to provide excellent slump retention properties, to provide improved durability by increasing ultimate strengths and reducing concrete permeability, to extend the setting time. This is especially important when the length of placement may result in flexural cracks created by dead load deflections during placement. Controlled retardation extends working life and stiffening time for ease of construction, control of stiffening improves slip forming and assists in preventing the formation of cold joints in large pours. Chloride free, safe for reinforcement bars allowing use in pre stressed and reinforced concrete.

Dosage: Dosage of Octa Crete SP410 is set to meet specific job requirements and determined by site trials. A confirm dosage under a particular situation can vary between 0.35 to 0.75 liter per 50 kg of cement.

Octa Crete P112 Water Reducing Admixture

Octa Crete P112 is a chloride free water reducing, retarding and plasticizing liquid Admixture based on selected lingo sulphonates, To improve effectiveness of the water content of a concrete mix & to reducing concrete permeability and water reducing penetration, use high dosage, allows specified strength grades to be met at reduced cement content or increased workability.

Dosage: Dosage of Octa Crete P112 is set to meet specific job requirements and determined by site trials. A confirm dosage under a particular situation can vary between 0.2 to 0.5 liter per 50 kg of cement.

Octa Crete RP222 Water Reducing Concrete Admixture

Octa Crete RP222 is a chloride free water reducing, retarding and plasticizing liquid Admixture to improve the effectiveness of water content of a concrete mix, to extend working times of concrete, controls the stiffening improves slip forming and assists in preventing the formation of cold joints in large pours, water reduction significantly improves compressive strength at all ages and enhances durability.

Dosage: Octa Crete RP222 is set to meet specific job requirements and determined by site trials. A confirmed dosage under a particular situation can vary between 0.2 to 0.5 liter per 50 kg of cement.

Octa Crete WP60

Octa Crete WP60 is a liquid admixture produced specifically for the complete and permanent waterproofing of mass and reinforced concrete structures, improves workability, increases the plasticity of the mix, allows a reduction of gauging water without loss of workability, facilitates compaction and reduces the possibility of shrinkage and consequential cracking and crazing. Octa Crete WP60 does not contain calcium chloride and therefore cannot cause corrosion of embedded metals, does not in any way, affect the setting time of Portland cement.

Dosage: Dosage of Octa Crete WP60 is set to meet specific job requirements by site trials. A confirmed dosage under a particular situation can vary between 0.25 to 0.5 liter per 50 kg of cement.

Octa Plast IWP

Octa Plast IWP is used as Admixture (powder form) when used as an Admixture form an internal barrier against water penetration and increases the plasticity of mortar, reduces water absorption and thereby guards against freeze-thaw damage. Add Octa Plast IWP to concrete or mortar in the following proportion: Powder: 1 Kg per 50 Kg Bag of Cement.

SUGGESTED BUILDING PRODUCTS FOR CONSTRUCTION WORKS

General Protection of Footings, Plinth, Columns & Foundations

Octa Plast IWP

Octa Plast IWP is used as Admixture (powder form) when used as an Admixture form an internal barrier against water penetration and increases the plasticity of mortar, reduces water absorption and thereby guards against freeze-thaw damage. Octa Plast IWP to concrete or mortar in the following proportion: Powder: 1 Kg per 50 Kg Bag of Cement.

Octa Crete P112 Water Reducing Concrete Admixture

Octa Crete P112 is a chloride free water reducing, retarding and plasticizing liquid Admixture based on selected ligno sulphonates, To improve effectiveness of the water content of a concrete mix & to reducing concrete permeability and water reducing penetration, use high dosage, allows specified strength grades to be met at reduced cement content or increased workability.

Octa Proof 300 Rubber Modified Bitumen Waterproofing Membrane System

Octa Proof 300 applied by brush or trowel, two coat application is desirable of Octa Proof 300 apply first coat undiluted Octa Proof 300 at the rate of 0.25 kg/square meter and leave it dry for at least 48 hours, second coat of undiluted Octa Proof 300 should be applied after the first coat has dried at the rate of 0.25 kg per square meter. To provide a flexible waterproofing membrane to building & civil engineering structure, provides protection of concrete where the bridging of fine cracks is important.

Octa Brush Seal Crystalline Penetrative Capillary Waterproofing System

Octa Brush Seal is a migratory crystalline waterproofing coating which requires the presence of moisture in substrate in order to carry out its functions, a coat of Brush Seal over the whole area will eliminate any further ingress of water the first coat should be

applied at the right angles to the first to ensure that complete coverage is achieved and second coat maybe applied as soon as first becomes touch dry. It can be applied to new or old structurally sound surfaces and can be also applied either to the negative or the positive side and will negate dampness and ground water permeation even under hydrostatic pressure. The active chemicals within the mix penetrate into the structure and react with the free lime forming long chain complexes, which crystalline in the capillaries. The migratory crystallization process is continuous in damp structures and will effect great penetration achieving complete resistance to the passage of water whilst still allowing the fabric to breath.

Waterproof Construction & Protection of Foundations Below Ground Concrete of Medium or Large Water Tanks/ Reservoirs, Retaining Structures, Basements Including Permanent Treatment of Construction Joints.

Highly saline or water logged areas

Octa Plast IWP

Octa Plast IWP is an integral water proofer powder in concrete, used as an admixture, form an internal barrier against water penetration and increases plasticity of mortar, reduces water absorption and thereby guards against freeze-thaw damage.

Dosage: 1 Kg per 50 Kg cement, dry mixed with cement, sand and aggregate.

Octa CAD

Octa CAD is a capillary admixture belongs to the same family of Octa Brush Seal but is used as an admixture, dry mixed with other concrete ingredients. The concrete thus produced will remain water and moisture resistant till its service life of the structure. The chemicals in this product spread within the mass of the concrete and remain active to block moisture movement within the structure.

Dosage: A confirmed dosage under a particular situation can vary between 1 kg to 2 kg per 50 kg cement.

Octa Crete P112 Water Reducing Concrete Admixture

Octa Crete P112 is a chloride free water reducing, retarding and plasticizing liquid Admixture based on selected lingo sulphonate, To improve effectiveness of the water content of a concrete mix & to reducing concrete permeability and water reducing penetration, use high dosage, allows specified strength grades to be met at reduced cement content or increased workability.

Octa Crete RP222 Water Reducing Concrete Admixture

Octa CreteRP222 is a chloride free water reducing, retarding and plasticizing liquid Admixture to improve the effectiveness of water content of a concrete mix, to extend working times of concrete, controls the stiffening improves slip forming and assists in preventing the formation of cold joints in large pours, water reduction significantly improves compressive strength at all ages and enhances durability.

Dosage: Octa Crete RP222 is set to meet specific job requirements and determined by site trials. A confirmed dosage under a particular situation can vary between 0.2 to 0.5liter per 100 kg of cement.

Octa Proof 300 Rubber Modified Bitumen Waterproofing System

Octa Proof 300 applied by brush or trowel, two coat application is desirable of Octa Proof 300 apply first coat undiluted Octa Proof 300 at the rate of 0.25 kg/square meter and leave it dry for at least 48 hours, second coat of undiluted

Octa Proof 300 should be applied after the first coat has dried at the rate of 0.25 kg per square meter. To provide a flexible waterproofing membrane to building & civil engineering structure, provides protection of concrete where the bridging of fine cracks is important.

Octa Brush Seal Crystalline Penetrative Coating System

Octa Brush Seal is a migratory crystalline waterproofing coating which requires the presence of moisture in substrate in order to carry out its functions, a coat of Brush Seal over the whole area will eliminate any further ingress of water the first coat should be applied at the right angles to the first to ensure that complete coverage is achieved and second coat maybe applied as soon as first becomes touch dry.

Spread Rate: 1 to 1.5 kg per square meter per layer.

Octa Coat FLX Polymer Modified Flexible CementitiousWaterproof Membrane:

Octa Coat FLX is a two component polymer modified cementitious coating applied as a flexible waterproof barrier. Excellent crack bridging capabilities with stands high hydrostatic pressures with high bond strength to concrete. Apply the mixed product by medium hard short bristle brush or trowel checking that the first coat is at a minimum thickness of 1 mm approx. The product should always be finished in one direction, the second coat should be applied as soon as the first coat is set hard. The total thickness of film should be 1-2 mm on walls and 1-3 mm on floors depending on the anticipated water pressure. Spread Rate: 1 kg per square meter per coat.

Octa PVC Waterstops

Octa PVC Waterstops is a high grade PVC extrusion formulated to meet the highest performance. Esquire Tech PVC Waterstops are supplied as straight lengths along with factory fabricated junction pieces to simplify layouts and site jointing. Various types and sizes selected on the basis of specific requirement.

Octa ET101 Swell Bar Waterstop

Octa ET101 Swell Bar is a bentonite swelling type water stop in all construction joints, especially wall/floor junction and wall/wall or floor/floor joints.

Laid:ET101 is simply laid and nailed to horizontal or vertical (bitumen primed) substrate and concrete poured. Serves for the life of the structure.

Octa Bond

Octa Bond is a construction grade SBR Latex used for bonding new & old concrete, floor toppings & grouting patch work, laying of thin joint less cement sand screeds, preparation on-site repair mortars, filling of blowholes and wide cracks, waterproof lining of water retaining structures, etc.

Protection of Foundations & Other Concrete Structures

(Salt water & brackish water and Corrosion Effect on Concrete)

Salt water itself contains magnesium chloride sulphate ions and hydrogen carbonation ions that will essentially attack concrete to a certain degree but what really start to corrode in a concrete structure is any of the steel sub structure within, the steel inside the concrete is used for reinforcement will react with the concrete and form a film that protects the steel.

This is where salt water/brackish water works against that process, once the film is breached then the corrosion process begins to work on the steel itself. The problem with the steel inside the concrete is that as it expands, forces will be applied to the concrete structure that causes it to crack. This turn leads to more of the corrosion process to begin, corrosion of this sort will surely destroy concrete over time unless it is properly protected.

Concrete can be damaged by aggregate expansion sea water, brackish water, distilled water bacterial corrosion, calcium leaching and physical damage carbonation, chlorides sulphates etc.

Reinforced Concrete can be protected from corrosion in two main ways.

1 Modifying the Concrete using Admixtures for Maximum Required Strength, to Enhance the Properties of Concrete, Workability, Retardation and Low permeability

Admixtures are artificial or natural materials added to the concrete to modify the concrete to improve certain property of concrete during casting or setting or service stage. For more details about Admixtures follow Admixture Guide or Technical Data Sheet.

Octa Plast IWP

Octa Plast IWP is an integral water proofer powder in concrete, used as an admixture, form an internal barrier against water penetration and increases plasticity of mortar, reduces water absorption and thereby guards against freeze-thaw damage.

Dosage: 1 Kg per 50 Kg cement, dry mixed with cement, sand and aggregate.

Octa CAD

Octa CAD is a capillary admixture belongs to the same family of Octa Brush Seal but is used as an admixture, dry mixed with other concrete ingredients. The concrete thus produced will remain water and moisture resistant till its service life of the structure. The chemicals in this product spread within the mass of the concrete and remain active to block moisture movement within the structure.

Dosage: A confirmed dosage under a particular situation can vary between 1 kg to 2 kg per 50 kg cement.

2 Seal the surface of the concrete to minimize the ingress of chloride ions.

To prevent these problems it's necessary to apply protective coatings on concrete surface as a barrier between the concrete and the salt/brackish water that will stop water chloride and oxygen from reaching the inner workings of the structure, the most satisfactory and available solutions are:

Octa Proof 100 Polymer Modified Clay Stabilized Bitumen Waterproofing and Protective Coating

Octa Proof 100 is a ready to use, cold applied bitumen emulsion with selected polymer to provide a tough durable bituminous coating, as a waterproof membranes in sandwich waterproofing system, curing membrane for freshly laid concrete. Recommended Spread Rate

Damp Proof Membrane & Vapor Barrier 2 coats at 4 square meter per kg per coat 32 sq meter

Waterproofing Membrane 2 coats at 2 square meter per kg per coat 16 square meter

Curing Membrane 1 coat at 4 square meter per kg per coat 72 square meter

Octa Proof 300 Rubber Modified Bitumen Waterproofing System

Octa Proof 300 applied by brush or trowel, two coat application is desirable of Octa Proof 300 apply first coat undiluted Octa Proof 300 at the rate of 0.25 kg/square meter and leave it dry for at least 48 hours, second coat of undiluted Octa Proof 300 should be applied after the first coat has dried at the rate of 0.25 kg per square meter. To provide a flexible waterproofing membrane to building & civil engineering structure, provides protection of concrete where the bridging of fine cracks is important.

Octa Brush Seal Crystalline Penetrative Capillary Waterproofing System

Octa Brush Seal is a migratory crystalline waterproofing coating which requires the presence of moisture in substrate in order to carry out its functions, a coat of Brush Seal over the whole area will eliminate any further ingress of water the first coat should be applied at the right angles to the first to ensure that complete coverage is achieved and second coat maybe applied as soon as first becomes touch dry. Spread Rate: 1 to 1.5 kg per square meter per layer.

Octa Coat FLX Polymer Modified Flexible Cementitious Waterproof Membrane

Octa Coat FLX is a two component polymer modified cementitious coating applied as a flexible waterproof barrier. Excellent crack bridging capabilities with stands high hydrostatic pressures with high bond strength to concrete. Apply the mixed product by medium hard short bristle brush or trowel checking that the first coat is at a minimum thickness of 1 mm approx. The product should always be finished in one direction, the second coat should be applied as soon as the first coat is set hard. The total thickness of film should be 1-2 mm on walls and 1-3 mm on floors depending on the anticipated water pressure. Spread Rate: 1 kg per square meter per coat.

Roof Treatments

Shell & Sloped RCC Roofs & Flat Roofs (non trafficked)

Octa Proof 300 Rubber Modified Bitumen Waterproofing Membrane

System applied by brush or trowel, two coat application is desirable of Octa Proof 300 apply first coat undiluted Octa Proof 300 at the rate of 0.25 kg/square meter and leave it dry for at least 48 hours, second coat of undiluted Octa Proof 300 should be applied after the first coat has dried at the rate of 0.25 kg per square meter. To provide a flexible waterproofing membrane to building & civil engineering structure, provides protection of concrete where the bridging of fine cracks is important.

Life Expectancy: 5 - 7 years.

Octa Shield AC Seamless & Elastomeric Waterproofing Membrane :

Octa Shield AC is an elastomeric, single pack waterproofing compound based on special styrene co-polymers. It is ideal for substrates which require a seamless, joint free, water tight and weather resistant elastic membrane. Completely water tight after drying even then immersed, high stretch & tear resistant, accepts light foot traffic, waterproof membrane in sandwich construction, protection to below ground concrete elements, moisture and vapor barrier and resistant to aging & UV radiation. Application rate shall be 2 coats at 0.5 kg per coat per square meter, minimum re-coating period shall be 24 hours. In very humid conditions or cold weather the interval should be increased to 48 hours.

Life Expectancy: 7 – 8 years.

Octa Shield HIC Elastomeric Insulation and Waterproof Coating System

Octa Shield HIC is an emulsion of high grade acrylic resins in water combine with micro-spheres. It dries by evaporation to yield a tough, velvety water repellent surface with exceptional abrasion resistance and UV light stability.

The Octa Shield HIC is an innovative roofing and waterproofing system combining strength, light weight protection and integral heat insulation. Waterproofs roofs, even low sloped and horizontal surfaces, high degree of puncture resistance due to its outstanding tensile strength, thermal and waterproof barrier between intermediate floors also for insulation and rust proofing of metal roofs, shades and expanding while wet and shrinking while dry, helps keep the moisture out and improve efficiency of the system.

Octa HIC can be applied by airless spray or brush or roller. It should be applied evenly without build-up. Two coats are recommended at the rate of 0.50 liter per square

meter per coat to a total wet film thickness of 500 microns (0.5mm). In irregular conditions more product shall be required per square meter depending upon the roughness of the substrate to obtain an average thickness of 0.50mm.

Life Expectancy: 7 – 8 years.

Octa Coat FLX Polymer Modified Flexible Cementitious Waterproof Membrane

Octa Coat FLX is a two component polymer modified cementitious coating applied as a flexible waterproof barrier. Excellent crack bridging capabilities with stands high hydrostatic pressures with high bond strength to concrete. Apply the mixed product by medium hard short bristle brush or trowel checking that the first coat is at a minimum thickness of 1 mm approx. The product should always be finished in one direction, the second coat should be applied as soon as the first coat is set hard. The total thickness of film should be 1-2 mm on walls and 1-3 mm on floors depending on the anticipated water pressure. Spread Rate: 1 kg per square meter per coat.

Life Expectancy: 7 – 8 years.

All the products mentioned above also can be applied with Polyester Reinforcing Fabric to increase the tensile strength & elongation, extra puncture resistance, adds Superior strength to roofing systems to prevent the crack expansion.

Proper design of falls in reinforced concrete flat roofs is most important in creating flow paths to suitable discharge points. For a roof to be effective, surface water should be discharged quickly without ponding or stagnation. Next, it is important to select the appropriate waterproofing membrane

Waterproofing is a construction measure designed to prevent water from damaging a building. It can be done during or after building work to protect the structure from water damage caused by rain, moisture and leaks.

Water damage can result in serious issues to a building's structure and appearance. It can damage not only the surface, but also affects the health and safety of those around the affected building.

What could happen if a building isn't waterproof?

Poor waterproofing brings serious risks to the integrity of a building. Several building projects have experienced structural failures due to poor or lack of roof and concrete waterproofing

Roof Treatments

Flat RCC Roofs & Flat Roofs (trafficked)

Octa Shield AC Seamless & Elastomeric Waterproofing Membrane

Octa Shield AC is an elastomeric, single pack waterproofing compound based on special styrene co-polymers. It is ideal for substrates which require a seamless, joint free, water tight and weather resistant elastic membrane. Completely water tight after drying even then immersed, high stretch & tear resistant, accepts light foot traffic, waterproof membrane in sandwich construction, protection to below ground concrete elements, moisture and vapor barrier and resistant to aging & UV radiation. Application rate shall be 2 coats at 0.5 kg per coat per square meter, minimum re-coating period shall be 24 hours. In very humid conditions or cold weather the interval should be increased to 48 hours.

Note: Cover with cement sand screed, tiles or marble slabs as per budget and finish required. Stress Relieve joints should be incorporated and sealed with a polysulphide or polyurethane sealant.

Life Expectancy: 12-15 years.

Octa Shield HIC Elastomeric Insulation and Waterproof Coating System

Octa Shield HIC is an emulsion of high grade acrylic resins in water combine with micro-spheres. It dries by evaporation to yield a tough, velvety water repellent surface with exceptional abrasion resistance and UV light stability.

The Octa Shield HIC is an innovative roofing and waterproofing system combining strength, light weight protection and integral heat insulation. Waterproofs roofs, even low sloped and horizontal surfaces, high degree of puncture resistance due to its outstanding tensile strength, thermal and waterproof barrier between intermediate floors also for insulation and rust proofing of metal roofs, shades and expanding while wet and shrinking while dry, helps keep the moisture out and improve efficiency of the system.

Octa HIC can be applied by airless spray or brush or roller. It should be applied evenly without build-up. Two coats are recommended at the rate of 0.50 liter per square meter per coat to a total wet film thickness of 500 microns (0.5mm). In irregular conditions more product shall be required per square meter depending upon the roughness of the substrate to obtain an average thickness of 0.50mm.



Note: Cover with cement sand screed, tiles or marble slabs as per budget and finish required. Stress Relieve joints should be incorporated and sealed with a polysulphide or polyurethane sealant.

Life Expectancy: 12-15 years.

Octa Coat FLX Polymer Modified Flexible Cementitious Waterproof Membrane:

Octa Coat FLX is a two component polymer modified cementitious coating applied as a flexible waterproof barrier. Excellent crack bridging capabilities with stands high hydrostatic pressures with high bond strength to concrete. Apply the mixed product by medium hard short bristle brush or trowel checking that the first coat is at a minimum thickness of 1 mm approx. The product should always be finished in one direction, the second coat should be applied as soon as the first coat is set hard. The total thickness of film should be 1-2 mm on walls and 1-3 mm on floors depending on the anticipated water pressure. Spread Rate: 1 kg per square meter per coat.

Note: Cover with cement sand screed, tiles or marble slabs as per budget and finish required. Stress Relieve joints should be incorporated and sealed with a polysulphide or polyurethane sealant.

Life Expectancy: 10-12 years.

Proper design of falls in reinforced concrete flat roofs is most important in creating flow paths to suitable discharge points. For a roof to be effective, surface water should be discharged quickly without ponding or stagnation. Next, it is important to select the appropriate waterproofing membrane

Waterproofing is a construction measure designed to prevent water from damaging a building. It can be done during or after building work to protect the structure from water damage caused by rain, moisture and leaks.

Water damage can result in serious issues to a building's structure and appearance. It can damage not only the surface, but also affects the health and safety of those around the affected building.

What could happen if a building isn't waterproof?

Poor waterproofing brings serious risks to the integrity of a building. Several building projects have experienced structural failures due to poor or lack of roof and concrete waterproofing

Grouting for Filling Large Voids between Concrete Units, Machine Anchor Bolts & Foundations

High Strength, Shrinkage Compensated Cementitious Grout

Octa Grout NC

Octa Grout NC is ready to use one part cementitious grout. The addition of clean mixing water, produces a non-shrink grout of predictable performance. High bond strength to concrete and steel, high compressive strength at early stages allowing minimal downtime on machinery and extremely low permeability, excellent for Anchor bolts, Pressing & Milling machines, Generators and Turbines, etc.

Mixing Ratio: 3.8 to 4 liter fresh water per 25 kg Bag

Octa Grout SC

High Fluidity Dual Shrinkage Compensated Grout

Octa Grout SC is a pre-mix, chloride free, and one part cementitious pourable grout providing high strength, shrinkage compensation, frost resistance, shock and vibration resistance. Excellent for filling large voids between concrete, anchoring holding down bolts, tie bars, stressing cables, concrete repair, grouting under machinery base plates, stanchion base with high bond strength to steel and concrete, high compressive strength at early stages, rapid installation and early use to plant and extremely low permeability.

Mixing Ratio: 4.1 liter fresh water per 25 kg Bag

Some Useful Products & Applications

Octa Bond

Construction grade SBR latex use for bonding of new & old concrete, floor toppings, waterproof tile fixing & grouting, patch work, on-site repair mortars filling blow holes and wide cracks, waterproof lining of water retaining structures.

Octa LP 50

Leak plugging liquid concrete accelerator LP 50 is a simple and cost effective chemical for blocking liquid migration Octa LP 50 is an admixture composed of negativity charged, in organic chemical and react with its surroundings to form a crystal based plug that will block the flow of liquid.

Octa Crete WP60

Octa Crete WP60 is a liquid admixture produced specifically for the complete and permanent waterproofing of mass and reinforced concrete structures, improves workability, increase the plasticity of the mix, allows a reduction of the gauging water without loss of workability and reduces the possibility of shrinkage and conicquential cracking and crazing

Octa Crete WP60 does not contain calcium chlorides and therefore cannot cause corrosion of embedded metals does not in any way.

Dosage: 0.5 to 1.0 liter per 50 kg cement.

Octa Plast IWP

Octa Plast IWP is an integral water proofer powder in concrete, used as an admixture, form an internal barrier against water penetration and increases plasticity of mortar, reduces water absorption and thereby guards against freeze-thaw damage.

Dosage: 1 Kg per 50 Kg cement, dry mixed with cement, sand and aggregate.

Octa CAD

Octa CAD is a capillary admixture belongs to the same family of Octa Brush Seal but is used as an admixture, dry mixed with other concrete ingredients. The concrete thus produced will remain water and moisture resistant till its service life of the structure. The chemicals in this product spread within the mass of the concrete and remain active to block moisture movement within the structure.

Dosage: A confirmed dosage under a particular situation can vary between 1 kg to 2 kg per 50 kg cement.

Octa FiberTex

Octa FiberTex is a Polypropylene Fiber Reinforcement is an engineered polypropylene fiber designed specifically for secondary reinforcing of concrete Octa FiberTex are true monofilaments that totally disperse into the concrete mix. Controls or eliminates plastic shrinkage and provides three-dimensional reinforcing versus two-dimensional with wire mesh.

Dosage:Residential 0.6 kg/ cubic meter, Commercial 0.9 kg/ cubic meter.

Octa Seal PU1

Octa Seal PU1 is a one part polyurethane low modulus construction sealant is suitable for joints from 5 to 30 mm wide, subject to a 10 mm minimum depth of sealant.

Octa PVC Waterstops

Esquire Tech PVC Waterstops are the high grade PVC extrusion formulated to meet the highest performance. Esquire Tech PVC Waterstops are supplied as straight lengths along with factory fabricated junction pieces to simplify layouts and site jointing. Various types and sizes selected on the basis of specific requirement.

Octa ET101 Swell Bar Waterstop

Octa ET101 Swell Bar is a bentonite swelling type water stop in all construction joints, especially wall/floor junction and wall/wall or floor/floor joints.

Laid:ET101 is simply laid and nailed to horizontal or vertical (bitumen primed) substrate and concrete poured. Serves for the life of the structure