

Building with Recycled Materials

Why Build with Recycled Materials?

Recycled materials are energy efficient. Recycled polystyrene and wood block building products have energy efficiency ratings above that of conventional insulation and building materials. This is due to their insulation properties and to the large thermal mass of the solid walls. These walls also prevent drafts because the poured cement used with them in construction eliminates air pockets.

Recycled building products save materials from the landfill. Plastics that would otherwise go into a landfill can be recycled and turned into building blocks, reducing the need to harvest lumber from forests. Recycled wood building projects save wood from being wasted and decrease the need to harvest forests.

Recycled material mixed with cement or concrete is fire resistant. Many recycled wood or polystyrene building materials are more fire resistant than conventionally built houses.

What are Recycled Materials?

Polystyrene Building Forms

Concrete Forms: Uses polystyrene recycled material and steel to create a permanent form into which concrete walls are poured. These forms are stacked in a manner similar to interlocking building blocks and have excellent insulation and sound absorption properties, as well as being sturdy and wear-resistant. Examples include Arxx[®] or Polysteel[®] .

Cement Forms: Mixes cement with recycled polystyrene to create a building system around which concrete is poured, creating a wall. The structures are highly energy efficient, fire resistant and sound absorbing. Examples include Cempo[®] .

Wood Cement Building Forms: Mineralizes and bonds recycled wood chips with cement, under pressure, to create a building form which interlocks and serves as a mold into which concrete can also be poured. The resulting structure is a wall with excellent sound absorption and fire resistant properties that is non-toxic and can be recycled. Examples include Durisol[®] .

Sources:

- ¹Arxx[®], November 27, 2000, , (6 August, 2001).
- ²Cempo Forms, Inc.[®], 2001, , (10 July, 2001).
- ³Durisol[®], October 25, 2001, , (10 July, 2001).
- ⁴Pulysteel[®], 2001, , (10 July, 2001).