

EVEREST CLADDING, WALL & **PRE-ENGINEERED BUILDINGS** FOR **GREEN BUILDING SOLUTIONS**





A **Green** building, also know as a **Sustainable** building, is a structure that is <u>designed, built, renovated, operated, or re-used</u> in an ecological and **resource – efficient** manner.

Green buildings are designed to meet certain objectives such as protecting occupant's health & comfort; Improving employee productivity; using energy, water and other resources more efficiently and reducing the overall impact to the environment.





SUSTAINABLE

(Designed, built, renovated, operated)... in a **RESOURCE – EFFICIENT** manner.

Protecting OCCUPANT'S HEALTH & COMFORT.

IMPROVING employee PRODUCTIVITY

USING ENERGY & WATER EFFECTIVELY

REDUCING the overall **IMPACT** to the **ENVIRONMENT**.





At EVEREST we provide "complete building solutions" that fit into these basic requirements which makes a building Green.

Before I showcase those solutions A brief introduction of Everest Industries Ltd.



Everest Industries Ltd



- Established in 1934.... A rich 83 years of experience.
- Turnover 1200 crores.
- Started as a roofing company Only company to manufacture nonasbestos cement corrugated roofing sheet, in India.... We also manufacture metal roofing sheet.
- Everest manufacturers Non-asbestos Flat Cement Boards & Ready made aerated concrete Panels which provides different building solutions..... for external, internal & wet area applications.
- We are also into pre-engineered buildings (Rolled out MS profiles / Light gauge Steel Frame - Structures).
- A strong dealer network of over 6000 outlets....Beyond India we also provide solutions to over 25 countries, spanning Asia, Africa, Australia & Europe.
 - Integrated Technical Expertise with strong design & R&D support.

SOLUTIONS FROM EVEREST FOR GREEN BUILDINGS



$_{\odot}$ INSULATED CLADDING TO AN EXISTING EXTERNAL WALL

- EXTERNAL CLADDING
- INTERNAL CLADDING

$_{\rm O}$ ENERGY EFFICIENT EXTERNAL WALL SYSTEMS

- HOLLOW SYSTEM
- SOLID SYSTEM

• REPLACING TIMBER HOUSES WITH STEEL HOUSES

- REPLACING TIMBER STRUCTURES WITH SMART STEEL (LIGHT GAUGE) STRUCTURES
- REPLACING TIMBER PLANKS WITH EVEREST CEMENT WOOD PLANKS

• EVEREST PRE-ENGINEERED BUILDINGS

- SMART STEEL (LIGHT GAUGE FRAME) STRUCTURES
- MS BUILT UP PROFILES

External / Internal Cladding Solutions





External / Internal Cladding Solutions





EVEREST

SUSTAINABLE -

- ✓ Improves Building Envelope Performance;
- ✓ Reduce Building Energy Demand;
- ✓ Enhances U-Value of 9" AC Block Wall from 0.60 to 0.31W/m²K
- ✓ Enhances U-Value of 9" Clay Brick Wall from 2.76 to 0.53W/m²K
- ✓ Low maintenance.

OCCUPANT'S HEALTH & SAFETY; IMPROVE WORKER'S EFFICIENCY.

- ✓ Better sound insulation.
- ✓ Contributes towards enhanced fire protection.
- ✓ Better working ambience

USING ENERGY & WATER EFFICIENTY

- ✓ Dry construction. Conserves Water.
- ✓ Easy & Economical Material & Waste Handling.

External / Wall Solutions (HOLLOW)





* External Wall Solution – Both for RCC / Steel Structures.



External / Wall Solutions (HOLLOW)





External / Wall Solutions (HOLLOW)

SUSTAINABLE -

- ✓ Improves Building Envelope Performance;
- ✓ Reduce Building Energy Demand;
- ✓U-value of the External Wall as low as 0.35 W/m^2K
- ✓ Low maintenance.

OCCUPANT'S HEALTH & SAFETY; IMPROVE WORKER'S EFFICIENCY.

- ✓ Better sound insulation. (60 to 65 dB)
- ✓ Contributes towards enhanced fire protection. (>120 Mins)
- ✓ Better working ambience

USING ENERGY & WATER EFFICIENTY

- ✓ Dry construction. Conserves Water.
- ✓ Light Weight (1/4th the weight of conventional brick structure) / Lighter Structure / Reduction in Structural cost / Less excavation.
- Easy & Economical Material & Waste Handling.

External / Wall Solutions (SOLID)





External / Wall Solutions (SOLID)





EVEREST

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REPLACING TIMBER WITH EVEREST FIBRE CEMENT BOARD & EVEREST CEMENT WOOD PLANKS FOR TIMBER HOUSES, EVEREST ESPECIALLY IN HIGH ALTITUDES.



- ✓ Replace timber structures with Everest Smart Steel Structures
- ✓ Save forest. Save environment.
- ✓ "Steel" Maximum recycled & recyclable content.
- ✓ Easy to maintain.
- ✓ Can easily incorporate future design changes.
- ✓ Can be relocated with maximum salvage.
- ✓ Lighter than timber.

REPLACING TIMBER WITH EVEREST FIBRE CEMENT BOARD & EVEREST CEMENT WOOD PLANKS FOR TIMBER HOUSES, EVEREST ESPECIALLY IN HIGH ALTITUDES.





- ✓ Replace timber planks with EVEREST CEMENT WOOD PLANKS.
- ✓ Save forest. Save environment.
- ✓ Do not ROT or DECAY (easy to maintain)
- ✓ Provides better thermal & sound Insulation.
- ✓ Non-comustible. Better Fire Protection.

EVEREST CEMENT WOOD PLANK

REPLACING TIMBER WITH EVEREST FIBRE CEMENT BOARD & EVEREST CEMENT WOOD PLANKS FOR TIMBER HOUSES, ESPECIALLY IN HIGH ALTITUDES.

SUSTAINABLE -

- ✓ Improves Building Envelope Performance;
- ✓ Reduce Building Energy Demand;
- ✓ K-value of Everest Cement Wood Plank is 0.08 W/mk (as compared to 0.12 & 0.14 W/mk for Pine Wood & Deodar Wood respectively)
- ✓ Low maintenance. (Everest Cement Wood Planks do not rot or decay)
- Everest SMART STEEL (Light Gauge Steel Frame) Structures can easily adopt future design changes.
- Everest SMART STEEL structures can easily relocated with maximum salvage.

OCCUPANT'S HEALTH & SAFETY; IMPROVE WORKER'S EFFICIENCY.

- ✓ Better sound insulation.
- ✓ Better fire protection.

USING ENERGY & WATER EFFICIENTY

- ✓ Dry construction. Conserves Water.
- ✓ Light Weight . Lighter Foundation. Lesser Excavation.
- Easy & Economical Material & Waste Handling.



EVEREST PRE- ENGINEERED BUILDING



- Pre-Engineered Steel building both with MS built-up profiles & "Smart Steel" Light Gauge Steel frame structures.
- \checkmark Cladding material as discussed in previous slides.





✓ Everest Pre-Engineered Building – Design & Materials used, supports Green

Building.

- ✓ Steel Maximum recycled & recyclable content
- ✓Wall designed with Insulated Fibre Cement panels & Reflective / Insulated Galvalume Roofing Sheets, increases the Building envelope Performance –Contributes to the reduction in Building Energy Demand.
- ✓ Reduces carbon footprint by minimizing material / construction wastes.
- ✓ Dry Construction. Saves water.
- \checkmark As pre-engineered. Saves energy in construction.
- Lighter in weight (as compared to conventional buildings) Lighter foundations, lesser excavation.
- Accepts future design changes. Can be relocated with maximum salvage.





THANKS.....

