



## Cabot Nanogel® Delivers Unmatched Energy Savings

June 23, 2004

### Revolutionary Insulating Material Makes The Best Window, Wall and Skylight Products Better

(Boston, MA) - June 23, 2004 - With energy prices rising around the world, maximizing thermal performance in today's building materials is top of mind for architects, builders, and building and home owners. The emotional and ergonomic benefits of natural daylight often compromise the desire for energy efficiency. Cabot Corporation (NYSE: CBT) today announced that its Nanogel® translucent aerogel material, provides superior energy savings and is the best translucent insulating and lightest solid material in the world.

Nanogel is now incorporated into the skylight, window and wall system products of six leaders in the fenestration systems industry -- GRP (glass reinforced polyester) panels, polycarbonate, U-channel and insulated glass systems. This means that the material is now available in fenestration systems of all materials available to architects and builders who are looking for high light transmission and superior thermal performance.

"Nanogel makes the best fenestration products better," said James Satterwhite, Cabot Marketing Director, Building and Construction. "It makes them more energy- and cost-efficient with thermal capacities unmatched in building materials today. In addition, Nanogel repels water which limits the build-up of condensation, and will not degrade over time, two features which can substantially extend the life cycles of skylight, window and wall system products."

Manufactured exclusively by Cabot through its patented process, Nanogel translucent aerogel is a highly light transmissive, lightweight, nanoporous material, and is permanently hydrophobic, making it both moisture and mildew resistant. Cabot's continuous aerogel manufacturing process based on a new technology route, is housed in the first commercial plant in Frankfurt, Germany.

"Nanogel-filled systems will allow architects substantially greater design freedom, allowing a wider scope to maximize natural light and thermal performance, and at the same time meet the increasingly stringent building insulation regulations," said Satterwhite. "We see Nanogel as a breakthrough product that will stimulate innovation in building design and be a tool to create better and more efficient buildings worldwide."

In the United States, the state-of-the-art incorporators and distributors are:

- Kalwall Corporation ([www.kalwall.com](http://www.kalwall.com)), the leader in the field of translucent building panel systems, having invented the translucent, structural building panel. Kalwall is recognized worldwide for highly insulating, translucent panel technology.
- SuperSky Products Inc. ([www.supersky.com](http://www.supersky.com)) markets a polycarbonate skylight panel system filled with Nanogel translucent aerogel. The 10 mm and 16 mm panels are composed of GE Lexan® Thermoclear® polycarbonate, produced by GE Structured Products, and Macrolux BDL® polycarbonate. The Super Sky panels are impact resistant and energy saving, multi-wall glazing sheets that feature a proprietary surface treatment providing nearly total resistance to the degrading effect of UV light. The combination of Nanogel and polycarbonate enables a nearly two-fold increase in thermal performance without significantly compromising light transmission and creates the first polycarbonate panel resistant to condensation. This in turn allows the flexibility of both vertical and horizontal wall alignment adding to overall design freedom.
- Westcrowns Inc. ([www.westcrowns.com](http://www.westcrowns.com)) designs and supplies Pilkington Profilit™ translucent linear structural glazing systems where glass performance meets or exceeds building code criteria for thermal insulation and light transmission. Pilkington Profilit has been used in Europe for 40 years, and is now being recognized in North America as an innovative alternative to conventional glass products.

In Europe, Nanogel is incorporated into the products of Kalwall, Westcrowns, and other manufacturers, including:

- Scobalit AG: Scobalit AG produces high quality, glass reinforced polyester materials for applications in building and construction. The company specializes in glazing and insulation units, fiberglass and glass filled components among

others. Scobalit's polyester panels plus Nanogel provide 25% light transmission and thermal insulation values ( $0.48 \text{ W}/(\text{m}^2 \cdot \text{K})$  at 50 mm).

- GE Advanced Materials Structured Products: GE Structured Products is the global leader in the manufacture of high performance Lexan® polycarbonate sheet and film products. Lexan Thermoclear Polycarbonate multiwall plus Nanogel has improved thermal insulation by approximately 60% and acoustical insulation by 5dB as well as greater light diffusion in current products.
- Pilkington plc: Pilkington is one of the world's largest manufacturers of glass and glazing products for building, automotive and related technical markets. The company's U-channel glass with polycarbonate inserts filled with Nanogel provide an U value of  $0.97 \text{ W}/(\text{m}^2 \cdot \text{K})$  with inserts of 16 mm thickness.
- Okalux: An innovative insulating glass manufacturing company, Okalux, produces an insulated glass panel with Nanogel that provides better insulation ( $0.6 \text{ W}/(\text{m}^2 \cdot \text{K})$  at 32 mm) at thinner gauges. The company promotes using natural daylight and saving energy while creating comfort in the room.

All of these companies employ vast distribution networks to work with clients all over the world.

Nanogel-based roofs, skylights and pool enclosures have been installed in office buildings in Spokane, Washington and Bozeman, Montana; hotels in Manchester, New Hampshire; residences in the United Kingdom; and schools in Inkom, Idaho and Zurich, Switzerland.

### **About Cabot Corporation**

Cabot Corporation is a global specialty and materials company and is headquartered in Boston, Massachusetts, USA. Cabot's major products are carbon black, fumed silica, inkjet colorants, capacitor materials, and cesium formate fluids for oil drilling. Cabot has approximately 4,400 employees in 45 manufacturing plants located in over 20 countries around the world. [www.cabot-corp.com](http://www.cabot-corp.com) , [www.nanogel.com](http://www.nanogel.com).

For more information about the incorporating partners, see the following web sites:

Kalwall Corp.: [www.kalwall.com](http://www.kalwall.com)

SuperSky Products: [www.supersky.com](http://www.supersky.com)

Westcrowns Inc.: [www.westcrowns.com](http://www.westcrowns.com)

Scobalit: [www.scobalit.ch](http://www.scobalit.ch)

GE Structured Products: [www.gestructuredproducts.com](http://www.gestructuredproducts.com)

Pilkington plc: [www.pilkington.uk](http://www.pilkington.uk)

Okalux: [www.okalux.com](http://www.okalux.com)