## 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<sup>™</sup> 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<sup>™</sup> Hyper Plastisizer for Concrete
  - Uses / Applications:
    - Reduce water content by upto 40%.
- Masterkure<sup>TM</sup> 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.
- Neopor<sup>TM</sup> Infrared resistant insulation board.
- Peripor<sup>TM</sup> Water resistant polystyrene insulation.
- Elastopor<sup>TM</sup> High density polyurethane insulation.
- Elastospray<sup>™</sup> Spray PU foam insulation.
- Thermocrete<sup>™</sup> Thermal insulating light wt concrete
  - Uses / Applications:
    - To provide insulation & reduce heat load.

#### GRIHA Criterion – 14:

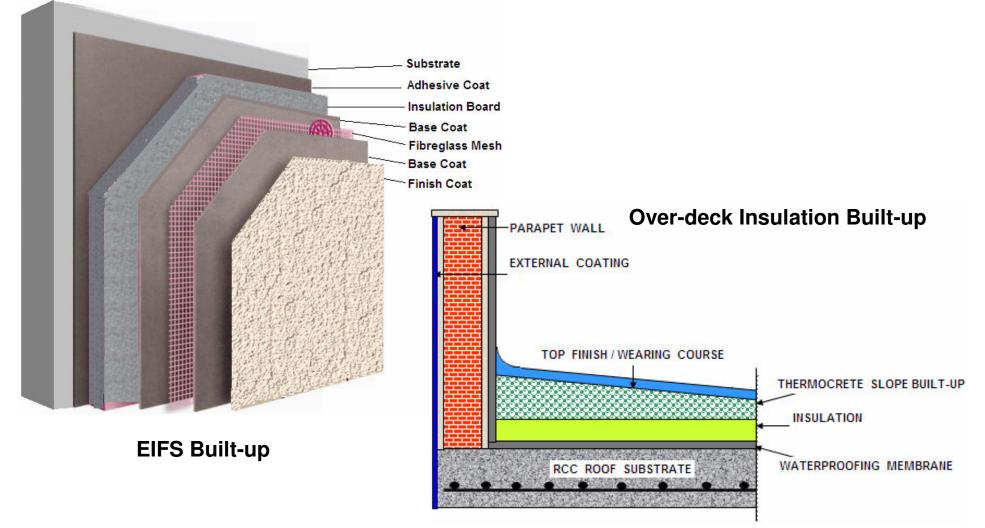
Optimize the energy performance of the building within specified comfort limits.





#### **Products / Solutions for Sustainable Construction**

#### EIFS & Over-deck Roof Insulation Built-up



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- Glenium<sup>™</sup> Hyper plasticizer for concrete
  - Uses / Applications:
    - Enable high cement replacement with fly ash.
    - Self Compacting Concrete, Smart Dynamic Concrete
- RheoFIT<sup>TM</sup> 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.





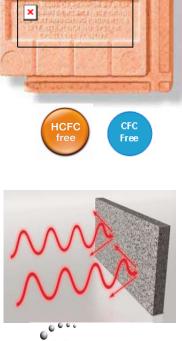
- OBJECTIVE: To ensure healthy indoor air quality, water quality and noise levels and reduce the global warming potential..
- Masterseal<sup>™</sup> 200H/300H No VOC acrylic wall coating
- Masterseal<sup>™</sup> 351P Low VOC PU wall coating
- Masterflex® No VOC sealants
- Sonolac® Low VOC acrylic-silicone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

#### GRIHA Criterion – 26:

Use of low VOC paints/adhesives/sealants.

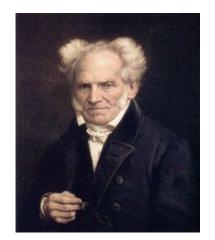


- Peripor<sup>TM</sup> board CFC, HCFC Free insulation
- Neopor<sup>™</sup> board CFC, HCFC Free insulation
  - Uses / Applications:
    - Overdeck insulation.
    - Underdeck insulation
    - Wall insulation in EIFS
    - Cavity wall insulation
  - GRIHA Criterion 27:
    - Minimize ozone depleting 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

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