



## Emerging Materials & Technology Systems Private Limited

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## EMERGING MATERIALS & TECHNOLOGY SYSTEMS PRIVATE LIMITED

Consultants & Project Managers



Industrial  
Structure



Industrial  
Flooring



Testing &  
Certification

Design | Application | Testing | Certification



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Industrial Flooring Consultant & Project Managers



Consultants & Project Managers



## OUR VISION

To be the preferred consultancy and project management firm in the region for industrial flooring and commercial buildings, which everyone aspires to be associated with.

### Emerging Materials & Technology Systems

We are technology focussed company to develop and promote Innovative materials and systems which will optimise the construction process in our core focus area of civil construction in industrial & commercial structures. We constantly look for newer technologies and faster implementation at project site. Our team of experts will support in implementation of technologies and application development.

### Technology Development & Management

We would be keen of developing newer products and systems in association with Industry, Research Institutions and Institute of Higher education.



We are associated with IIT Madras for our offering on  
Design & Testing



## OUR MISSION

We are committed to being a highly focussed and client-centered institution offering differentiated services and customized products to our chosen segments using appropriate channels. By so doing, the organization will create value through constant innovation and re-investment to build sustainable relationships with all its stakeholders.





## ON SITE PROJECT MANAGEMENT



Our expertise on understanding the floor execution over the past 20 years has resulted in offering onsite project support & Supervision of flooring contractors to get the desired floor outcomes. Client can engage available local resources and get desired out come on floor finishing.

## SUB BASE TESTING (SOIL)



Having a good compacted and rolled soil surface is the base for building a strong subbase for concrete flooring. Soil compaction tests like CBR is used to measure the degree of compaction. It is also used as design parameters for flooring design.

We also offer Proof Roll test to evaluate the compacting on a larger floor plate. This will indicate the reasonable level of compaction for further subbase building up.

## QUALITY CONTROL



We undertake quality control of concrete – mix design, gradation control, optimisation of admixture, addition of steel fibres, shrinkage control additives to result in concrete suited for industrial flooring.

## SUB BASE TESTING (GRANULAR SUB BASE LAYER)



Improvement of subgrade soil layer is usually done by a granular layer of subbase such as WMM, GSB. Achieving proper gradation, compaction and uniformity of these granular subbase is very important in absence of PCC layers in modern day industrial floors

We offer Plate Load Test to determine the Ks value of the prepared subbase.

## FLOOR PROFILE CONTROL



With high floor finishing standards of FM1, FM2, DM1, DM2 achieving the required flatness and levelness while executing the floor is very important. Doing right at first time is our approach. We offer onsite management, quality control and training of resources for achieving high floor standards.

## PLATE LOAD TEST



Determination of Ks value of the fully prepared surface and reevaluation of assumed design value need to be ensured for optimisation of floor design

Plate load test can be done by conventional Plate load test Jack and gauges. In this method loaded truck is used to release load and deflection is observed. Based on the chart K value is calculated. Alternate is to use a Light Weight Deflectometer (LWD) and arrive at K Value.





## Industrial Flooring Flatness, Levelness & Crack Survey



### LEVELNESS SURVEY



As per TR 34 & ASTM 1155 using Axiom 1155 floor profilograph, high accuracy levelling equipments with high accuracy auto level equipments and micrometer. Our reports are professional and neutral to be counted for third party report consideration and submission to clients.

### FLATNESS SURVEY



As per TR 34 & ASTM 1155 using Axiom 1155 floor profilograph, high accuracy levelling equipments with high accuracy auto level equipments and micrometer. Our reports are professional and neutral to be counted for third party report consideration and submission to clients.

### GLOSS SURVEY



Floors are Grinded and polished for better durability, cleanability and sheen. The process of Grinding & Polishing includes various stages of grinding, application of densifiers and usage of abrasive tools. The quality measure to evaluate the sheen or reflectivity of the floor is measured by a Gloss meter. We offer gloss meter survey and DOI (Distinctness of Image) surveys can also be performed, if required.



## Industrial Flooring Flatness, Levelness & Crack Survey



### CRACKWIDTH (SEAMLESS FLOOR)



Limiting crack is key aspect of seamless floor. Onsite measurement of crack width is ensured by our Crack with Survey method. We deploy digital crack width device and crack width scale.

### CRACKWIDTH (REPAIR)



Limiting crack is key aspect of seamless floor. Onsite measurement of crack width is ensured by our Crack with Survey method. We deploy digital crack width device and crack width scale.

### DIGITAL CRACK WIDTH METER



Appearance and propagation of crack is a concern in industrial flooring. Identification and attention to cracks will help in enhancement of structural and service life of flooring. We offer root cause and remedy for floor cracks, repair methodology.





### SYSTEM (JOINT REPAIR)



Joints are a cause of concern in industrial flooring. Repair of Construction joint or so called expansion joints in is a challenging task in operational projects. Suitable choice of materials, equipments and methodology is important to achieve desired outcome. Joint system should be able to replace the damage portions and should be easy installable.

### ISSUES RESOLUTION



Typical cases of floor cracks and settlement of floors are cause of concern for developers and execution agency. The reasons may be attributed to facility usage underestimate, design issue or may be a execution issue. We offer our professional service on issue resolve as a neutral observer or arbitrators. Our understanding and insights on floors concept to commissioning helps in resolving issues amicably.

### TECHNOLOGY – POLISHING WITH TROWELS



Large scale projects requires faster and reliable polishing methods. In recent times Trowel (ride on) polishing systems are providing alternate to dry grinding process. Large scale polishing of 1500 to 2000 Sq.m are possible by this method.

As both dry and wet polishing systems got their own merits and demerits choice of method should be chosen according to project requirements.

### TRAINING (CLASS ROOM, CONFERENCE & SEMINARS)



There is constant development and up gradation of new materials, technology and systems. We offer class room courses to dissipate the knowledge on industrial flooring coupled with onsite training programs.

We also attend Conferences and conduct Seminars related to Industrial Flooring, Project Management and Introduction of new materials in the market

### FLOORING (COLOURED FLOORS & TERRAZZO)



Colouring of industrial floors are possible by use of coloured floor hardener system. It is possible to achieve both performance and aesthetics using these methods. Earthy colours are preferred in cementitious system owing to the cloud combination of colour uniformity.

Modern looking Terrazzo floors are possible with large panel size. Materials and systems of laying are available. It can be customised as per client requirement.

### TRAINING FOR SUPERVISORS / ENGINEERS AND OPERATORS



We offer training for operation of specialised tools and equipment such as Laser screeds, Ride-on-Trowels etc. Companies can also have their Engineers / Supervisors trained to share knowledge within in their operation.



## DESIGN REVIEW



With increasing demand for large bay pouring – Jointless floor, restriction of crack width – Seamless Floor, analysis and design of industrial flooring by specialised flooring consultants and peer review will help in improving the design of floor and thus optimisation of floor design.

## SCHEME APPROVAL



Selection of scheme of Industrial flooring and method of execution will result in project optimisation in terms of speed, quality and cost. We advise our clients on right choice of material, machinery and work force to achieve project objectives.

## CERTIFICATE OF APPROVAL



Special projects requires certificate of approval on design of flooring, material and system selection. It may be mandated for third party certificate by Client. We offer certificate of approval.



### End Users

- KIA Motors
- APM Terminal
- Peekay Steels
- NDR Warehouse
- LM Windpower
- Vignesh Polymers
- Kuehne + Nagel
- Nilkamal
- Apollo Tyres

- Reliance
- Venture Tea
- Jockey
- Embassy
- Sobha
- Biocon
- Vignesh Polymer
- BGR
- Aarush Logistic

### Flooring Specialist

- Dura Floor
- LNF E&C
- Impact Floors
- KPK
- Yuvraj floors
- Hariharan
- Yugal Floors
- STA
- Scube Flooring