Sustainable Construction Solutions



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BASF at a Glance





BASF – The Chemical Company

- Established in 1865, The world's leading chemical company
- Offers intelligent system solutions and highvalue products for almost all industries
- Rated as "America's Most Admired Chemical Company, 2008"
- In "Global 100" list since 2006 of World's Most Sustainable Corporations
- Global market leader with strong R&D and many innovations to its credit
- Offers a range of products/solutions for Green buildings

Four mega-trends in construction pose challenges for Sustainability

More eco-efficient construction materials. Faster and more cost efficient construction.

The Chemical Company

Sustainability

Structures with longer service lives.

Consumption of less energy when using the finished buildings.

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Products / Solutions for Sustainable Construction Category: Site Selection & Site Planning

OBJECTIVE: To maximize the conservation & utilization of resources and enhance efficiency of the systems & operations.

- Geofoam[™] Light weight heavy duty EPS blocks.
 - Uses / Applications:
 - Landscaping
 - Landfill
 - Bridge Embankments
 - Road widening
 - GRIHA Criterion 3:
 - Soil Conservation



Products / Solutions for Sustainable Construction

Category: Site Selection & Site Planning

Pervious Concrete

- Uses / Applications:
 - Storm-water management
 - Pavments /Jogger / Bicycling tracks
 - Parkings
 - Storm-water drain floors
- **GRIHA** Criterion 4:
 - Design to include existing site features.
- **GRIHA** Criterion 5:
 - Reduce hard paving on site.
- **GRIHA** Criterion 21:
 - Water recycle & reuse (including rainwater).







- OBJECTIVE: To maximize resource (water, energy, and materials) conservation and enhance efficiency of the system and operations.
- Glenium[™] Hyper Plastisizer for Concrete
 - Uses / Applications:
 - Reduce water content by upto 40%.
- MasterkureTM Non-film forming Curing Compound
 - Uses / Applications:
 - Reduce/eliminate water curing at site.

GRIHA Criterion – 12:

Efficient water use during construction.



The Chemical <u>Compan</u>



- Senergy EIFS External insulation & finishing system for building facades.
- NeoporTM Infrared resistant insulation board.
- PeriporTM Water resistant polystyrene insulation.
- ElastoporTM High density polyurethane insulation.
- Elastospray[™] Spray PU foam insulation.
- Thermocrete[™] Thermal insulating light wt concrete
 - Uses / Applications:
 - To provide insulation & reduce heat load.

GRIHA Criterion – 14:

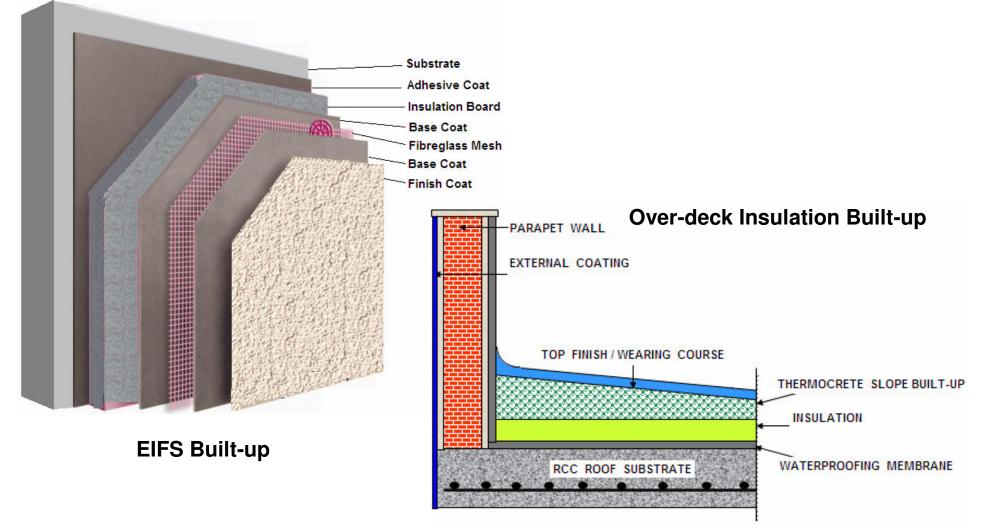
Optimize the energy performance of the building within specified comfort limits.





Products / Solutions for Sustainable Construction

EIFS & Over-deck Roof Insulation Built-up



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- Glenium[™] Hyper plasticizer for concrete
 - Uses / Applications:
 - Enable high cement replacement with fly ash.
 - Self Compacting Concrete, Smart Dynamic Concrete
- RheoFITTM High performance admixture for precast
 - Uses / Applications:
 - Enable high cement replacement with fly ash.
 - GRIHA Criterion 15:
 - Utilization of fly ash in the building structure.
 - GRIHA Criterion 16:
 - Reduce volume, weight and time of construction by adopting an efficient technology.





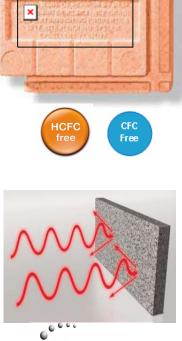
- OBJECTIVE: To ensure healthy indoor air quality, water quality and noise levels and reduce the global warming potential..
- Masterseal[™] 200H/300H No VOC acrylic wall coating
- Masterseal[™] 351P Low VOC PU wall coating
- Masterflex® No VOC sealants
- Sonolac® Low VOC acrylic-silicone sealants
 - Uses / Applications:
 - Coatings / Sealants.

GRIHA Criterion – 26:

Use of low VOC paints/adhesives/sealants.

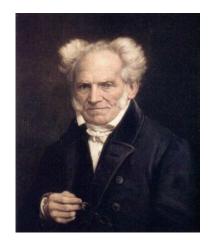


- PeriporTM board CFC, HCFC Free insulation
- Neopor[™] board CFC, HCFC Free insulation
 - Uses / Applications:
 - Overdeck insulation.
 - Underdeck insulation
 - Wall insulation in EIFS
 - Cavity wall insulation
 - GRIHA Criterion 27:
 - Minimize ozone depleting substances.





- Basotect® board Noise cancelling, thermal insulating melamine foam
 - Uses / Applications:
 - Noise cancelling in:
 - Auditoriums
 - Home theatres
 - Conference rooms / Auditoriums
 - Public places
 - GRIHA Criterion 29:
 - Acceptable outdoor & indoor noise levels.



Noise is the most impertinent form of interruption. It is not only an interruption, but is also a disruption of thoughts.'

> Arthur Schopenhauer German Philosopher



Together .. et's build a sustainable future

Himanshu Agrawal

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