

ECO-FRIENDLY BENEFITS

NUDURA Insulated Concrete Forms (ICFs)



OUR ECONOMICAL & ECO-FRIENDLY PLASTICS

Expanded polystyrene (EPS) more commonly known as “foam” and other expanded plastics are an integral part of everyday life. They are used in the manufacturing of insulated panels and concrete forms for houses, for insulating the underside of roads, for protecting furniture, appliances and electronic equipment, and in sports equipment, automobiles and many other products. These plastics offer many advantages. For example, as it is composed of only 2% matter and 98% air, EPS is light, is an excellent thermal insulator, has little impact on loading weight and is shock resistant. Due to its composition, it is stable and retains all its properties over time. It is an inorganic and rot-proof material, it can be handled without danger to health and it does not contain CFC's or HCFC's (damaging to the ozone layer). All these reasons and more make expanded plastic products a logical choice for a wide range of projects.

IMPORTANT FACT

Contrary to popular belief, expanded polystyrene (EPS) and expanded polypropylene (EPP) are, in fact, eco-friendly materials; they help protect forests by serving as a replacement for wood and cardboard. EPS and EPP are **100% Recyclable** and contain **Recycled Materials** in the majority of manufactured products.

IN THE EVENT OF A FIRE*

- Like other building materials (wood, wool, paper, etc.) EPS burns and releases energy, carbon dioxide, carbon monoxide, water vapour and soot, but **no other gas**
- The black smoke produced when EPS burns has proved to be **less harmful than that of organic materials**
- These fumes are **much less toxic** than those released by fir, pine chipboard or expanded cork

EPS AND THE ENVIRONMENT**

- **Only 0.2%** of European **crude oil** consumption goes toward producing polystyrene. Using polystyrene in place of non-plastic materials **saves more oil** than the quantity required to manufacture it
- 40–50% of goods are packed with plastics, but this is only **10% of the total weight** of all types of packaging
- **EPS can be recycled** up to 20 times without any degradation of its physical properties

* Study by AFIPEB and by center for fire safety
afipeb.org/promopse/isolant-maison-pse.html

** Packscope no. 30, 02/2007 (Packaging Chemicals Total)

ECO-FRIENDLY BENEFIT'S CONTINUED

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EPS VS. CARDBOARD PACKAGING*

- EPS requires just **one-sixth the energy** it takes to produce cardboard
- Critical airflow volume shows EPS has a **lower air pollution total**
- EPS has a lower global warming potential (GWP) than cardboard
- You would have to produce up to **20 times more EPS** to achieve the **same level of water pollution as cardboard**
- Waste volume of EPS is higher than cardboard, but **recycling technologies** are lowering these figures at an increasing rate

MATERIAL BENEFITS**

- **EPS is 98%** air and only 2% material.
- With its insulating properties, it **saves on energy costs** and **reduces CO₂ emissions**
- EPS is extremely **lightweight**, which **reduces fuel consumption** during transportation
- EPS is **100% reusable** and has a controlled life cycle

LEED STUDY

- NUDURA has all documents required for LEED documentation and can provide all the necessary information for a project. For more information on LEED visit nudura.com/leed



* Study by BASF
** www.ecopse.fr/page.asp?idp=10