

CONSTRUCTION
CHEMICALS



PRODUCT CATALOGUE



Concrete Admixtures



Waterproofing



Grout & Anchor



Surface Treatment



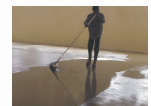
Concrete Repair



Joint Sealant



Tiling



Flooring



BUILDING BONDS FOR A BETTER TOMORROW

Chembond Chemicals Limited (BSE: CHEMBOND) is a 40 year old known name in India, manufacturing a diverse range of specialty chemicals like water treatment, polymers, construction chemicals, high performance coatings, animal nutrition's and industrial biotech products. The company has excellent infrastructure facilities like a well equipped R & D laboratory, multiple regional offices and production plants, well trained personnel and references across several business segments from the best known companies in the field. Our presence through the various product lines allows us to serve industries across most segments of manufacturing in India.

Chembond has believed in delivering to customer expectations through continuous investments in innovation and technical services. We strive to deliver value and delight our customers for the money invested by them.



OUR CONSTRUCTION CHEMICALS BUSINESS

Construction chemicals are used by the Construction and civil repair industry. These chemicals help to enhance concrete strength and quality, provide water-tightness and protect concrete structures from atmospheric degradation.

Our range of admixtures, sealants, waterproofing solutions, repair mortars and systems, tile fixing adhesives, tile joint fillers, floor hardeners, and cement / epoxy based grouts are used by construction companies, ready-mix concrete manufacturers, civil contractors and repair and waterproofing applicators. These products find applications in infrastructure projects, industrial construction, residential and commercial construction.

The products are sold directly to large customers and through a channel of dealers and distributors across many parts of the country. We cater our chemicals to distributors and dealers by following a unique number series so that they are easy to understand and recall in small pack sizes, while the infrastructure projects are catered by the "KEM" series of products in bulk pack sizes.

We have a cutting edge R&D centers manned by an excellent pool of professionals and state-of-the-art manufacturing facilities at 4 different locations.

CONCRETE ADMIXTURES

SUPER PLASTICIZERS

KEM SUPLAST 101 S	Sulphonated naphthalene formaldehyde based superplasticizer	2
KEM SUPLAST 280 DC	Super Plasticizers for Ready Mix Concrete	2
KEM SUPLAST 101 G	Superplasticising, high range, water reducing admixture	2
KEM SUPLAST 220 PQC	Plasticizing admixture for Pavement Quality Concrete	3
KEM SUPLAST 240 G10	Super Plasticizers for Ready Mix Concrete	3
KEM SUPLAST L 10	Sulphonated melamine formaldehyde based super plasticizer	3
KEM SUPLAST SCC 30	Polycarboxylate ether based super plasticizing admixture for self compacting concrete	4
KEM SUPLAST SCC 50	Hyper plasticizer based on a blend of modified polycarboxylate & viscosity modifier ether	4
KEM SUPLAST SP 65	Super slump retaining hyper plasticizer based on third generation polycarboxylate ether.	5
KEM SUPLAST SPC 40	Hyper plasticizer based on modified poly carboxylic ether (PCE)	5
KEM SUPLAST PCL 20	Concrete super plasticizer / retarder	5
KEM SUPLAST PCL 110	High range water reducing superplasticising and slump retaining admixture	5
KEM SUPLAST 110 R	Concrete super plasticizer cum retarder	6
KEM SUPLAST 4 A	Quick setting waterproofing admixture	6
KEM SUPLAST 128 UT	High-range, retarding superplasticiser for high performance concrete mixes	6
KEM SUPLAST SCC 30 VM 2	Hyper plasticizer based on a blend of modified poly carboxylate & viscosity modifier ether (PCE)	7
KEM SUPLAST 3540	Water reducing super plasticizing and slump retaining admixture	7

PLASTICIZERS

KEM PLAST 100	Blend of sodium lignosulphonate and specialty additives	8
KEM PLAST N	Normal Plasticizers	8
KEM PLAST NG	Plasticizers for Ready Mix Concrete	8

AIR ENTRAINER

KEM AEA 10	Entrains small air voids and distributes them homogeneously in the concrete	9
------------	---	---

SHOTCRETE ADDITIVES

KEM CRETESET 100 AF	Alkali free liquid accelerator for shotcrete	9
KEM CRETESET 300 P	Powder accelerator for dry mix shotcrete	9
KEM CRETESET 200 L	Alkaline liquid accelerator for shotcrete	10

CORROSION INHIBITOR ADMIXTURES

KEM CORPRO 710	Corrosion Inhibiting Admixture for Reinforced Concrete.	10
KEM CORPRO 810 M	Bipolar Migrating Corrosion Inhibitor	10

CONCRETE ADMIXTURES

OTHER ADMIXTURES

KEM FIBRE 84	Fibre reinforcement for concrete and mortar	11
KEM BLOCK AID 1	Admixture for concrete blocks and paver blocks	11
KEM ACCEL W	Set accelerating admixture for concrete	11
KEM FOAMAID 100	Foaming agent for light weight concrete	12
KEM PUMP PRIME SL	Concrete pump primer	12

WATERPROOFING

INTEGRAL WATERPROOFING

KEM PROOF IWC/KEM PROOF 77	Liquid integral waterproofing compound for concrete	14
KEM PROOF IWP/KEM PROOF 80	Powder integral waterproof for cement concrete and mortar	14

CRYSTALLINE WATERPROOFING

KEM PROOF CWC/KEM PROOF 81	Crystalline waterproofing compound	14
KEM PROOF CWC 2 K	Two component cement based crystalline waterproofing compound	15

COATINGS

KEM PROOF EWC-BLACK / KEM PROOF EWC 71	Elastomeric waterproofing coating	15
KEM PROOF EWC-WHITE/ KEM PROOF EWC 72	Elastomeric waterproofing coating	15
KEM BRUSH COAT / KEM BRUSH 73	Cementitious acrylic modified waterproof coating	16
KEM SEALER PAV	Masonry and concrete block sealer	16
KEM INJECT OXYDAMP - C	Synthetic solution against rising dampness, heavy moisture penetration and salt contamination	16
KEM PROOF ULTIMATE	High performance elastomeric anti carbonation and water repellent coating	17
KEM DAMPSEAL/KEM DAMPSEAL 83	Two component epoxy resin based water thinnable coating	17
KEM PROOF 86	Elastomeric waterproof exterior coating	17
KEM PROOF 87	Elastomeric waterproof roof coating	18
KEM PROOF 88	Flexible waterproofing slurry	18
KEM PROOF 89	Water based efflorescence resistant penetrating primer	18
KEM PROOF PUD 100	High performance low V.O.C elastomeric waterproofing polyurethane membrane	19

HYDROPHILIC WATERSTOP

ADEKA ULTRASEAL	Water swelling rubber elastic type sealing materials	19
-----------------	--	----

MEMBRANES

KEM HYDROSHIELD BAP 3000/4000	APP modified waterproofing membranes	19
KEM HYDROSHIELD SBS 3000/4000	SBS modified waterproofing membranes	20
KEM HYDROSHIELD HDPE	HDPE based waterproofing membranes	20
KEM HYDROSHIELD TPO	TPO based waterproofing membrane	20
KEM BITUPRIME 41	Quick drying bitumen based primer	20

SURFACE TREATMENT

CURING COMPOUNDS

KEM CURE AID 10 A	Acrylic polymer based membrane for curing concrete surfaces	22
KEM CURE AID 10 W/10 M	White pigmented curing agent for concrete surfaces	22
KEM CURE AID 10 (EM & EB Grades)	Curing agent for concrete	22

DESHUTTERING AGENTS

KEM MRA 1	Oil based de-shuttering agent with built in corrosion inhibitor	23
KEM MRA 2	Emulsion based mould release agent for formworks	23

WATER REPELLENT COATING

KEM REPEL 111/KEM REPEL 78	Water repellent	23
KEM REPEL 555/KEM REPEL 79	Water repellent impregnation coating	23

GROUT & ANCHOR

EXPANDING GROUT ADMIXTURE

KEM GROUT AID	Expanding grout admixture	25
---------------	---------------------------	----

CEMENT GROUT

KEM GROUT NS1	Nonshrink, free flow, cementitious grout	25
KEM GROUT NS2	Non-shrink, free flow, high strength cement grout	25
KEM GROUT CI 2	Non-shrink pumping grout	26

EPOXY GROUT

KEM GROUT EP1	Free flow epoxy grout	26
KEM GROUT EP2	Free flow epoxy grout	26
KEM GROUT EP3	Non-shrink free flow epoxy grout	27
KEM GROUT EP4	Heavy duty epoxy grout	27

CAPSULES

KEM ROCKPAC CEM 100	Cement capsule	27
KEM ROCKPAC RES 100	Resin capsule	28

CONCRETE REPAIR

BONDING AGENT

KEM BOND AR/KEM BOND 50	Acrylic co-polymer based bonding agent for concrete	30
KEM BOND SBR/KEM BOND 76	Polymer as mortar modifier for repair and rehabilitations	30
KEM BOND EP 1	Epoxy resin based old to new concrete bonder	30
KEM BOND EP 1 L	Epoxy resin based old to new concrete bonder	30
KEM BOND EP2	Epoxy resin based old to new concrete bonder	31
KEM GELL EP	Multipurpose epoxy adhesive and sealing compound	31
KEM LATEX KRPN 47	Latex for waterproofing and repairs	31

CRACK FILLER / SEALER

KEM SEAL/ KEM SEAL 53/54 (GREY/WHITE)	Crack sealer	32
KEM CRACKFILL/ KEM CRACKFILL 51	Acrylic crack filler	32

MICROCONCRETE

KEM MICROCONCRETE	Flowable grout for RCC structure	32
-------------------	----------------------------------	----

MORTAR

KEM MORTAR HS	Polymer-modified fibre reinforced structural repair mortar	32
KEM MORTAR EP 1	Epoxy based fairing coat and concrete adhesive	33
KEM MORTAR EP 2	General purpose epoxy resin mortar	33
KEM MORTAR EP 3	High build epoxy resin mortar	33
KEM MORTAR MT	Thixotropic cementitious repair mortar	34
KEM MORTAR FS	Fast setting cement based patching material	34
KEM BRICKLINE 10	Ready to use brick / block laying mortar	34

CRACK INJECTION

KEM INJECT UWEP	2 pack underwater/ moisture tolerant epoxy based injection resin	35
KEM INJECT PU 2K	2 Pack polyurethane based injection	35
KEM INJECT PU 3K	3 component flexible injection PU	35
KEM INJECT PU 100	Single pack PU injection foam	36
KEM EPOXY GROUT ELV	2 pack low viscosity epoxy based injection resin	36

JOINT SEALANTS

2K POLYSULPHIDE

KEM JOINT GG/PG	Two pack gun grade/pour grade joint sealant	38
KEM PRIMER	Primer for polysulphide sealant	38

1K POLYURETHANE

KEM JOINT PU 50/ KEM JOINT PU 100	Single component moisture cured PU joint sealant	38
--------------------------------------	--	----

JOINT SEALANTS

BITUMEN SEALANT

KEM JOINT BIT - 180P	Hot Poured Polymer Modified Bitumen Sealant	39
----------------------	---	----

FLOORING

CEMENTITIOUS SELF LEVELING COMPOUND

KEM FLOOR CSL 100	Self leveling cementitious floor underlay	41
-------------------	---	----

FLOOR HARDENER

KEM FLOOR HT	Non-metallic surface hardener	41
KEM FLOOR LI	High performance lithium based hardener, strengthener and densifier for concrete floors with salt protection technology	41
KEM FLOOR S	Concrete surface hardener and dust proofer	41

TILING

CEMENT BASED

KEM TILE EX/TILE 21	Tile fixing adhesive	43
KEM TILE ST/KEM TILE 22	Grey flexible natural stone tile adhesive	43
KEM TILE WA/KEM TILE 23	White adhesive for glass and marble	43
KEM TILE GROUT/KEM TILE 24	Tile Fixing adhesive	43

EPOXY BASED

KEM EPOXY TILE GROUT/ KEM TILE 26	High performance epoxy resin based tile adhesive & Grout	44
--------------------------------------	--	----

TILE CLEANER

KEM TILE CLEAN/KEM TILE 25	Concentrated mildly acidic ceramic tile cleaner / stain remover	44
----------------------------	---	----

concrete admixtures



- **Super Plasticizers**

- **Plasticizers**

- **Air Entrainer**

- **Shotcrete Additives**

- **Corrosion Inhibitor Admixtures**

- **Other Admixtures**

SUPER PLASTICIZERS

KEM SUPLAST 101 S

Description:

(HRVRA, conforms to IS 9103-1999 (Amendment 2003) and ASTM C 494 Type A & D)

KEM SUPLAST 101 S is a sulphonated naphthalene formaldehyde based superplasticizer enables the concrete to achieve following parameters:

- High retention in workability.
- Good cohesion and homogeneity.
- Less bleeding and segregation.
- Increased durability.
- This product was formerly known as KEM SUPLAST TB 101S.

Application Areas:

Ready mix concrete. Pile concrete. Tremie concrete. Under cater concrete. High performance concrete, etc.

Dosage / Coverage:

- Dosed between 0.5% and 2.4% by weight of cement.
- Maximum 3.50% at extreme climate.
- Compatible with all types of cement.



KEM SUPLAST 280 DC

Description:

(Meets/exceeds the requirements as per IS 9103 and ASTM - C 494 Type - D & G)

KEM SUPLAST 280 DC is a high range water reducing and slump retaining concrete admixture. It is brown colored, ready to use liquid admixture formulated from selected water - soluble poly condensate and polymers.

- Highly effective in high cement content, low water cement ratio mix to make the mix more workable without loss in strength reduces cracks, bleeding and segregation.
- It maintains plasticity of the concrete for better application of mix, thus reducing the incidence of honey combing and reducing the number of construction joints needed.
- Suitable to produce concrete containing cement replacing pozzolons like silica fumes, slag (GGBFS) and flyash (PFA)

Application Areas:

Ready Mix Concrete. Mass concrete. Road Project. Slip formed concrete. High strength concrete. Pre-stressed concrete work. Bridge building, in placing bridge deck concrete where it is desirable to load the entire section prior to the concrete achieving the initial set.

Dosage / Coverage:

Dosed between 0.7% and 1.4% of cement by weight. However the dosage can be increased up to 1.8% with prior consultation with our technical service department.



KEM SUPLAST 101 G

Description:

(Complies with BS 5075 – 1982 and ASTM C494 Type F)

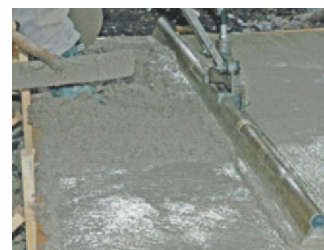
KEM SUPLAST 101 G is a chloride free, superplasticising admixture based on selected synthetic polymers. It is supplied as a brown solution which is instantly dispersible in water. It can provide very high level of water reduction and hence major increase in strength can be obtained coupled with good retention of workability to aid placement.

Application Areas:

It can provide self-leveling concrete practically eliminating the need for vibration during placing. It provides excellent workability even at low water/cement ratio. It is especially recommended for use in high workability concrete and where fast shutter removal is required.

Dosage / Coverage:

- 0.80 - 1.30 litres/100 kg cementitious material, for flowing concrete.
- 1.00 - 2.50 litres/100 kg cementitious material, for high strength concrete.



KEM SUPLAST 220 PQC

Description:

(Meets/exceeds the requirements as per IS 9103 and ASTM - C 494 Type - A & F)

KEM SUPLAST 220 PQC is a plasticizing and water reducing admixture. It is brown colored, ready to use liquid admixture formulated from selected water-soluble poly condensate and polymers. KEM SUPLAST 220 PQC is specially formulated in meeting the requirements of PQC.

Improved workability - Easier, quicker placing and compaction.

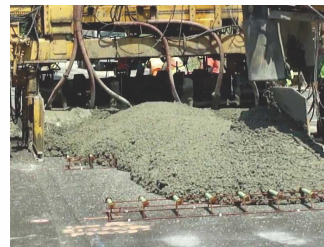
- Risk of segregation and bleeding minimized; thus aids pumping of concrete
- Denser, close textured concrete with reduced porosity and hence more durable.
- Provides high early strength for precast concrete if water reduction is taken advantage of.
- Safe in prestressed concrete and with sulphate resisting cements and marine aggregates.

Application Areas:

Pavement Quality Concrete. Ready Mix Concrete. High strength concrete. Pre-cast concrete work. Pumpable concrete.

Dosage / Coverage:

Dosed between 0.5% and 1.2% of cement by weight. However the dosage can be increased up to 1.5% with prior consultation with our technical service department.



KEM SUPLAST 240 G10

Description:

(Meets/exceeds the requirements as per IS 9103 and ASTM - C 494 Type - A & D)

- Improved cohesion for good pump-ability
- Improved adhesion to reinforcing and stressing steel
- Better resistance to carbonation
- Lower permeability
- Better resistance to aggressive atmospheric conditions
- Reduced shrinkage and creep
- Increased durability

Dosage / Coverage:

Dosed between 0.7% and 1.4% of cement by weight. However the dosage can be increased up to 1.6% with prior consultation with our technical service department.

Application Areas:

Ready Mix Concrete. Mass concrete. Slip formed concrete. High strength concrete. Pre-stressed concrete work.



KEM SUPLAST L 10

Description:

(SMF based HRWRA for high early strength, conforms to IS 9103-1999 (Amendment 2003) and ASTM C 494 Type F)

KEM SUPLAST L10 is a sulphonated melamine formaldehyde based superplasticizer shows a strong dispersing effect on the binding medium to achieve:

- High workability without segregation and bleeding.
- High early as well as ultimate strength.
- Better pouring consistency during casting.

Dosage / Coverage:

Dosed between 0.5% and 3.5% by weight of cement depending upon the usage of concrete.



Application Areas:

Pre-cast concrete. High performance concrete. Pre-stressed concrete.

KEM SUPLAST SCC 30

Description:

(Polycarboxylic polymer based HRWRA, conforms to EN 934.2 and ASTM C 494 Type G)

KEM SUPLAST SCC 30 is a polycarboxylic ether based concrete super plasticizer, disperses the concrete medium at a substantial lower dosage than conventional concrete superplasticizers and improves consistency as well as strength.

Dosage / Coverage:

Dosed between 0.4% and 3% by weight of cement.



Application Areas:

Self consolidated concrete. High performance concrete. Underwater concrete. Ready mix concrete. Paver block.

KEM SUPLAST SCC 50

Description:

(ASTM C494 Types G & F, IS 9103: 1999)

KEM SUPLAST SCC 50 is a third generation admixture, based on polycarboxylate ether co-polymer with specialize additives. KEM SUPLAST SCC 50 disperses cement particles and fillers by electrostatic repulsion coupled with steric hindrance.

- To produce concrete with larger water reduction when cement and filler contents are high
- To produce concrete with high workability without segregation and bleeding
- Excellent dispersion resulting in high workability
- Better resistance to aggressive atmospheric conditions, to carbonation, with lower permeability
- Improved surface finish, reduced shrinkage
- Creep and improved durability
- Increases durability and impermeability

Dosage / Coverage:

Dosed between 0.3% to 1.0% of cement by weight. However the dosage can be increased up to 1.3% with prior consultation with our technical service department.



Application Areas:

Self Compacting Concrete. High Strength Concrete. High Performance Concrete. Precast / Pre-stressed Concrete. Pumped concrete

KEM SUPLAST SP 65

Description:

(ASTM C494 Types G & F IS 9103: 1999, ASTM C 1017 Type II)

KEM SUPLAST SP 65 is a third generation admixture, based on polycarboxylate ether co-polymer with specialize additives, formulated especially for higher grade mixes upto M 100 grade with good strength development and extended workability without delayed setting characteristics.

- Superior workability retention
- Excellent dispersion resulting in high workability
- Suitable to produce concrete containing cement replacing Pozzolona like micro silica (silica fume), slag (GGBFS) and fly ash (PFA).
- Minimizes the need of slump adjustment at the job site
- Reduces concrete mixture cost
- Increases durability and impermeability
- Consistent ultimate strength

Dosage / Coverage:

Dosed between 0.5% to 1.2% of cement by weight. However the dosage can be increased up to 1.4% with prior consultation with our technical service department.



Application Areas:

Best suitable for concrete grade from M45 to M100. High Strength Concrete. High Performance Concrete. Self Compacting Concrete. Ready Mix and Pre-cast Concrete Industries where high durability and performance is required.

KEM SUPLAST SPC 40

Description:

(Meets/exceeds the requirements as per ASTM - C494 Type - D & G)

KEM SUPLAST SPC 40 is a third generation high performance concrete hyper plasticizer, an opaque light brown colored solution of Poly Carboxylic Polymer. It disperses cement particles and fillers by electro static repulsion coupled with steric hindrance. Stabilizes the cement particle's capacity to disperse and separate, result in highly workable/flowable concrete with greatly reduced water content. It allows water reduction up to 40% while maintaining workability.

Thus with KEM SUPLAST SPC 40 we can produce concrete with high Early and ultimate strength with minimal voids and therefore optimum density.

Dosage / Coverage:

Dosage is approximately 0.8% - 1.3%.

Application Areas:

- To produce pumpable concrete.
- To produce high strength, high grade concrete by substantial reduction in water resulting in low permeability and high early strength.
- To produce high workability concrete requiring little or no vibration during placing.
- Ready Mix and Pre-cast Concrete Industries where high durability and performance is required



KEM SUPLAST PCL 20

Description:

(ASTM C494 Types A, B & D, IS 9103: 1999)

KEM SUPLAST PCL 20 is a high range water reducing and slump retaining concrete admixture, manufactured to comply to the IS 9103 and ASTM C 494 type A, Type B & Type D specifications. KEM SUPLAST PCL 20 is yellowish brown colored, ready to use liquid admixture formulated using polycarboxylate ether super plasticizers. KEM SUPLAST PCL 20 incorporates a new generation of highly powerful dispersant, which make the product possible to utilize the full potential of cement- water matrix at economical dosage.

Dosage / Coverage:

KEM SUPLAST PCL-20 is dosed between 0.5% and 1.5% of cement by weight. However the dosage can be increased up to 2% with prior consultation with our technical service department.

Application Areas:

- Excellent dispersion resulting in High workability
- Increases early and ultimate strengths
- Concrete to be placed and compacted in congested reinforcements
- Reduced labor requirements.
- Increases durability andh impermeability
- Improve surface finish



KEM SUPLAST PCL 110

Description:

(ASTM C494 Types D & G, IS 9103: 1999)

KEM Suplast PCL 110 is a brown coloured liquid admixture based on modified polycarboxylate ether.

It has been specially formulated to achieve high water reduction up to 20% and to give cohesive concrete mix even at low cement content.

Dosage / Coverage:

0.4 to 1.0 kg / 100 kg of cement.

Application Areas:

- Excellent dispersion resulting in high workability
- Increases early and ultimate strengths
- Concrete to be placed and compacted in congested reinforcements
- Reduced labor requirements.
- Improve surface finish



KEM SUPLAST 110 R

Description:

(Meets/exceeds the requirements as per IS - 9103 and ASTM C494, Type - A & D)

KEM SUPLAST 110 R is a high range water reducing and slump retaining concrete admixture, manufactured to comply to the IS 9103 and ASTM C 494 type G specifications. KEM SUPLAST 110 R is brown colored, ready to use liquid admixture formulated from selected water-soluble polycondensates and polymers. KEM SUPLAST 110 R incorporates a new generation of highly powerful dispersants, which make the product possible to utilize the full potential of cement water matrix at a very low dosage

Application Areas:

- Pavement quality concrete
- Long hauls
- Pumped concrete
- Concrete containing Granulated Slag / Pozzolans
- Mass concrete pours
- Hot weather concreting



Dosage / Coverage:

KEM SUPLAST 110 R is dosed between 0.3% and 1.5% of cement by weight. However the dosage can be increased up to 2% with prior consultation with our technical service department.

KEM SUPLAST 4 A

Description:

(ASTM C494, Type - C)

KEM SUPLAST 4A is a quick setting waterproofing liquid admixture for Portland cement based mortar.

Dosage / Coverage:

0.5 to 1.2 % by weight of cement



Application Areas:

- It is used for surface waterproofing against water infiltrations in porous rock or concrete as well as for cracks and joints through which water infiltrates.
- For use in building construction and civil engineering, in particular where dry conditions are required for the following permanent waterproofing operations
- It can also be used in quick setting mortar for assembly work, eg. Fixing climbing irons, rag bolts, pipe supports, bolts, anchorages, repair work etc.

KEM SUPLAST 128 UT

Description:

(Meets/exceeds the requirements as per ASTM C - 494 Type D & G, EN 934 - 2: T11.1/11.2 IS 9103)

KEM SUPLAST 128 UT is composed of synthetic polymers specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation.

It is preferred admixture for triple blend binder system based High Performance Concrete (HPC) mixes or mixes containing micro silica or metakaolin. It is chloride free.

Application Areas:

- Concrete containing Silica fume/ Metakaolin
- Ready mixed concrete
- Congested/complex reinforced sections
- Pre-cast concrete production
- Long-distance transporting
- Pumped concrete
- Low water/binder ratio mixes
- Mixes requiring >20% water reductions



Dosage / Coverage:

Optimum dosage of KEM SUPLAST 128 UT should be determined with trial mixes. As a guide, a dosage range of 600ml to 1800ml per 100 kg of cementitious material is normally recommended. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required.

KEM SUPLAST SCC 30 VM 2

Description:

(Meets/exceeds the requirements as per ASTM - C494 Type - A & F, ASTM C - 1017 Type 1 and IS 9103 - 1999)

KEM SUPLAST SCC 30 VM 2 is a third generation high performance concrete hyper plasticizer, an opaque – light brown coloured solution of poly carboxylic polymer. It disperses cement particles and fillers by electro static repulsion coupled with steric hindrance. Stabilizes the cement particle's capacity to disperse and separate, resulting highly workable/flowable concrete with greatly reduced water content. It allows a water reduction up to 40% while workability is maintained.

Application Areas:

- To produce high early strength concrete
- Self-compactable concrete
- Water reduction up to 40%
- Ready Mix and Pre-cast Concrete Industries where high durability and performance is required



Dosage / Coverage:

0.3 – 2% by weight of cement and Pozolona content. For SCC dosage is approximately 0.8% - 1.2

KEM SUPLAST 3540

Description:

(ASTM C494 Type A & D, IS 9103: 1999)

KEM SUPLAST 3540 is a brown colored liquid admixture based on sulphonated naphthalene formaldehyde, KEM SUPLAST 3540 has been specially formulated to achieve high water reduction up to 15-25% & to give cohesive concrete mix even at low cement content.

- Minimize bleeding & segregation
- Easier, quicker placing & compaction
- Reduction in w/c ratio enables increase in density & impermeability thus enhancing durability of concrete
- Safe in pre- stressed concrete & sulphate resisting cement & marine aggregates.
- Lowers the permeability and increases durability of concrete

Dosage / Coverage:

Dosed between 0.7% to 1.4% of cement by weight. However the dosage can be increased up to 1.6% with prior consultation with our technical service department.



Application Areas:

Excellent dispersion resulting in high workability. Reduces the water & ultimate increase strength of concrete. Reduce labour requirement. Improve surface finish. For production of foundation, wall beams, columns. For improvement in surface finishing. Pumped concrete. Concrete containing pozzolans. Mass concrete pours.

PLASTICIZERS

KEM PLAST 100

Description:

(WRA, conforms to IS 9103–1999 Amendment 2003, ASTM C 494 Type A)

KEM PLAST 100 is a blend of Sodium Lignosulphonate and specialty additives is used for:

- Improvement in workability.
- Lowering in consumption of cement.
- Improvement in compressive strength.
- Reduction in fungal growth.

Dosage / Coverage:

- Dosed between 0.3% and 0.6% by weight of cement.
- Maximum 1.0% at extreme climate.



Application Areas:

Underground concrete. Structural elements. Paver blocks. Lean structural concrete. High rise concrete casting.

KEM PLAST N

Description:

(Meets/exceeds the requirements as per IS 9103 and ASTM - C 494 Type - A & F)

KEM PLAST N is a plasticizing and water reducing admixture. It De-flocculates cement particles & maintains the plasticity of the concrete mix. Allows a water reduction up to 15%, thus cement saving and cost effective.

- Highly effective in high cement content, low water cement ration mix to make the mix more workable without loss in strength, reduces cracks, bleeding and segregation.
- It maintain plasticity of the concrete for better application of mix, thus reducing the incidence of honey combing and reducing the number of construction joints needed.
- Suitable to produce concrete containing cement replacing pozzolonans like micro silica (silicafume), slag (GGBFS) and flyash (PFA)

Dosage / Coverage:

0.5 – 1.2% by weight of cement.
Lab trials are recommended to determine the optimum dosage.



Application Areas:

Mass concrete. Slip formed concrete. High strength concrete. Pre-stressed concrete work. Bridge building, in placing bridge deck concrete where it is desirable to load the entire section prior to the concrete achieving the initial set.

KEM PLAST NG

Description:

(Meets/exceeds the requirements as per IS 9103 and ASTM - C 494 Type - A & B)

KEM PLAST NG is a plasticizing and water reducing admixture. It De-flocculates cement particles & maintain the plasticity of the concrete mix.

Allows a water reduction up to 15%, thus cement saving and cost effective.

- Highly effective in high cement content, low water cement ration mix to make the mix more workable without loss in strength, reduces cracks, bleeding and segregation.
- It maintains plasticity of the concrete for better application of mix, thus reducing the incidence of honey combing and reducing the number of construction joints needed.
- Suitable to produce concrete containing cement replacing pozzolonans like GGBFS and flyash (PFA)

Dosage / Coverage:

KEM PLAST NG is dosed between 0.6% and 1.4% of cement by weight. However the dosage can be increased up to 1.8% with prior consultation with our technical service department.



Application Areas:

Mass concrete. Slip formed concrete. High strength concrete. Pre-stressed concrete work. Bridge building, in placing bridge deck concrete where it is desirable to load the entire section prior to the concrete achieving the initial set.

AIR ENTRAINER

KEM AEA 10

Description:

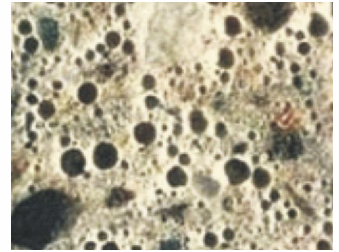
(Air - Entrainer, conforms to IS 9103 - 1999 (Amendment 2003) and ASTM C-260)

KEM AEA 10 is entrains small air voids and distributes them homogeneously in the concrete. These air voids interrupt the capillary system and improves:

- Workability of concrete.
- Freeze-thaw stability.

Dosage / Coverage:

Dosage varies between 0.02% and 0.5% of weight of cement, depending on the desired air content.



Application Areas:

Mass Concrete. Pavement quality concrete. Concrete in region where temperature fall below freezing point of work.

SHOTCRETE ADDITIVES

KEM CRETESET 100 AF

Description:

KEM CRETESET 100 AF is a high performance alkali-free, non-caustic and non-toxic accelerator for the use in dry-mix shotcrete processes. It is a liquid additive whose dosage can be varied to the desired setting and hardening times.

Dosage / Coverage:

The dosage of KEM CRETESET 100 AF depends on the temperature of concrete, air substrate and reactivity of the cement being used. Depending on the required setting time and early strength requirements dosage of KEM Creteset 100 AF will normally be in the range of 2-6% of cement weight. Over dosing, in excess of 10% will lead to lower final strengths. On site trials are recommended prior to use.



Application Areas:

It is suitable for all applications where high early strength, high final strength and large thickness are required for temporary and permanent rock support. For final lining (one pass lining). For repair works in tunnels and mining.

KEM CRETESET 300 P

Description:

KEM CRETESET 300 P is a smoke grey powder admixture for dry shotcrete mix.

- Reduce rebound losses.
- Increase productivity with optimum cement consumption.
- Accelerate setting.

Dosage / Coverage:

Dosed @ 1 kg / 50 kg cement.



Application Areas:

Tunnel shotcreting. Structural rehabilitation.

KEM CRETESET 200 L

Description:

KEM CRETESET 200 L is a high performance alkali-free set accelerator for sprayed concrete. It is a liquid admixture whose dosage can be varied to the desired setting and hardening times.

Dosage / Coverage:

Dosed @ 1 kg / 50 kg cement.



Application Areas:

Tunnel shotcreting. Structural rehabilitation.

Corrosion Inhibitor Admixtures

KEM CORPRO 710

Description:

(ASTM G109 Modified.)

KEM CORPRO 710 is a liquid corrosion inhibiting concrete admixture. It is formulated to protect embedded reinforcing steel from corrosion, which helps in extending the service life of concrete structures.

Dosage / Coverage:

- For Moderate to low chloride concentrations: 2 to 3 kg / m³ of concrete
- For high chloride concentration: 3 to 5.5 kg / m³ of concrete
- For severe marine exposure / extremely high chloride concentration: 5.5 to 8.5 kg / m³ of concrete



Application Areas:

- KEM CORPRO 710 is a dual purpose corrosion inhibiting admixture which protects both the anodic and cathodic parts of the corrosion. It is a combination of aminoalcohols, aminocarboxylates and inorganic inhibitors.
- Due to its high vapor pressure, KEM CORPRO 710 penetrates through concrete seeking the steel reinforcement. It is then adsorbed onto the steel surface where it forms a continuous protective film around the steel. This film acts as a physical barrier to chlorides and other deleterious substances.
- KEM CORPRO 710 is recommended for all steel-reinforced concrete exposed to corrosive environments including, steel reinforced concrete bridges, highways and express ways exposed to deicing salts or corrosive environments.
- Concrete in or near marine environments, parking garages, piers, piles, and concrete dock structures.

KEM CORPRO M 810

Description:

(ASTM G109 Modified)

KEM CORPRO M 810 is a water-based organic corrosion inhibiting admixture. It is formulated for the protection of reinforcement in concrete structures. When mixed in the wet concrete as an admixture, KEM CORPRO M 810 migrates towards reinforcement and forms a layer that inhibits the corrosion reaction on the anode as well as the cathode poles of the reinforcement steel. This action yields resistance and tolerance to higher levels of chlorides and therefore a reduction in corrosion rate of the reinforcement steel.

Application Areas:

KEM CORPRO M 810 is recommended for use in:

- Reinforced concrete structures
- Corrosive environments with saline groundwater, high levels of chloride and carbonation
- Marine and coastal structures, roads and bridges, pilings, substructures, piers, pillars and pipes



Dosage / Coverage:

KEM CORPRO M 810 is admixed into concrete or repair mortars at the rate of 2.0 to 3.0 Litres/m³. Once determined the dosage is fixed and it is independent of chloride levels (i.e. the dosage is the same for lower or higher chloride levels).

OTHER ADMIXTURES

KEM FIBRE 84

Description:

KEM FIBRE 84 is a high performance micro polypropylene fibre developed as a crack controlling additive for cementitious materials. It is available as monofilament 6mm in length for plaster and mortar. It is used to inhibit the formation of small cracks which can occur through plastic shrinkage, premature drying and early thermal changes in order to provide utilization of the intrinsic properties of the hardened cementitious material.

Dosage / Coverage:

0.125 kg per bag of cement for plaster work (6mm) & 0.900 kg/m³ concrete (12mm)



Application Areas:

Specifically designed for crack control in cementitious materials covering areas such as conventional shotcrete, screeds, rendering mortars etc.

KEM BLOCK AID 1

Description:

(Meets/exceeds the requirement as per IS 9103 and ASTM C494 – Type A & D.)

Concrete blocks use mix of cement, sand, stone chip/crusher dust with low w/c ratio suitable for moulding in block making machines. These mixes have very low work ability. It improves the work ability and homogeneity of the mix which help in attaining higher density of blocks when pressed in block machine or hand operated machines or cast at site in steel/wooden moulds.

KEM BLOCK AID 1 is developed to get over the deficiencies of dry concrete mixes. KEM BLOCK AID 1 admixed in the concrete mix at a nominal dosage of 140 ml per bag of cement dramatically improves the work ability and homogeneity of leaner mixes apart from improving overall strength and surface finish.

Application Areas:

- KEM BLOCK AID 1 is used as an admixture for making concrete blocks, paver blocks & cement blocks.



Dosage / Coverage:

Add, KEM BLOCK AID 1 per bag of 50 kg. Cement in the proportion of 140 ml

KEM ACCEL W

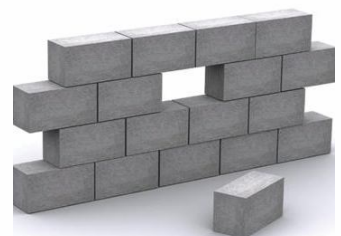
Description:

(ASTM C494 Type C IS 9103: 1999.)

KEM ACCEL W is a chloride based liquid admixture specifically designed for use in concrete, portland cement and mortar. It is a ready to use liquid, added directly to the gauging water to reduce set times of concrete and mortar mixes. It should not be used in concrete with reinforcements as it is based on chloride which contributes to the corrosion of rebars.

Application Areas:

- Concrete to be placed at low temperature
- For cold weather concreting
- Early setting of concrete



Dosage / Coverage:

1.5 to 3.5 kg / 100 kg of cement

KEM FOAMAID 100

Description:

(ASTM C-869.)

KEM FOAMAID 100 is colourless to brown liquid instantly miscible with water. KEM FOAMAID 100 is used to produce light weight concrete mixes, with or without aggregates.



Application Areas:

- For making flat roof insulation screeds
- Insulated floor screeds (under rigid floor finishes)
- Trench reinstatement and road works
- Fire protection of wooden floors and structural steel works
- Soil replacement for back filling and ground stabilization
- Fabrication of lightweight beams, blocks and panels
- Fire barrier especially in service voids, fire, walls and doors
- Filling of old underground pipes, tunnels, sewers, storage tanks, shelters and basements

Dosage / Coverage:

Dry Density Kg/M3	Sand Kg.	Cement Kg.	Water Kg.	Kem Foam kg.
1250	750	350	140	0.29
1000	500	400	160	0.31
850	360	360	144	0.33
780	-	600	240	0.21
600	-	450	180	0.30
390	-	310	124	0.65

KEM PUMP PRIME SL

Description:

When cement or mortar is used for lubrication of pump-car piping at the early stage of concrete casting, letting it flow into a structure can bring about structural problems such as the deterioration of strength or if otherwise scraped, it can lead to an environmental problem. Moreover, the mortar mixed into concrete may adversely affects the quality of the concrete.



Dosage:

For a pump car with 5-inch piping:

- If the boom length of the pump car is 150 feet (approx. 45 meters) or less, required quantity is 120-liter bowl of solution from one pack of KEM PUMP PRIME SL
- If the boom length is more than 150 feet (approx. 45 meters), required quantity is 220-liter bowls of solution from two packs of KEM PUMP PRIME SL.

water proofing



- **Integral Waterproofing**

- **Crystalline Waterproofing**

- **Coatings**

- **Hydrophilic Waterstop**

- **Membranes**

INTEGRAL WATERPROOFING

KEM PROOF IWC / KEM PROOF 77

Description:

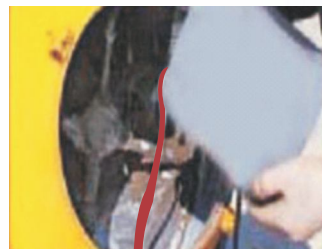
IS 2645, DIN 1048

KEM PROOF IWC/ KEM PROOF 77 is a specialty additive based liquid integral waterproofing compound.

- Produces impermeable matrix.
- Reduces porosity and bleeding.
- Improves consistency at lower dosage.

Dosage / Coverage:

200 gm to 50 kg bag of cement.



Application Areas:

Basement concrete. Underground structures. Terrace concrete.

KEM PROOF IWP / KEM PROOF 80

Description:

IS 2645, DIN 1048

KEM PROOF IWP/ KEM PROOF 80 is a powder integral waterproofing compound for concrete and mortar, forms an internal barrier against water penetration, also increases the workability of mortar, reduces water absorption and thereby protect against freeze - thaw effect.

Dosage / Coverage:

Add 1 kg of KEM PROOF IWP/ KEM PROOF 80 to 50 kg of dry cement / sand mix to produce concrete or mortar. (Do not add KEM PROOF IWP/ KEM PROOF 80 to the mixing water)



Application Areas:

Terraces. Bathrooms. Basement. Swimming pools. Water tanks. Precast and Blocks, etc.

CRYSTALLINE WATERPROOFING

KEM PROOF CWC / KEM PROOF 81

Description:

IS 2645, DIN 1048

KEM PROOF CWC / KEM PROOF 81 is an integral capillary (Crystalline) waterproofing compound which penetrates KEM PROOF CWC / KEM PROOF 81 and waterproofs concrete in depth.

Dosage / Coverage:

Add 2 part water to 5 parts of KEM PROOF CWC/ KEM PROOF 81 1 kg / m² / coat when used alone or for dry shake broadcast. (Treated area should be kept damp for 5 days)



Application Areas:

Basement & Foundation. Tunnels and subways. Sewage and water treatment plants. Concrete pipes. Dams and reservoirs. Harbors and bridges. Parking areas.

KEM PROOF CWC 2 K

Description:

(Complies ASTM E96, ASTM D4541.)

KEM Proof CWC 2 K is a two component system consisting of a powder component and a latex component. The powder component is a blend of cementitious material and chloride free minerals. The liquid component is a dispersion based on styrene butadiene. KEM Proof CWC 2 K is a solvent free penetrative sealing system and once applied forms a barrier for water ingress. The ability of the system to penetrate in to the substrate makes the surface highly impermeable to water pressure and also acts as vapor barrier.

Application Areas:

- Basements and water tanks
- Tunnels, manholes and canals
- Sewage and water treatment Plants
- Swimming pools and water reservoirs
- Inside elevator shafts in buildings

Dosage / Coverage:

- Coverage for Single basements and Water bodies is 1.8 to 2 kg/m²
- Coverage for Toilets and Sunken portions is 1.4 to 1.6 kg/m². Coverage for Multi Level basements is 2 to 2.5 kg/m².
- Note: Coverage may vary depending upon texture, porosity and condition of the surface.
- Precautions: In higher temperatures, KEM proof CWC 2 K dries fast, so small quantities should be mixed for application.



COATINGS

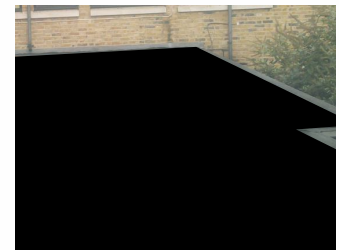
KEM PROOF EWC - BLACK / KEM PROOF EWC 71

Description:

KEM PROOF EWC - BLACK / KEM PROOF EWC 71 is heavy duty bituminous elastomeric waterproof coating for asbestos sheets, sunken portion of toilets and underground structures.

Dosage / Coverage:

15 - 20 Sq. ft / Kg for 2 coats. (Coverage varies with the actual site condition) 200 to 300 microns (DFT)



Application Areas:

Asbestos cement roofs and around J hooks. Sunken portion of toilets. Sewage pipes. Plinth foundation. Basement and other underground structures.

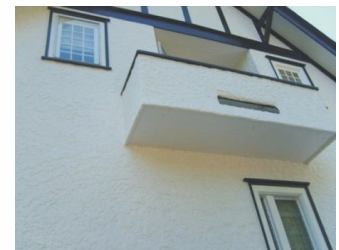
KEM PROOF EWC - WHITE / KEM PROOF EWC 72

Description:

KEM PROOF EWC - WHITE/ KEM PROOF EWC 72 is heavy duty aliphatic acrylic elastomeric waterproofing for external surfaces. It is water based, can be tinted to any shades, resistance to dirt picks, anti-fungal and anti - algae and can be applied both by brush and roller.

Dosage / Coverage:

As coat 30 - 35 sq. ft /Kg for 2 coats, (Coverage varies with the actual site condition) 100 - 110 microns (DFT) As primer - 130 - 150 sq. ft/Kg



Application Areas:

External walls. Roofs and parapet walls. Designed for exterior RCC, cement sand plastered surfaces.

KEM BRUSH COAT / KEM BRUSH 73

Description:

KEM BRUSH COAT / KEM BRUSH 73 is a high performance two component elastomeric cementitious waterproof coating for concrete, slabs, masonry and as surface protection for reinforced concrete.

Dosage / Coverage:

6 sq.ft. / Kg for 2 coats for total minimum thickness of 1 mm (DFT)
For protection against physical damage use 15 - 25 mm thick cementitious screed.

Nature : Two components

Appearance: Grey Powder and White Liquid

Mixing Ratio: Powder : liquid=2:1
(by weight) Consistency after mixing: Brushable



Application Areas:

Specialty treatment coat for internal and external waterproofing. Bathrooms, basements, toilet and wet areas. Dam Walls, swimming pools, basins, water storage tanks, balconies, terraces. Application in marine areas. Protective coat against carbonation and chloride attack.

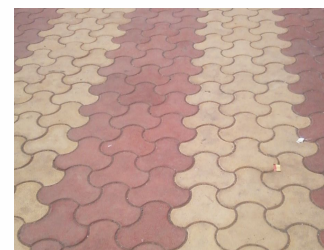
KEM SEALER PAV

Application Areas:

KEM SEALER PAV is pure acrylic liquid polymer modified with auxiliary agents to improve its deep penetration characteristics and sealing properties in existent porosities of concrete, sand lime bricks, cement mortars and concrete blocks.

Dosage / Coverage:

8/10 m²/kg/coat



Application Areas:

It is used as primer sealer on friable surfaces before the application of cement based coatings, paints and renders. It will stabilise, seal, strengthen, spalled, friable, unstable and weak surfaces of cement made materials and mortars. It has exceptionally high wetting and penetrating properties to impregnate the capillary system in cementitious products also sand lime bricks producing a durable high performance barrier against the penetration of water and dampness. It is recommended for use on industrial concrete floorings to provide an economical dust proof treatment. It can be applied as an economical primer on absorbent cementitious surfaces, rendering and over sand lime bricks surfaces. When dry the it gives an essentially colourless "sheen" appearance.

KEM INJECT OXYDAMP - C

Description:

KEM INJECT OXYDAMP - C is a very low viscosity synthetic resin solution. It penetrates deeply into the smallest capillaries and pores in building materials. Due to its very low density and a surface tension that is less than that of water, KEM INJECT OXYDAMP - C pushes water out of the capillaries. Capillaries treated in this way become lined and water repellent. The curing of the injected product is independent of the drying of the masonry.

After its full cure, KEM INJECT OXYDAMP - C remains flexible, does not disintegrate or give rise to effloresce and does not affect steel reinforcement.

KEM INJECT OXYDAMP - C is resistant to all of the usual aggressive masonry corrosives, such as mild acids, alkalis and salts both during application and after full cure.

Dosage / Coverage:

Approx. 75 - 80 ml/ft in wall thickness



Application Areas:

KEM INJECT OXYDAMP - C can also be applied using the low pressure injection system for mitigating rising dampness in masonry walls.

KEM PROOF ULTIMATE

Description:

(Complies to ASTM C 1202 - 97, BS EN 12390, ASTM D 412 - 02, ASTM C 836:1995, ASTM E 96:2000, BS 1881.)

KEM PROOF ULTIMATE is a high quality acrylic emulsion based coating. It is elastomeric in nature and has good resistance to weather and sunlight. It is single component system containing inert pigments and fillers suitable for application by brush, roller or spray. It prevents chloride ion ingress and exceeds all the requirements of a coating that resists carbonation and provides a smooth, durable and water repellent coating for concrete and masonry surfaces.

Dosage / Coverage:

- KEM Prime 89: 10 - 12 m²/ltr.
- KEM PROOF ULTIMATE - 3 to 4.5 m²/ltr/2 coats
- Note: Coverage may vary depending upon the texture, porosity and condition of the surface.



Application Areas:

- KEM PROOF ULTIMATE is designed to bound and to protect concrete structures against carbon dioxide, air/water born chlorides.
- It is also used as elastomeric water repellent coating for asphalt, timber, fiber cements and zinc sheets.
- It may be applied to many types of substrates particularly those commonly requiring elastomeric anti carbonation and water repellent coating like concrete bridges, highways, structures in marine environments, car parking structures, commercial and industrial buildings, flat and slopping roofs.

KEM DAMPSEAL / KEM DAMPSEAL 83

Description:

KEM DAMPSEAL / KEM DAMPSEAL 83 is specialty treatment coat for internal damp wall and ceiling which can be applied both in brushable and paste consistency. This product is anti-fungal, non-toxic, non-hazardous, and resistance to mild acids and alkalis.

Dosage / Coverage:

Mixing ratio as coating = 1:1:1 (Base: Hardener: Water) by weight.
Mixing ratio for Putty = 1: 1: 2 by weight (Base: Hardener: White cement)

Coverage as finish coat: 35 - 40 sq. ft / Kg 2 coats

Coverage as putty: 6 - 8 sq. ft / kg / coat (Coverage varies with the actual site condition).



Application Areas:

Waterproofing RCC water tanks. Specialty treatment coat for internal damp walls and ceiling. Primer for painting on internal and external walls. Damp wall coating for toilets, kitchen walls and lift pits. Applied in sterile areas of food and pharma industries.

KEM PROOF 86

Description:

(Complies to ASTM C 1202 - 97, BS EN 12390, ASTM D 412 - 02, ASTM C 836:1995, ASTM E 96:2000.)

KEM PROOF 86 is a high quality, acrylic emulsion based coating. It is elastomeric in nature and has good resistance to weather and sunlight.

Dosage / Coverage:

3-4.5 m²/litre for 2 coats

Note: Coverage may vary depending upon the texture, porosity and condition of the surface.



Application Areas:

As waterproofing and protective coating for exterior walls of buildings. Typical substrate includes masonry, concrete, cement and waste plaster as well as cement boards.

KEM PROOF 87

Description:

(Complies ASTM D 2240:2002, ASTM E 96:2000, ASTM D 412-02, ASTM C 1202-97, ASTM C 836:1995, BS EN 12390 Part 8:2000.)

KEM PROOF 87 is an elastomeric coating based on selected acrylic co-polymers. When applied, it cures to form a durable, protective, waterproof membrane. It is applied by brush or roller. It can be applied on concrete, cement board, wood, brick, stone and tiles. It is a single-component emulsion containing inert pigments and has a brushable consistency.

Dosage / Coverage:

2 - 2.5 m²/litre

Note: coverage may vary depending upon the texture, porosity and condition of the surface.



Application Areas:

- Used for coating roofs, it protects concrete structures against carbonation and chloride ingress
- Typical surfaces include concrete, cement good, woods, bricks, tiles
- It can also be used in damp and sunken areas such as under terrazzo or tile floors, shower pans, kitchen, laundry and bathroom floors

KEM BRUSH 88

Description:

KEM BRUSH 88 is a high performance, two-component elastomeric cementitious waterproof coating for concrete, slabs and masonry. It also acts as surface protection for reinforced concrete. Designed for waterproofing hydraulic projects, it is a specialty treatment coat for internal and external waterproofing.

Dosage / Coverage:

45 - 50 sq.ft/ 2.5 kg / Coat

Coverage depends on roughness and porosity of the surface.



Application Areas:

Bathrooms and Toilets, Water tanks, Basements, Channels, Faces of dam walls, Swimming pools Basins, Storage tanks, Concrete structures like pillars and beams for road and railway bridges, Balconies and terraces, Cooling towers, Underpasses, Water retaining walls

KEM PRIME 89

Description:

(Meets the requirement of ASTM D 7234 - 12)

KEM PRIME 89 is water based primer composed of acrylic emulsion polymer, properly selected fine fillers, white pigments and additives in water as a medium. It is used as primer over exterior and interior building walls before application of water based paints.

Dosage / Coverage:

10 - 12 m²/litr/coat

Coverage may vary depending upon the nature and texture of the substrate.



Application Areas:

Priming of plastered walls, asbestos, brick, false ceiling, concrete surface etc.

KEM PROOF PUD 100

Description:

(Conforms to the requirements of ASTM 836-Modified "Standard specification for high solids Content, Cold liquid - Applied Elastomeric Waterproof Membrane for Use with Separate Wearing Course")

KEM PROOF PUD 100 is a high performance low v.o.c elastomeric waterproofing polyurethane membrane. It has got very good anti-tarnishing properties rain water resistance, dirt pick up resistance and good elongation. It bridges surface stresses and hairline cracks. This gives fresh look to the coated surface. Very good product performance against fading, peeling, algae growth & fungal-growth.

Dosage / Coverage:

2.4 kg/per mt. for 1mm D.F.T

Application Areas:

KEM PROOF PUD 100 is designed to bond to many types of substrate particularly those commonly requiring a waterproof membrane in 'tanking', above and below ground, and internal wet area sections of buildings.



HYDROPHILIC WATERSTOP

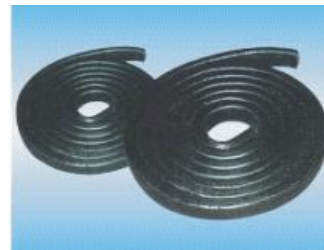
ADEKA ULTRASEAL

Description:

ADEKA ULTRASEAL is a chemically modified natural rubber product. This patented process chemically bonds a hydrophilic agent to the rubber. This permits the seal to undergo controlled expansion when exposed to moisture. This expansion capability provides a "double locking" water-stop. One from rubber's natural resilience and one from expansion. Expansion occurs in three dimensions: width, height, and length. It has a unique stainless steel wire mesh embedded within the material. The wire mesh eliminates unnecessary expansion in the length and width dimensions. When fastened to concrete, the wire mesh prevents "winding" action and directs the expansion. It has excellent durability and resistance to chemical contaminants. It can /form in a wide range of solutions such as sea water or cement water. The material does not contain any toxic substance or heavy metals and is environmentally safe.

Application Areas:

It is used in general below grade concrete joint work where water intrusion must be prevented. It is designed to replace conventional waterstop. It is also used for piping penetrations where pipe diameter exceeds 600mm.



MEMBRANES

KEM HYDROSHIELD BAP 3000/4000

Description:

KEM HYDROSHIELD BAP 3000/4000 is an elastomeric waterproofing membrane modified with APP polymers and reinforced with non-woven polyester.

Dosage / Coverage:

Size of the membrane – 1 M x 10 M x 3 or 4 mm (Coverage depends upon the site condition)

Application Areas:

It is used in protected roofing and waterproofing applications in a various applications. It is suitable for the damp proofing and waterproofing applications for slope and flat protected roof, tunnels, wet areas and underground structures.



KEM HYDROSHIELD SBS 3000/4000

Description:

KEM HYDROSHIELD SBS 3000/4000 is SBS Modified Bitumen Waterproofing Membrane. Upper surface coating: PE film, fine sand, mineral granules or aluminum foils, cop/ foils or other isolating materials.

Dosage / Coverage:

- Breadth: 1000mm
- Thickness: PY fiber membrane 3mm and 4mm
- G fiber membrane : 2mm, 3mm and 4mm
- Area / roll: 15m² (2mm), 10m² (3mm) and 7.5m² (4mm)



Application Areas:

For waterproofing all kinds of industrial and civil building roof engineering projects. Waterproof and damp proofing for all kinds of underground engineering projects. For waterproofing bridge surfaces, subways, tunnels, concrete roads and sewage treatment. For waterproofing swimming pools and water ponds.

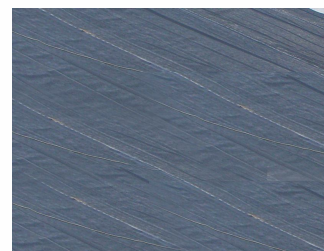
KEM HYDROSHIELD HDPE

Description:

KEM HYDROSHIELD HDPE is self-adhesive waterproof membrane based on high-density polyethylene (HDPE) as the main waterproof layer, which is composed of self-adhesive layer, protective layer (for environmental change), and isolated layer.

Dosage / Coverage:

Size of the membrane – 1.2-2.0 M x 20 M x 1.2, 2.0 mm
(Coverage depends upon the site condition)



Application Areas:

It is suitable for tunnels, subways, and other municipal waterproofing projects.

KEM HYDROSHIELD TPO

Description:

KEM HYDROSHIELD TPO is a waterproofing sheet, consisting of thermoplastic polyolefin compound resin materials as the base stock, reinforced with polyester mesh fabric.

Dosage / Coverage:

Available in roll sizes of 15, 20 and 30 m²
Available Thickness: 1.2mm and 1.5mm.



Application Areas:

Applied in industrial and civil buildings, public buildings as well as other kinds of waterproof roofing projects. Particularly recommended for roof gardens.

KEM BITUPRIME 41

Description:

(ASTM D 41, Type 1 Standard Specification for Bitumen Primer Used in Roofing, Dampproofing and Waterproofing.)

A low viscosity pure bitumen base material formulated for the professional roofing contractor. Includes select penetrating oils and fast setting petroleum solvents. Chemically inert to resist mild acids and alkali. Provides maximum bond to bitumen, concrete, masonry and metal surfaces.

Dosage / Coverage:

BUR/Modified roofing - 2.5 to 3 ltrs per 10 sqmtr
Concrete surfaces - 3 to 7 ltrs per 10 sqmtr
Metal surfaces - 0.8 to 1 ltr per 10 sqmtr



Application Areas:

Performs as a bonding agent between the surface and bitumen cements and coatings used in roofing and waterproofing applications.

surface treatment



- **Curing Compounds**
- **Deshuttering Agents**
- **Water Repellent Coatings**

CURING COMPOUNDS

KEM CURE AID 10 A

Description:

(Meets the requirement of ASTM: C 309)

KEM CURE AID 10A is water based acrylic emulsion specially selected for its water retention properties. The dried film is either colourless OR white depending on customer requirement. KEM CURE AID 10A is specially formulated product for use under hot climatic conditions. The white pigment reflects light and heat of sun and minimizes the chances of surface cracking.

Dosage / Coverage:

3 to 5 m²/ kg depending upon the concrete



Application Areas:

All types of concrete and plaster surfaces which requires water curing. Used to cure seal and harden concrete, white concrete and renders without the stains caused by resin based curing compounds. Also it does not have problems associated with adhesion of subsequent finishes common in wax based curing membrane. Recommended as a curing membrane over all RCC repaired sections.. Specially recommended for use over KEM FLOOR HT. Ideal for dust proofing of hardened concrete floors in warehouses, garages, indoor car parks and light industrial buildings.

KEM CURE AID 10W / 10M

Description:

(Conforming to ASTM C 309 Type II Class A)

KEM CURE AID 10 W / 10M is wax emulsion based curing agent to avoid fast drying of concrete surfaces exposed to atmospheric conditions.

Dosage / Coverage:

150 / 200 gm / m² depending on spraying conditions and climatic situations.



Application Areas:

Canal surfaces. Bridge decks. Building slabs and columns.

KEM CURE AID 10 (EM & EB Grades)

Description:

(ASTM C – 309, Type II, Class B BS – 7542.)

KEM CURE AID 10 (EM & EB) is used on pavement concrete construction in order to avoid fast drying of the surface, which is exposed to atmospheric conditions.

KEM CURE AID 10 (EM & EB Grades) is a resin based pigmented emulsion with aluminum flakes. On application it forms a thin film which delays the concrete drying during the curing process and avoids the formation of early shrinkage cracks.

Dosage / Coverage:

The consumption of KEM CURE AID 10 (EM & EB) (EM & EB) is approximately 150 - 200 gm/m². In case of heavy winds or higher temperature, a consumption of 250 - 300 gm/m² is recommended.



Application Areas:

As a concrete curing agent for airport runways, road pavements, bridge decks and all kinds of precast concrete elements

DESHUTTERING AGENTS

KEM MRA 1

Description:

KEM MRA 1 is mould release oil and helps in achieving:

- Smooth release of formwork.
- Excellent concrete surface texture.
- Increases productivity in plants.

Dosage / Coverage:

20 to 60 m² / liter, depending upon porosity and texture of mould surfaces.



Application Areas:

Used for all shuttering agents made of steel, wood etc.

KEM MRA 2

Description:

KEM MRA 2 is a concentrated emulsion base mould release agent which needs to be diluted with water before applications. The product is specially designed to offer economic usage with better performance.

Dosage / Coverage:

50 to 150 m² / liter depending upon porosity and texture of mould surface.



Application Areas:

Used for all shuttering agents made of steel, wood etc.

WATER REPELLENT COATINGS

KEM REPEL 111 / KEM REPEL 78

Description:

KEM REPEL 111 / KEM REPEL 78 is a ready to use all purpose colourless water repellent which easily penetrates to masonry substrates and acts as a damp proof course when injected.

Dosage / Coverage:

Coverage: 70 to 100 Sq.ft./ coat /ltr depending upon substrate conditions.



Application Areas:

Exterior surfaces / stone masonry structures. Mineral paints. Ceramic and decorative tiles. Corrugated AC sheets.

KEM REPEL 555 / KEM REPEL 79

Description:

KEM REPEL 555 / KEM REPEL 79 is all purpose unique colourless water repellent based on silane siloxane.

- Easy penetration to masonry substrates.
- Resistant against high alkalinity.

Dosage / Coverage:

Coverage: 3 to 5 sq.mtr. / coat / ltr. depending upon substrate conditions.



Application Areas:

Mineral plasters / stone structures. Brick structures. Ceramic and structural tiles. Concrete blocks. Corrugated AC sheets.

grout & anchor



- Expanding Grout Admixture

- Cement Grout

- Epoxy Grout

- Capsules

EXPANDING GROUT ADMIXTURE

KEM GROUT AID

Description:

KEM GROUT AID is a chloride free expanding grout admixture for injection grouting in structural and pre-stressed concrete elements.

- Improves cohesion in the concrete mix.
- Avoids segregation of the grouting mortar.

Application Areas:

Pocket grouting, Porous surface grouting.

Dosage / Coverage:

Dosed in between 1.0 to 2.5% by weight of cement.



CEMENT GROUT

KEM GROUT NS1

Description:

(ASTM C - 1107, ASTM C - 191, BS - 1881, BS - 4551)

KEM GROUT NS 1 is a pre-packed cementitious grout requiring only the addition of clean water to produce at the job site non-shrink multi-application grout. It is a special and unique blend of cements, micro-silica, graded sands, water reducing agents and special auxiliary chemical to deliver expansion in the plastic state to compensate for shrinkage. It can be mixed in a range of consistencies in varying the amount of water used to produce a fluid to trowellable consistency grouts.

Dosage / Coverage:

12.5 litres for 25 kg bag at flowable consistency



Application Areas:

It is formulated for a wide range of applications such as grouting of machinery base plates - anchor bolts - structural grouting of precast elements - grouting of crane rails also bridge seats - beams and columns - handrails. It is suitable for use in marine environments.

KEM GROUT NS2

Description:

((It is tested using the appropriate section of BS - 1881, ASTM C - 827 - 78, BS - 4551, BS 5075 - Part 2, ASTM C - 1107 Grade C. It meets requirement of CP 110 Part 1 - 1972 Section 6.12 for prestressing duct grouts.))

KEM GROUT NS 2 is supplied as a ready to use powder which is a blend of cements, graded sand, micro-silica and a blend of expansive agents. It requires only the addition of water to produce a high fluid - high strength non shrink grout. It is a unique product designed to give positive expansion in the plastic and early hardened states, producing a low porosity high durability material.

Dosage / Coverage:

12.5 litres for 25 kg bag at flowable consistency



Application Areas:

With dual expansion properties is recommended for use in grouting heavy duty machinery base plates - power generators pumps - base plates for electrical pylons and oil storage tanks - columns - crane rails bridge seats - compressors. It is suitable for use in marine environments.

KEM GROUT CI 2

Description:

(BS - 1881, ASTM C - 827 - 78, BS - 4551, BS 5075 - Part 2, ASTM C - 1107)

KEM GROUT CI 2 is supplied as a ready to use powder requiring only the addition of water to produce a free flowing grout. It is a unique product designed to give positive expansion in the plastic and hardened states, producing a low porosity high durability material. It is carefully designed very fine blend of portland cements modified with silica fume, water reducing agents and expansive agents. The product is formulated to produce controlled expansion in the plastic state with low water mixing requirement to minimize segregation delivering high early strength and long lasting durability.

Dosage / Coverage:

A 25 kg. bag will yield approximately 16 ltrs. of pumpable free flow consistency grout.



Application Areas:

It is used for general purpose grouting of narrow concrete cracks or gaps between concrete and metal structures. It is recommended to filling gaps between metal electrical lighting poles base plates and the concrete supporting foundation. It is used for cable duct grouting in post tensioned concrete members. It is used for sealing / filling narrow concrete cracks, grouting machine base plates, stanchion bases and crane rails. It is an excellent grout for all horizontal ducts or concrete in situ opened channels installation of pipe lines, cables, ducts, plastic conduits etc.

EPOXY GROUT

KEM GROUT EP 1

Description:

(ASTM-C 881-87 - Type I, IV & VI, Grade 2, Class B & C Passes ASTM - C 883 & ASTM - C 884)

KEM Grout EP1 is solvent free epoxy resin with polyamine hardener. KEM Grout EP1 additionally contains inert granular powdered fillers. They are designed for a gap from 0.3 mm to 70 mm.

Dosage / Coverage:

10 kg pack, yields 5 litre



Application Areas:

KEM GROUT EP1 is used for all grouting applications where chemical resistance and resistance to vibrational and other dynamic loads is desired. Typical applications include but are not limited to crane and transport rails, compressors, turbines, centrifuges, rock crushers, pulping machines and anchoring of steel bars in concrete.

KEM GROUT EP 2

Description:

(ASTM C - 827, ASTM C - 579, ASTM C - 580, ASTM C - 307, ASTM C - 531)

KEM GROUT EP 2 is a three component solvent free epoxy resin based grout. KEM GROUT EP 2 is for gaps from 20 mm to 50 mm.

Dosage / Coverage:

21 kg pack, yield: 10 litre



Application Areas:

KEM GROUT EP 2 is used for all grouting applications where chemical resistance and resistance to vibrational and other dynamic loads is desired. Typical applications include but are not limited to crane and transport rails, compressors, turbines, centrifuges, rock crushers, pulping machines and anchoring of steel bars in concrete.

KEM GROUT EP 3

Description:

(ASTM C - 827, ASTM C - 579, ASTM C - 580, ASTM C - 307, ASTM C - 531)

KEM GROUT EP 3 is a 100% solid three component flowable, non-shrink epoxy grout which is easy to place. It has high strength and creep resistance and very high effective bearing area. Due these properties and extremely high water, oil, fuel and chemical resistance, it is best suited for oil field, refinery and petrochemical equipment grouting, as well as pile cap waterproofing applications.

Dosage / Coverage:

21 kg pack, yields 10 litres


Application Areas:

It is used for most grouting applications, particularly those requiring chemical resistance and heavy duty resistance to vibrational, reciprocating and other types of dynamic and mobile loads. Typical Applications include but are not limited to, crane and transporter rails, Heavy duty compressors, turbines and centrifuges, rock crusher and pulping machines and other critical equipment. It is also used for anchoring steel bars in concrete.

KEM GROUT EP 4

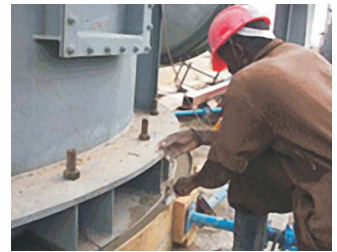
Description:

(ASTM C - 827, ASTM C - 579, ASTM C - 580, ASTM C - 307, ASTM C - 531)

KEM GROUT EP 4 is a 100% solids three component epoxy grout for thick pours. It is a very high strength grout with excellent and very low exotherm. Due to these properties it provides minimal shrinkage in thick pours up 200 mm. This makes it suitable for final positioning of critically aligned machinery within close tolerances.

Dosage / Coverage:

36 kg pack, yields 15.5 litres


Application Areas:

It is used for most grouting applications, particularly those requiring chemical resistance and heavy duty resistance to vibrational, reciprocating and other types of dynamic and mobile loads. Thick pours are possible. Typical applications include but are not limited to, crane and transporter rails, heavy duty compressors, turbines and centrifuges, rock crusher and pulping machines and other critical equipment. It is also used for anchoring large anchor bolts in machinery base plate grouting.

CAPSULES

KEM ROCKPAC CEM 100

Description:

KEM ROCKPAC CEM 100 is available in plastic pouch. At the time of application, the pouch is put in water, allowing enough water through the perforations to form a non-shrink, thixotropic cementitious grout. Additives in the grout ensure controlled expansion to stabilize the grout and control the water uptake to provide an optimum w/c ratio for high early strength. The overall cohesiveness of the grout enables it to be used in wet conditions even in flowing water without excessive grout washout.


Application Areas:

It is used for grouting rock bolts for strata reinforcement in tunneling and mining to reduce roof collapses.

Standard Sizes

Nominal Diameter: 40mm/35mm/32mm/25mm/20mm

Nominal length: 800mm/500mm/300mm/200mm

KEM ROCKPAC RES 100

Description:

KEM ROCKPAC RES 100 cartridges contain very high quality polyester resin and its catalyst in precisely measured quantities. These two components are kept separate i.e. the catalyst is separated from the resin by an inner tube. The outer nylon skin contains the resin and the inner tube filled with catalyst; basically floats in the encapsulated resin. The sausage-shaped cartridges are designed to be inserted into the drill holes for the purpose of mining or tunneling. The rotating bolt during insertion punctures the outer skin of the cartridge and breaks the inner tube filled with catalyst and thus ensuring a homogenous mixing of the catalyst and the resin. The resin catalyst mix fills the annular space between the bolt and the bore hole and holds the bolt firmly and permanently. Its cartridges are available in different dimensions suiting the exact requirement of the users.



Application Areas:

KEM ROCKPAC RES 100 cartridges are developed for stabilization of strata in tunnels and mining applications. The basic purpose of strata reinforcement by KEM ROCKPAC RES 100 cartridges is to prevent the freshly exposed rocks particularly overhead after each blast from collapsing. KEM ROCKPAC RES 100 cartridges may be used for the purpose of both point anchorage and full column grouting.

Standard Sizes

25mm dia X 300 mm length

32mm dia X 300 mm length

40mm dia X 300 mm length

concrete repair



- **Bonding Agent**

- **Crack filler / Sealer**

- **Microconcrete**

- **Mortar**

- **Crack Injection**

BONDING AGENT

KEM BOND AR / KEM BOND 50

Description:

(ASTM C-1059 Type II and waterproofing agents)

KEM BOND AR / KEM BOND 50 has an excellent bonding cementitious mixes.

Dosage / Coverage:

Mixed with OPC at a ratio 1:1 by weight, covers 40-45 sq. ft. depending upon porosity of surface.



Application Areas:

As a bonding agent for new to old concrete and old to old concrete.

KEM BOND SBR / KEM BOND 76

Description:

(ASTM C-1059 Type II)

KEM BOND SBR / KEM BOND 76 is styrene butadiene rubber based dispersion for improving adhesion and strength of all types of commonly used mortars for restoration jobs.

Usage / Dosage:

Mixed with cement and sand at a ratio 1:5:15 by weight.



Application Areas:

Structural repairs

KEM BOND EP 1

Description:

(ASTM C-881 Type II, V grade II class B & C)

KEM BOND EP 1 is a specially formulated non - shrink, solvent free epoxy resin based system blended with fine inert fillers. It is supplied as a two component material in pre weighed quantities ready for on site mixing and use.

Dosage / Coverage:

Normally 2.5 to 3.5 m²/kg depending on surface profile



Application Areas:

It is primarily intended as a bonder for old concrete to new freshly laid concrete and cementitious repair products.

KEM BOND EP 1 L

Description:

(ASTM C 881 - 87 - Type II & V. Grade 2 Class B & C. Bond Strength in accordance with ASTM C - 882 - 87)

KEM BOND EP 1L is a low viscosity variant of KEM BOND EP 1. It is specially formulated non - shrink, solvent free epoxy resin based system blended with fine inert fillers. It is supplied as a two component material in pre weighed quantities ready for on site mixing and use.

Dosage / Coverage:

It is recommended at a spread rate of 2.5 to 3.5 m² / Kg



Application Areas:

Bonding agent for old concrete to new freshly laid concrete and cement based repair products. As a primer for water based epoxy systems.

KEM BOND EP 2

Description:

(ASTM C - 881 Type II, V grade II class B & C)

KEM BOND EP 2 is a specially formulated epoxy resin based system blended with fine Inert fillers. It is supplied as a two component material in pre-weighed quantities ready for on-site mixing and use.

Application Areas:

Intended as a bonder for old concrete to new freshly laid concrete.

Dosage / Coverage:

Normally 2.5 to 3.5 m²/kg depending on surface profile



KEM GELL EP

Description:

(ASTM C - 881 Type I, VI, VII grade III, class B & C)

KEM GELL EP is a thixotropic two component epoxy based adhesive bond to variety of surfaces. It is supplied in gel like consistency which is easy to mix and apply. Base and hardner components and coloured different for ease of mixing.

Application Areas:

It is designed for use as a surface sealant for crack injection systems. It is also used as bonding agent for common construction materials including cement boards, glass, wood and some plastics.

Dosage / Coverage:

2.850 litres / 3 kg pack.



KEM LATEX KRPN 47

Description:

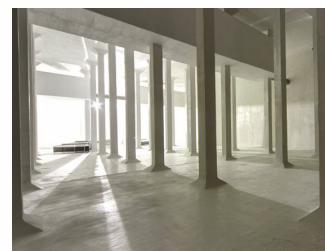
KEM LATEX KRPN 47 is a high quality specification resistant liquid resin latex dispersion for improving adhesion and strength of all type of commonly used mortars. When blended with cement, the polymer: cement mixture makes it suitable to provide the barrier coating. KEM LATEX KRPN 47 has excellent bonding property to mortars, concrete, Brickwork, Wood, Glass, Aluminum and Steel. The flexible and elastomeric nature of this system has properties, which are able to combat the inadequacies of cement like low flexural strength and tensile strength, low impact strength, and thin section fragility. The resultant system offers a tough, hard wearing surface with abrasion, chemical and weather carbonation resistance coupled with excellent waterproofing effect for marine environments as well.

Application Areas:

Repair mortars for mending damaged spots in precast concrete industry, pipelines etc. Waterproofing water retaining structures, terraces, parapets, bathrooms and sunken portions of toilet blocks. Cold joints between old and new concrete can be made strong and non-permeable with bonding slurry consisting of KEM LATEX KRPN 47 and cement mortar. Fixing ceramic tiles, floor screening and mosaic tiling. Crack repair and porous surface sealing. By using KEM LATEX KRPN 47 the conditions created due to breeds of termites are avoided. Healthy conditions prevail and discomfort is eliminated. Improvement of the mechanical and technological characteristics of ready to use coarse and fine repair mortars intended for the repair of concrete.

Dosage / Coverage:

1 kg of KEM LATEX KRPN 47 will cover 65-80 sq. ft. area in 2 coats for a proportion mix 1:4:6 (KEM LATEX KRPN 47: Water: Cement)



CRACK FILLER / SEALER

KEM SEAL / KEM SEAL 53/54 (GREY/WHITE)

Description:

KEM SEAL / KEM SEAL 53/54 (GREY/WHITE) is a single component cementitious base crack sealing compound.

Application Areas:

Internal & external cracks in plasters.

Dosage / Coverage:

4 parts KEM SEAL / KEM SEAL 53/54 (GREY/WHITE) is to be mixed with 1 part of water and applied.



KEM CRACKFILL / KEM CRACKFILL 51

Description:

KEM CRACKFILL / KEM CRACKFILL 51 is an acrylic co-polymer based white thixotropic paste specially formulated for sealing static cracks.

Application Areas:

Exterior & interior surfaces. Plastered surfaces.

Dosage / Coverage:

Density: 1.45 ± 0.05 g/cc.

Coverage: Approx 25 RM/kg for 5 mm wide cracks.



MICROCONCRETE

KEM MICROCONCRETE

Description:

(ASTM C -1107 Grade C, BS - 1881, BS - 4550, CRDC - 821 - 82 A, BS - 6319)

KEM MICROCONCRETE is a general purpose non-shrink, cementitious, flowable high strength grout for repairs with high strength precision concrete. Free flowing on site, suited for thickness up to 40 mm to 100 mm. Suitable for various structural strengthening measures such as encasement build-ups, jacketing etc.

Dosage / Coverage:

0.14 0.16 w/p ratio @ 300C.

Approximately 13 liters / 25 kg bag. Actual yield depends upon the consistency required as / the site requirement.



Application Areas:

General repair and renovation of decayed defective or damaged concrete like beams, columns, walls, and honey combed concrete, where access is required and compaction is not available. Jacketing of RCC columns - strengthening of vertical members.

MORTAR

KEM MORTAR HS

Description:

(BS 4550, BS 1881, BS 6319, ASTM C - 109)

KEM MORTAR HS is a single component cement based enriched with fine additives, fibre reinforced restoration mortar. Used for structural repair new and old concrete. Applied manually or mechanically.

Dosage / Coverage:

For optimum bonding, prepare slurry by mixing 5 parts of KEM Mortar HS with 1 part of water. One 25 kg bag of KEM Mortar HS requires about 3.75 to 4.25 of water to achieve proper consistency of a repair mortar. For applications using pump or spray machines, the mixing water can be increased up to 4.5 /bag.



Application Areas:

Concrete repair affected by repeated loads. Structures affected by marine environment. Bridges, harbors, dams. Repair of pre-fabricated concrete elements. Repair of concrete structures with carbonation process. Repair of damaged areas in industries due to aggressive environment.

KEM MORTAR EP 1

Description:

(ASTM - C 881 - Type I & IV, Grade III, Class B&C Passes ASTM - C 883 & ASTM - C 884)

KEM MORTAR EP 1 is thixotropic solvent free, two component epoxy based repair mortar. The base component is white coloured and the hardener is grey to facilitate ease of mixing.

Dosage / Coverage:

5 kg, pack yields 3.22 ltrs & covers 3.22 m² at 1 mm thickness.

Thickness: Depending on the condition of substrate.



Application Areas:

For filling blow holes, making fair slightly damaged concrete, eliminating minor irregularities prior to painting or coating. Highly recommended for repair of structures that will be permanently submerged in water, sea water like water intake areas in power plants etc. As an adhesive for bonding pre-fabricated concrete bridge segments.

KEM MORTAR EP 2

Description:

(ASTM - C 881 - Type I & IV, Grade III, Class B&C Passes ASTM - C 883 & ASTM - C 884)

KEM MORTAR EP 2 is solvent free three component epoxy based repair mortar it can be applied at a thickness between 5mm to 50mm in horizontal & 5mm to 10mm in vertical.

Dosage / Coverage:

yields 8 litres giving a theoretical coverage of 1.6 m² at 5mm thickness.



Application Areas:

For speedy and permanent repairs to concrete structures, where strength, impermeability to water and resistance to aggressive chemicals is essential. Emergency repairs to concrete structures, repairs to acid tanks, sea walls, industrial floors in plating shops, chemical handling and process areas and bedding of precast concrete beams. It is suitable for use in marine environments.

KEM MORTAR EP 3

Description:

(ASTM - C 881 - Type I & Grade III, Class B&C Passes ASTM - C 883 & ASTM - C 884)

KEM MORTAR EP 3 is a three component solvent free epoxy based mortar, designed for fast and durable repairs to concrete, particularly in vertical or overhead situations. It can be applied at a thickness between 5mm to 30mm in vertical, and 5mm to 25mm in overhead in one layer.

Dosage / Coverage:

10.5 kg packs which yields 10 litres giving a theoretical coverage of 2.0 m² at 5mm thickness.



Application Areas:

For speedy and permanent repairs to concrete structures, especially in overhead and vertical situations where "High Build" repairs are required and impermeability to water and resistance to aggressive chemicals is essential. For emergency repairs to concrete columns, lintels and roof-beam faces, to provide a dense impermeable finish and protect the embedded reinforcing steel.

KEM MORTAR MT

Description:

(BS 4550, BS 1881, BS 6319, ASTM C - 109)

KEM MORTAR MT is supplied as a ready to use dry powder requiring only the addition of water to produce cohesive easily applied mortar. The product is a careful blend of portland cements, graded silica sands, shrinkage compensating agents, silica fume, water reducing agents and compatible water resistant polymers. The product is designed to give good adhesion and cohesion in the plastic state and low water requirement resulting in a non-shrink low porosity mortar with good compressive strength and durability.

Yield

12.4 litres



Application Areas:

- KEM Mortar MT is recommended for structural repair of damaged concrete for beams and columns in inland and marine environments, and as a general purpose repair mortar for concrete floors and highly trafficked areas.
- It is highly recommended for vertical as well as overhead applications.
- It is suitable for structures in highly humid atmosphere such as marine and offshore installations.

KEM MORTAR FS

Description:

(ASTM C - 109)

KEM MORTAR FS a rapid setting mortar made from special cements, fine aggregates, additives and fibers. It requires addition of potable water for mixing. It produces high early strength and achieves initial set in 10 to 30 minutes. Final set is achieved in 30 - 90 minutes. Repaired areas may be opened to traffic within 2 - 4 hours, after application.

Dosage / Coverage:

A 25 kg bag after mixing with 11% of water will produce 12.4% liters of mortar. If aggregates are added then volume increases accordingly.



Application Areas:

- KEM MORTAR FS is for quick repairs of horizontal concrete surfaces such as airport runways, expressways, highways, bridge decks, sidewalks, parking decks, loading docks and floors. It may be used in vertical application with proper form work and care.

KEM BRICKLINE 10

Description:

(BS 4550, BS 1881, BS 6319, ASTM C - 109)

KEM BRICKLINE 10 jointing compound is a bricklaying mortar made from a special combination of cement, graded sand and additives. It is generally applied at a thickness of 3mm, being a pre-mixed mortar it is easy to use & always consistent in performance.

Dosage / Coverage:

KEM BRICKLINE 10 covers 2.75 to 3.25 sq. mtrs in normal condition with average thickness of 3 mm for a bag of 25 kg for blocks size 600 X 200 X 150mm. The coverage area however will depend upon the quality & evenness of the substrate, thickness of joints and size of masonry units.



Application Areas:

- KEM BRICKLINE 10 jointing mortar is a versatile thin jointing material for laying AAC blocks, fly ash bricks, concrete blocks etc. It replaces conventional sand & cement based mortar. It provides a thin but much more durable bond between blocks than the conventional mortar.

CRACK INJECTION

KEM INJECT UWEP

Description:

(ASTM C 579, ASTM C 580)

KEM INJECT UWEP is a two part, solvent-free, water moisture tolerant epoxy resin based injection system designed to form a strong permanent bond and seal in cracks in dry, damp or wet concrete and masonry. It is designed to be injected into cracks using suitable resin injection equipment. However it can be easily applied manually in horizontal application due to using flooding technique its low viscosity.

Dosage / Coverage:

1 kg Pack yielding 0.950 litres.



Application Areas:

For injecting into cracks in concrete or masonry particularly in wet or underwater conditions to form a permanent bond or seal preventing water seepage in areas such as basements, swimming pools water retaining structures etc. It is suitable for use in marine environments.

KEM INJECT PU 2K

Description:

KEM INJECT PU 2K is a two part solvent-free, low viscosity high tensile strength polyurethane based system designed to form a strong permanent bond and seal in cracks in dry, damp or wet concrete and masonry.

Dosage / Coverage:

Depends on extent of cracks.



Application Areas:

For injecting into cracks for dry, damp or wet concrete or masonry. Due to its good adhesion with sand & concrete, it may be used for sealing layer around construction. It can be used for sealing & bonding cracks between or upto 10 mm. It is designed as a permanent solution to seal and bond cracks in concrete and masonry. Crack widths of between 0.2 mm and 10 mm can be treated depending on requirements.

KEM INJECT PU 3K

Description:

KEM INJECT PU 3K is a three part solvent-free, injection foam for stopping water leakages through cracks.

Dosage / Coverage:

Depends on extent of cracks.



Application Areas:

For injecting into cracks for, dry, damp or wet concrete or masonry. Especially as an underlay for poorly ventilated working areas. May be used to form bowl-shaped sealing layers around construction, since it adheres well to sand and concrete (wet or dry). It is designed as a permanent solution to seal and bond cracks in concrete and masonry. Crack widths of between 0.2 mm and 10 mm can be treated depending on requirements.

KEM INJECT PU 100

Description:

KEM INJECT PU 100 is single component fast reacting PU Injection foam. The product is injected in leaking cracks to stop the flow of water. It reacts with available water foaming almost instantly. This help in stopping even a heavy leakage in concrete structures such as water retaining structures, basements, tunnels etc.

Dosage / Coverage:

Depends on type and size of cracks.



Application Areas:

For sealing leaking cracks in concrete.

KEM EPOXY GROUT ELV

Description:

(ASTM C 579, ASTM C 580)

KEM EPOXY GROUT ELV is solvent free epoxy resins with polyamine hardeners. The grades additionally contain inert granular powdered fillers. It is used for gaps from 0.3 mm to 10 mm.

Also available ELV 50 / ELV 100 for building cracks upto 15 mm

Dosage / Coverage:

Depends on extent of cracks.



Application Areas:

For injecting into cracks in concrete or masonry, to prevent water seepages in areas such as concrete roads, pavements, bridges, basements, roofs, water reservoirs, swimming pools etc.

sealant



- 2K Polysulphide

- 1K Polyurethane

- Bitumen Sealant

2K POLYSULPHIDE

KEM JOINT GG/ KEM JOINT PG

Description:

(BS 4254)

KEM JOINT PG / KEM JOINT GG is two component system consists of a base compound and accelerator (curing agent)

Dosage / Coverage:

Mixing ratio (Base : Accelerator)
92:8 (Parts by weight)



Application Areas:

Applied between different construction joints in concrete highways, bridges, water retaining structures, water treatment plants, basements, subways, culverts, airfields, vehicular and pedestrian traffic pavements of concrete, areas which are affected by fuel, oil etc.

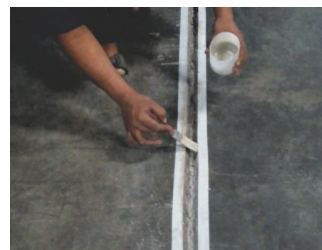
KEM PRIMER

Description:

KEM PRIMER is a low viscosity primer specially developed product to enhance the bonding of Polysulphide sealants.

Dosage / Coverage:

50 – 60 sq.ft. /litre /coat



Application Areas:

Concrete surfaces, Porous stones, Wood, Asbestos and Bricks.

1K POLYURETHANE

KEM JOINT PU 50 / KEM JOINT PU 100

Description:

ASTM C 920

KEM JOINT PU 50 / KEM JOINT PU 100 is a single component polyurethane based elastomeric sealant which cures under the effect of atmospheric humidity to form a flexible and resistant joint with very good adhesion on the materials.

Shore A Hardness:

KEM JOINT PU 50 - 25
KEM JOINT PU 100 - 40



Application Areas:

It can be used for heavy and light precast panel expansion joints, wood, aluminum and PVC joinery seams, and expansion joints in traditional construction. It is highly recommended for bonding baked clay and concrete roof tiles. This sealant has a good adhesion without primer on other current materials most lacquered metals, polyester, glass, stone, ceramic tiles.

BITUMEN SEALANT

KEM JOINT BIT - 180P

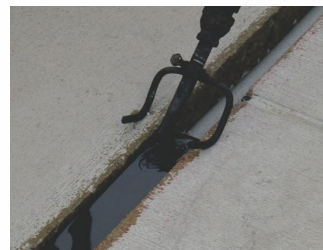
Description:

(BS 2499:1993 Type N1)

KEM JOINT BIT – 180 P is hot poured polymer modified bitumen sealant which has a movement accommodation factor of 25% in butt joints. For optimum performance, consideration should be given to the possibility that the movement accommodation will not be evenly distributed between joints provided. To ensure the sealant operates within the stated movement capacity of 25%, the width of the sealing slot should be designed in accordance with the recommendations of BS 6093.

Application Areas:

For the sealing and maintenance of joints in concrete roads and asphalt surfacing.



Dosage / Coverage:

Joint size in mm	Kg per metre	Metres per 15 kg pack
10 x 10	0.10	1500
10 x 13	0.13	1150
10 x 15	0.15	1000
10 x 20	0.20	750
13 x 15	0.195	760.92
15 x 15	0.225	660.66
15 x 20	0.30	500
15 x 25	0.375	400
20 x 20	0.40	370.5
20 x 25	0.50	300
25 x 25	0.625	240
30 x 25	0.75	200

1 litre of KEM BITUPRIME 41 will be sufficient for 50 kg of KEM JOINT BIT - 180P.
These are theoretical yields. No allowance has been made for variations in joint dimensions or wastage.

flooring



- **Cementitious Self Leveling Compound**

- **Floor Hardener**

CEMENTITIOUS SELF LEVELING COMPOUND

KEM FLOOR CSL 100

Description:

ASTM C 109

KEM FLOOR CSL 100 is a blend of specially selected cements, graded aggregates, synthetic polymers and workability aids. It is supplied as a dry powder requiring only, the addition of water to produce a smooth free flowing and self leveling smoothing coat, which can be laid to a feather edge. When thickness greater than 10mm are required, washed concrete sand can be added in equal proportions (if sand is added the product becomes trowellable and is no longer self-leveling).

Dosage / Coverage:

Normal application thickness is upto 3mm. (Max. 10mm)
Coverage is approx. 2.5 kg/m² at 1.5 mm thick.



Application Areas:

For leveling out uneven floor surfaces prior to covering with floor finishes e.g. tiles, carpeting, linoleum, rubber and other sheet flooring.

FLOOR HARDENER

KEM FLOOR HT

Description:

KEM FLOOR HT is ready to use non-metallic floor hardener designed with high quality natural aggregates which gives abrasion and wear resistance. It bonds monolithically to the base concrete, suitable for existing and as well as new floors.

Dosage / Coverage:

- Light traffic 3 - 5 Kg/sq.m
- Medium traffic 4 - 5 Kg/sq.m
- Heavy traffic 6 - 7 Kg/sq.m



Application Areas:

Hardwearing and dustproof flooring, anti-skid & anti-slip flooring, shop floors / warehouse, loading bays, rafts, car parking, garages, automobile industry.

KEM FLOOR LI

Description:

KEM FLOOR LI floor hardener is a lithium silicate based liquid hardener system which when applied on concrete surfaces penetrates into the micro capillaries and seals against water and chemical in grass.

Dosage / Coverage:

Spray applied - 10 - 12m² / ltr on power trowelled surfaces.
On textured surfaces the coverage will be much lower.



Application Areas:

- KEM FLOOR LI floor hardener is used for surface hardening of new and old concrete to prevent dust generation and to reduce wear, particularly on exposed concrete. Typical areas of application include salt exposed areas, parking decks, marine environments, pedestrian walkways, stamped/ colour concrete etc. It can be used on both new and existing concrete surfaces.

KEM FLOOR S

Description:

KEM FLOOR S is an aqueous solution of sodium silicate modified with wetting agents and other additives. The blended active ingredients chemically react with the free lime in the concrete producing hard insoluble salts sealing, dust proofing and hardening the floor surface in one operation.

Dosage / Coverage:

Surface Type	Coverage m ² /ltr of undiluted KEM FLOOR S	Coats	Dilution ration by Vol. KEM FLOOR S
Normal Concrete	6 To 12*	2	1-4 1st Coat 1-3 2nd Coat
Terrazo	15 to 25	1	1-5 Single Coat

Application Areas:

- KEM FLOOR S is a multi application concrete treatment for interior or exterior application. It can be used over new fresh or cured concrete and can be used over old concrete cleaned floors. It hardens also improves the abrasion resistance of concrete floors and seals the surface against the penetration of oils, chemicals and chlorides.



tiling



- **Cement Based**
- **Epoxy Based**
- **Tile Cleaner**

CEMENT BASED

KEM TILE EX / TILE 21

Description:

KEM TILE EX / TILE 21 is a specialty additive based cementitious product for fixing tiles to surfaces for its non-sagging and non-shrink advantages over conventional neat cement pastes.

Application Areas:

Tiles using KEM TILE EX / TILE 21 can be applied on any surface whether horizontal or vertical. Best for bathroom, toilet, kitchen, floor.

Dosage / Coverage:

4 kg of KEM TILE EX/TILE 21 covers about 1 m when applied in 3 mm thickness. W/P ratio is 0.24 to 0.28.



KEM TILE ST / KEM TILE 22

Description:

KEM TILE ST / KEM TILE 22 is a polymer modified, flexible cementitious based high performance waterproof adhesive for fixing natural stones, heavy duty tiles, ceramics, mosaic, granite for floor and wall and walls.

Application Areas:

Indoor and outdoor use. Walls and floors. Swimming pools, Vitrified tiles, Natural stones, Clinker bricks, On Gypsum fibre boards & aerated concrete. Plaster boards

Dosage / Coverage:

- The water powder ration for KEM TILE ST / KEM TILE 22 is 0.24 - 0.28 i.e. 25 kg bag requires 6 to 7 liters of water depending upon the temperature.
- 6-7 m² / 25 kg bag at 3 mm thickness and 3 to 3.5 m² at 6 mm thickness.



KEM TILE WA / KEM TILE 23

Description:

KEM TILE WA / KEM TILE 23 is a high performance white cement based polymer modified tile fixing adhesive for internal walls and floor. Suitable for external floorings, tile-on- tile applications, marbles, glass tile and natural stone.

Application Areas:

Internal flooring, Tile on tile applications, Marbles, Glass tiles and natural stones

Dosage / Coverage:

- The water powder ratio for KEM TILE WA / KEM TILE 23 is 0.24 - 0.28 i.e. 25 kg bag requires 6 to 7 liters of water depending upon the temperature.
- Glass tile 60-70 sq. ft/25 Kg bag at 3 mm thickness and 30-35sq. ft./25 Kg bag at 6mm thickness.
- Glass mosaics (100-110 mm sq. ft/ 25 Kg bag at 2mm thickness)
- Marble (30-35 sq.ft/25 Kg bag at 6mm thickness)



KEM TILE GROUT / KEM TILE 24

Description:

KEM TILE GROUT / KEM TILE 24 is cement based tile joint filler available in different colours. Its versatile property also helps to stop seepages through tile joints.

Application Areas:

Swimming pools, Bathrooms, Claddings

Dosage / Coverage:

One part of water is to be added to 3 parts of KEM TILE GROUT / KEM TILE 24



EPOXY BASED

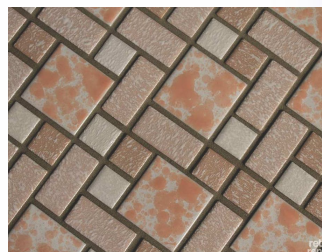
KEM EPOXY TILE GROUT / KEM TILE 26

Description:

KEM EPOXY TILE GROUT / KEM TILE 26 is a solvent free epoxy resin blended with selected fine fillers. It is supplied as a three component system in pre-weighed quantities ready for on-site mixing and use.

Dosage / Coverage:

Depends on joint width depth and tile size. For a tile size of 200 mm x 100mm x 6 mm and joint width of 5 mm, about 0.480 litre of KEM EPOXY TILE GROUT / KEM TILE 26 would be required / square meter i.e. in this case, one pack of KEM EPOXY TILE GROUT / KEM TILE 26 would cover about 7m² of tiled surface.



Application Areas:

It is a high performance epoxy grout with exceptional chemical resistance for bedding and grouting tiles in heavy duty environments. It is used for a single operation bedding and grouting of tiles on horizontal surfaces. It is used wherever excellent mechanical properties, high chemical resistance combined with a high standard of finish is required such as in swimming pools, hospitals, kitchens, slaughter houses, soft drink factories and steam cleaned areas.

TILE CLEANER

KEM TILE CLEAN / KEM TILE 25

Description:

KEM TILE CLEAN / KEM TILE 25 is a concentrated mildly acidic ceramic tile cleaner / stain remover. It removes mineral deposits, cement residues, soap film, efflorescence, algae and most types of soil. Acts as an excellent cleaner for kitchen floors.

Dosage / Coverage:

Spray cleaning : Dilute KEM TILE CLEAN / KEM TILE 25 1:2 with water. Approximately 10m² to 50m² / liter (depending on dilution).



Application Areas:

Ceramic Tile. Porcelain tile. Mosaic, glazed tiles and washbasins.

**Chembond Chemicals Ltd.**

Construction Chemicals Division

Chembond Centre, EL-71,

MIDC, Mahape, Navi Mumbai - 400 710

Tel: (022) 39213000 Fax: 022 27681294

Visit our website www.chembondindia.com for more information

For business enquiries write us on enquiries.conschem@chembondindia.com

Branches: • Ahmedabad 079 27542671/2160 • Chennai 044 43051197
• Delhi (Noida) 120 4275054 • Kolkata 033 40643450 • Mumbai 022 24922819/2402
• Navi Mumbai 022 39213000

Disclaimer: The information, based on our current level of knowledge, is given in good faith. It relates to the usage of CHEMBOND products when properly stored, handled and applied. Users are advised to carry out trials prior to full scale usage. No assumptions should be made as to a product's suitability for a particular use or application. Users acknowledge this and agree to accept CHEMBOND's technical advice only as a guideline. The images have been used for non-commercial purposes, only to represent and explain the concept further.

 : www.chembondindia.in