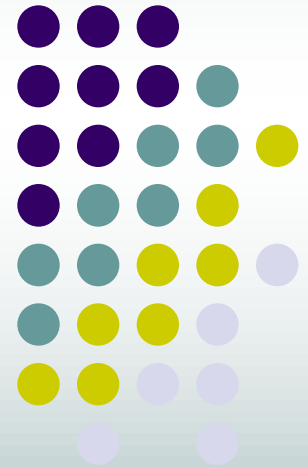


# Magnum Industries – Construction Products

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# Construction Product



- Chemical Admixtures
- Form Releasing
- Curing Products
- Repair and Water-proofing Products
- Flooring Products
- Grouts
- Plasters

# Chemical Admixtures



- **Retarders**

- Products designed to permit long haul of concrete from 30 min to 6 h and more without excessive variation in setting times.
- Products available for dosing in Concrete movers to allow storage of unused concrete even for 24 h.

- **Plasticizers**

- Products offer water reduction to offer better durability and also can optimise cement contents for same target strengths.
- Improved Workability and pumpability of concrete

- **Corrosion Inhibitors**

- Integral corrosion inhibitors can be used during mixing to offer resistance to corrosion due to salts and chloride in marine / saline environments

# Concrete Admixtures ..contd



- **Accelerators**
  - Controlled concrete setting even under low temperature conditions.
- **Shotcrete Additives**
  - For sprayed concrete typically applied for tunnels and temporary rock support
- **Concrete Deactivating**
  - Easy to use, consistent results
  - Cleans up with soap and water
  - Exposes aggregate on floor slabs, sidewalks, tilt-up and precast panels or any normal horizontal concrete
  - Produces roughened bonding surfaces for subsequent concrete toppings
  - Roughens horizontal surfaces for construction joints in power plants, dams and other civil engineering projects.

# Form Releasing



- **Form Release Clear**

- Effectively prevents bonding of concrete to the form
- Reduces the costly expense of cleaning forms and minimizes preparation for re-use
- Increase the life of both wood and steel forms
- Waterproofs plywood and helps prevent deterioration and corrosion of steel
- Non-staining, leaves no residue, free of kerosene
- Eliminates the need to sandblast before plastering
- Does not impair bonding of paint and other concrete surface coatings

- **Form Release - Emulsion grade**

- Economy release agent can be diluted with water 4 – 5 times before application to bring down the cost at sametime offers efficient release.

# Curing Products



- Evaporation Retarding

- Retains surface moisture in all types of concrete flatwork
- Helps prevent plastic shrinkage cracking
- Reduces wind crusting of flatwork surfaces
- No effect on curing compounds and other floor toppings
- Useful as a finishing aid during troweling operations
- Can be used on interior and exterior concrete surfaces
- Total compatibility with fresh concrete

- Curing membranes transparent

- Resin emulsion that forms a membrane to seal against moisture loss
- Retains 95% or more of mix water for seven days
- Allows for normal hydration of concrete

# Curing Products..contd



- **Curing Membranes Aluminized**
  - Aluminised version of Curing membrane
- **Curing Membranes Reflecting**
  - White reflecting membrane, solvent free
- **Curing and Sealing**
  - For curing and sealing concrete surfaces
  - Non-yellowing, UV resistant
  - Economical
  - Cures, seals, hardens and dustproofs
  - Protects against oils, acids, salt, alkalis, fungus, grease, spalling and damage from sudden rainfalls. Retards moisture exchange, giving additional protection for tile, paint, carpet, etc.

# Repair and Water-proofing Products



- **Bonding Aids Acrylic /SBR type**
  - Moisture-insensitive
  - Easy to mix
  - Excellent adhesion
  - Super strength, fast set
  - Corrosion inhibiting
- **Patch Repairs**
  - Microcements, fiber and non-fiber reinforced type, Road repair products for concrete roads.
- **Rust Removers**
  - Rust removal from rebar and other iron components
- **Zinc rich Primers**
  - 90 -95% Zinc based coats to effectively combat and reverse the rust formation thereby protecting the Rebar



# Repair and Water-proofing Products...contd



- Crack Injections
  - Epoxy and microcement based injection systems
- Water Stops
  - Water plugs to stop immediate water leakages
- Water-proofing
  - Membrane based solutions, forming strong impermeable water-proofing membrane.
  - Migrating crystalline water-proofing agents
- Water Repellants
  - Water based, silicone based, catalysed water repellants highly efficient over the available non catalysed solutions in the market

# Flooring Products



- **Floor Hardeners**

- Dry applied products both metallic and non metallic type depending on type of flooring and usage / traffic.

- **Healing and Sealing**

- Fills cracks
- Stops corrosion
- Deep penetrating
- Structurally restores concrete surface

- **Cleaning**

- Removes grease, oil and other contaminants
- Safe alternative to dangerous vapor degreasing
- Excellent for use in restaurants, kitchens, food processing plants, etc.
- Dilute with water or use in concentrated form
- Environmentally safe, nontoxic

# Flooring Products..contd



- Floor Finishing

- Increases useful life of concrete structures
- Reduces porosity and permeability to increase hardness for better wear resistance
- Builds concrete structure to increase chemical resistance and expand concrete products to new uses
- Penetrates to provide long-term performance

# Grouts



- Designed to meet the requirements of ASTM C-1107, Corp of Engineers CRD C-621, Class B, and AASHTO T-260
- Versatile – Suitable for damp pack, plastic, through fluid consistencies
- Consistent – Strict quality control testing and standards
- Strength – Attains high compressive strengths at specified water ratios
- Performance – Joins, supports and anchors
- Neatness – Will not bleed or segregate

# Plasters



- **Cement Plasters**
  - Sand – cement plasters various grades for interior and exterior finishes
- **Gypsum Plasters**
  - Chemically modified gypsum plasters, can be directly applied over brick work. Resistant to softening when exposed to moist conditions. Does not dust or peel like conventional POP Plasters
- **Decorative Plasters**
  - For interior finishes with rollers, trowel..etc
- **Heritage Plasters**
  - Decorative plasters for both interior and exterior use.

# SuperPlast PMG+



- The next generation in gypsum plaster
- Can be easily applied by routine POP applicators
- Can be applied from 12 to 40 mm thickness directly on brick work offers
- good Insulation,
- Superior fire retarding properties as compared to conventional sand cement plaster
- Does not soften in contact with water like POP
- Very elegant smooth finish.
- No water curing is required.
- The surface can be directly primed and painted

# SuperPlast PMG +



- **Advantages:**
- **Lightweight** - Weighs approximately 60% less than ordinary sand plaster, saving about one ton (1085 kg) for every 100 m<sup>2</sup> of material applied 13 mm thick.
- **Insulating** - 4 times more resistant to heat transmission than sand plaster... permits savings in heating and air conditioning costs... conserves energy.

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# SuperPlast PMG + ..Contd



- **Fire Retardant** - Non-combustible and non-toxic ... provides up to 5-hour fire protection with minimum weight and thickness.
- During a fire, adequate fire protection demands that the temperature of the load bearing members be maintained below the critical point at which weakening or failure is likely to occur. Repeated test over many years have demonstrated that gypsum plaster are exceptionally effective in blocking flames and retarding the transmission of heat. When exposed to flames, gypsum plasters release chemically combined water in the form of water vapor which helps maintain the plaster temperature to below 100<sup>0</sup>C until all of the water has been driven off as steam.

Unlike ordinary sand plaster which can expand and "explode" during fires and/or when subjected to high temperatures, gypsum plasters have low linear expansion characteristics which greatly reduce the number and size of cracks. By reducing the number and size of cracks through the plaster, the heat and flames of a fire cannot penetrate the plaster surface as easily or quickly.

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# SuperPlast PMG + ..Contd

- **Noise Reduction** - Reduces sound transmission between partitions.
- **SOUND ADSORPTION OF ACOUSTICAL PLASTERS**

The following reverberation absorption coefficients on acoustical vermiculite plaster were measured in a test by the Acoustical Investigation and Research Organisation Limited many years ago. We don't have the original testing information, but felt some information might be better than none.

FREQUENCY BNDS IN REGION (CYCLES)					
125	250	500	1,000	2,000	4,000
0.20	0.30	0.50	0.65	0.90	0.90

(The test sample consisted of 12.5 mm (1/2 inch) thick plaster applied by spraying machine to expanded metal lath to which two coats of lightweight plaster had been applied.)

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# SuperPlast PMG + ..Contd



- **Adaptable** - Packaged in 40 kg bags. Easy to measure, mix and handle... job mixing permits proper proportioning to meet different plaster based materials specifications.
- **Durable**--Cannot rot or decay...strong but not brittle... endures freeze-thaw exposure... successfully used on major construction projects since last 5 years.
- **Gypsum plasters** also provide protection for columns, partitions, and the undersides of floors and roof assemblies. This protection can be applied with either rough finishes, or in attractive, durable finish.

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# SuperDeco DC-2/3/5



- Cement based textures,
- Elegant long lasting.
- Undulations of the basecoat are not apparent after application.
- Can be easily painted and repainted as required.
- Does not soften like the acrylic textures which fail on continued exposure with water



**Thank You**