

## Ecobeam and Sandbag Homes

Eco-Build Systems The use of Ecobeams typically saves two thirds of the timber used in a classic timber frame construction. Build anywhere...quick

- Ecobeams can be manufactured at any location with minimum facilities.
- Ecobeams are easy to handle and economical to transport.
- The Ecobeams allow for services and ventilation to be installed in walls, ceilings and under floors.
- Curves can be built into Ecobeams.

Cutting edge simplicity and aesthetics

Ecobeams have enormous industrial and commercial application.

A "box" of beams is easily shuttered from the outside by simply stapling shutter boards to the battens. Reinforced steel is easily tied to the lattice, facilitating a "post and beam" construction for larger buildings.

Savings all over...

Convenience, comfort, economical, safe, quick to build, aesthetically pleasing, strong, little building waste, low stock theft, easy to plaster, clad in Ecoboard, low skills requirements, low transport requirements.

Versatility creates many applications

- Easy joining makes it possible to produce any length.
- Ecobeams can be "pre-stressed" by routing a groove in the bottom chord and tensioning a cable placed in the groove.
- The system is particularly suited for the construction of halls, factories, churches, clinics, etc.

Why Ecobeam?

- The Ecobeam System complies with all NHBRC requirements.
- Construction can take place at locations to which road access is not provided.
- This reduces the damage and congestion caused by heavy trucks which carry bricks and cement.

Bags of Convenience

- No electricity is required at the construction site and only minimal amounts of water and cement are required.
- 1500 bags fit into the boot of a small car and weigh only a few kilograms.
- This is the equivalent of 3000 bricks over the same area in a cavity wall.

Expertise and manpower

- The construction technique can easily be learnt in a few days by people without experience in the building trade.
- A regular "builder" would pick it up immediately.
- The Ecobeams are light in weight and can be easily handled by one person in all phases of the construction.

Plastering

- The only "wet" trade required is the plasterer.
- The plaster adheres easily to the sandbags and chicken wire that covers the walls.

- The Ecobags are made wet before the plastering process.
- The wet bags behind the plaster enable the plasterwork to "cure" instead of merely drying, as it does in standard construction.

#### Savings

- The end result is a very hard and reinforced cement finish.
- No bricks lie around the site before, during or after completion, thus eliminating "site-clearing", which is a major cost factor on any building site.
- Unused bags can be removed from the site overnight thus reducing the incidence of theft.

#### Properties for Comfort

- The "Ecobeam System" exhibits tremendous thermal stability.
- The occupants will be kept cool in summer and warm in winter.
- The system also has excellent sound absorbing properties which help to provide a measure of privacy in close quarter living.

#### Wind and Damp resistance

- The "Ecobeam System" is much heavier than a brick construction and is therefore more wind resistant.
- The "Ecobeam System" resists water penetration because the sand in the bags is a filter medium.
- Any water penetrating the plaster will "filter" down to the damp-course to exit the wall.

#### Communities and Safety

- The "Ecobeam System" is fire resistant.
- Construction rate of the "Ecobeam System" is rapid.
- All members of the community can be involved, thereby creating a sense of belonging and contribution in the participants.
- The walls of the "Ecobeam System" are bullet-proof.

**CONTACT US NOW TO BUILD YOUR ECO HOME**