RASTRA

A Better Way to Build

RASTRA is the ultimate building solution for economical and environmentally-friendly construction. RASTRA is the solution for this century to build environmentally conscious, energy efficient buildings that provide a safe and healthy living environment. Over 9 million units in service worldwide.

The Ultimate Green Building Material

RASTRA is produced from recycled post-consumer and post-industrial expanded polystyrene (Styrofoam), which is then mixed with a cement binder. By volume, RASTRA is 85% recycled polystyrene, which otherwise would have ended up in landfills never to disintegrate. It is a truly "green" building material.

The production of RASTRA is classified as ecologically clean. No particles or fumes are set free during its production. Only a minimum amount of energy is required - producing one RASTRA panel consumes less than 2 kWh of electricity; curing requires no external energy; and no heat is involved in the production process.

All production waste is immediately recycled and converted into new RASTRA product. In addition, remnants from the building site can also be returned to RASTRA and recycled.

Energy Conservation

RASTRA built homes reduce energy consumption, and with energy savings comes environmental benefits. Specifically, the reduction of fossil fuels burned to create energy. By reducing our energy consumption, we reduce combustion by-products that lead to smog and contribute to global warming. The Intergovernmental Panel on Climate Change (IPCC) unveiled its official report on global climate change. This report, produced by 600 representatives from 40 countries, concluded that there is a 90% chance that global warming is caused by the burning of fossil fuels, which emit carbon dioxide.

Forest Depletion

The depletion of forests for building materials has become an issue in many parts of the world with environmentalists and conservationists. Stunted growth of replanted trees due to acid rain has delayed harvest schedules by as much as three years in most parts of the world, thereby resulting in shortages. An average framed home consumes an average of ten mature fir trees. Why is it important to save trees? Because mature trees absorb carbon dioxide, a major contributor to global warming.

Reducing CO_2 Emissions

The Environmental Protection Agency (EPA) estimates that the average U.S. home releases 22,000 lbs of carbon dioxide (CO_2) into the atmosphere each year. That's twice the amount of the average vehicle. By reducing the amount of energy used for heating and cooling, RASTRA significantly reduces CO_2 emissions. In fact, a RASTRA built home can reduce enough energy consumption to eliminate 2-3 tons of CO_2 emissions from our atmosphere per year when compared to a similar wood frame home. Over the life of a 30-year mortgage, homes built with RASTRA save our atmosphere 60-90 tons of carbon dioxide emissions.

Indoor Air Quality

The unique composition of RASTRA enables better control over indoor environmental quality. Because RASTRA does not hold or wick water the way concrete block or wood products do, RASTRA will not promote or sustain mold and mildew.

The composition of RASTRA allows a slow interchange of air, which in turn allows the building to "breathe." The exchange is slow enough that it does not allow heat or cold to escape but helps maintain good air quality, preventing "sick building syndrome." This slow exchange of air also prevents condensation that can lead to mold growth.

Perhaps the biggest objection to fiberglass batts in green building circles comes from the binders used to glue the glass fibers into a cohesive mat. These binders usually contain formaldehyde, a chemical known to cause sensitivity in certain people and classified as a human carcinogen by the IARC and as a probable human carcinogen by the EPA.

Environmental Summary

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RASTRA buildings reduce energy consumption, and with energy savings comes environmental benefits. Specifically, the reduction of fossil fuels burned to create energy. By reducing our energy consumption, we reduce combustion by-products that lead to smog and contribute to global warming. Over the life of a 30-year mortgage, a home built with RASTRA saves our atmosphere 60-90 tons of carbon dioxide (CO_2) emissions. Another measure of sustainability is increased service life. Products that last longer make a large impact on our solid landfills.

Extended Service Life

Another measure of sustainability is increased service life. Products that last longer make a large impact on our solid landfills. RASTRA provides an almost limitless service life. This saves space in our landfills, reduces the consumption of fossil fuels to transport new and discarded products, saves timber resources and the energy required to produce new products.

Environmental Statement

We have a vision: A vision to preserve a world with forests, with clean air and clean water for future generations to come. A vision to take care of our environment by providing sustainable and energy efficient buildings, to meet new standards and to use recycled materials or those, which can be replenished. To support our mission, RASTRA offers a full range of building materials made with 85% recycled-content and produced in a manner that is environmentally-friendly.

RASTRA is a proud member of the U.S. Green Building Council

> *RASTRA is an ecological sound building material, consuming recycled raw materials, taking them permanently out of the waste stream and producing a healthy living environment.*

Contact

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