



# STUMBELBLOC

## STUMBELBLOC – Environmental Aspects

**STUMBELBLOCs** are significantly more environmentally friendly than most other forms of traditional building materials. The following represent the main environmental advantages:

1. **SAVING IN TRANSPORT COSTS:** Blocks can be made on site for material costs that are typically no more than the just cost of transporting an equivalent type block or brick. Of course, the raw materials must be transported but most sand is often naturally occurring locally and cement is widely available.
2. **ENERGY SAVING:** All other manufactured conventional blocks and bricks need massive energy to “fire” them. Even many hand made bricks or tiles e.g. clay bricks need to be fired to properly set. **STUMBELBLOCs** can be made with only need human energy - no electricity/no fuel!
3. **INSULATION** properties: **STUMBELBLOCs** contain two cavities. These and the mass of the block itself, provide some insulation.
4. **FAST BUILDING:** Because building with **STUMBELBLOCs** is very fast compared with traditional methods, energy costs are drastically reduced. They require no electricity or fossil fuel to make or build with.
5. **LUBRICATING OIL:** The moulds need to be oiled to allow easy release of the cured blocks. This can be achieved by using old cooking oil.
6. **MORTAR SAVING:** Although the blocks use THIN BED mortar to “stick” them together, the amount required is far less (25%) than conventional blocks or bricks.
7. **REDUCTION IN MORTAR:** Because thin bed mortar is used in construction, this too results in a significant transport saving versus conventional methods
8. **REDUCTION IN MORTAR WASTE:** Conventional builds generate surplus mortar. This is commonly piled up to await collection – which has to be paid for – and for disposal in landfill. With **STUMBELBLOC**, when properly remixed, surplus mortar from any source can be used to make blocks which can subsequently be used or sold.
9. **LONGEVITY:** Compared with other forms of building, the blocks are very strong and therefore will last for a very long time and, in many third world locations, significantly longer than traditional materials. This reduces the overall carbon footprint.