

# DuPont™ **Energain®**

Environmentally sustainability in buildings

## **DuPont™ Energain® technology improves room climate and energy efficiency of private villa in Prague**

(high resolution images available upon request)



Photos DuPont™ Energain®

May 2010 – In today's climate, energy saving is the key factor and a crucial condition for sustainable development, both environmental and economical. The innovative DuPont™ Energain® technology not only contributes to energy consumption and CO<sub>2</sub> reduction of buildings but also helps to improve the room climate by up to 7°C. A private villa at Makotrasy, in the suburbs of Prague, Czech Republic, is taking benefit of this new passive

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room climate management solution from DuPont.

DuPont™ Energain® thermal mass panels, 1.0m x 1.2m x 5.26 mm, are light and easy to install as known from gypsum board. They can be cut to any size and then nailed, stapled or screwed onto a ceiling or wall. The panels incorporate an innovative phase change material (PCM) with a melting point of 22 °C. around this temperature the paraffin starts melting and absorbing a large amount of thermal energy during its melting phase. If the temperature drops, the paraffin starts solidifying releasing stored heat back into the room.

Martin Rychlý, sales manager of Kerilit, the company which has supplied and installed DuPont™ Energain® panels for this private villa, explains: "This house has been designed as an energy-efficient family house, which meets the requirements of a "passive" building. Conceptually, the house is an up-to-date functionalist building heated by a pump using heat recovered from waste air and complemented with photovoltaic cells. Despite this, the rooms located directly under the roof, may get overheated in summer months. Therefore a total of 80 square metres of DuPont™ Energain® panels have been installed on the ceilings of these rooms." The panels help to improve the inertia through their high heat storage capacity, resulting in lower temperature fluctuations and higher room comfort.

"Manipulation and installation of the DuPont™ Energain® panels were quick and easy, a perfect solution for this project", said Mr. Rychlý.



**About DuPont™ Energain®** – DuPont™ Energain® is a long-lasting thermal mass solution for environmentally sustainable buildings, based on an innovative phase change material from DuPont. Available in light-weight and easy-to-install panels, it is suitable for "low-inertia" structures such as timber, steel or aluminium framed buildings, this ground-breaking product can help to reduce interior temperature peaks by as much as 7°C, optimizing comfort levels and helping to save energy. DuPont™ Energain® decreases air conditioning costs (by an

average of 35%) and heating costs (up to 15%) and can therefore make a meaningful contribution to reducing the carbon footprint of a building.

**About DuPont Building Innovations** - DuPont™ Energain® is a product of DuPont Building Innovations. From innovative energy-saving systems to beautiful and long-lasting surfacing solutions, the overall offer of DuPont Building Innovations is able to deliver safety, durability, beauty and energy efficiency, providing a major contribution to the

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modern built environment - including every kind of building and architecture, roads, bridges and other infrastructures and also gardens, as well as to the preservation or the renovation of existing and historical constructions.

In addition to DuPont™ Energain®, the best known products and brands of DuPont Building Innovations are DuPont™ Corian® (techno-surfaces for interior design and architecture), DuPont™ Zodiaq® (quartz surfaces for interior design), DuPont™ Tyvek® (advanced building membranes), DuPont™ Energain® (panels for energy consumption reduction), DuPont™ Typar® (geosynthetics for construction), DuPont™ Plantex® (geosynthetics for landscaping) and DuPont™ Gevity™ (building integrated photovoltaic modules).

**About DuPont** - DuPont is a science-based products and services company. Founded in 1802, DuPont puts science to work by creating sustainable solutions essential to a better, safer, healthier life for people everywhere. Operating in more than 70 countries, DuPont offers a wide range of innovative products and services for markets including agriculture and food; building and construction; communications; and transportation.

For commercial or technical information on DuPont™ Energain®: [www.energain.co.uk](http://www.energain.co.uk)

## **Notes to Editors**

DuPont™ Energain® was awarded in The Green Award category of the Self-Build Awards 2010;

DuPont™ Energain® was one of three Finalists the in the Technological Innovations (Large Companies) category of the 2007 Carbon Trust / Daily Telegraph Innovation Awards;

DuPont™ Energain® has been awarded a LIFE Grant from the European Commission as part of its support package for Energy Efficient Buildings Systems project;

DuPont™ Energain® Thermal Mass System is a patented technology made only by DuPont.

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