



*Cabot Corporation*

Aerogel

## PRESS RELEASE

### **Education Center learns that the best solution for daylighting is not always transparent!**

The main boardroom of the Novato Unified Education Center in Novato, CA, is a vital part of the city's community. Not only is it used extensively by the school board, it is also where the city and planning councils meet. The 35' square room is crowned by a grid of sixteen 4 foot square skylights that make up a large portion of the ceiling. Originally, when the education center was built, these skylights were tinted dark bronze to help eliminate sun glare. However, this not only made the room too dark but did nothing to reduce the thermal discomfort that was making it so unbearably hot. To solve the problem, the city turned to roofing experts Division 7.

The solution was to install Acralight International Skylight's NanoStar™ skylighting, a unique system which incorporates Nanogel® aerogel (now called Lumira® aerogel). This translucent granular form of silica aerogel comprises up to 95% air and is the world's lightest and best insulating solid material. Thirty-nine times more effective than the highest-grade fiber glass insulation, this space age ingredient increased the skylights' insulating properties from an R-value of 1.5 to R-6.5. In addition to providing the vital insulation and solar control, its translucent nature means that the natural daylight is diffused and distributed evenly as soft museum-quality light, without shadows or glare.

"I knew that the inclusion of Lumira® aerogel in the new skylights would make the room brighter, but I was pleasantly surprised by how much additional light was transmitted," John Silvestrini, the Executive Director of Facilities explained. "The room is now at least twice as bright as before and we never have to turn on the lights during the day. Also, the new skylighting helps keep the room really cool during the summer and will prevent heat loss during the cooler months. All of this means we save energy and running costs."

The California Board of Energy Efficiency's report on daylighting in schools has demonstrated that students' performance can be improved by more than 20% when classrooms are well lit with natural daylight. The use of translucent Lumira® aerogel in this environment not only removes unwanted glare and solar heat but eliminates external distractions while improving student's concentration and personal well-being.

Lumira® aerogel is used in a wide range of daylighting applications from skylights to glass walls. When used within translucent cladding systems, it can increase the insulation value up to an R-value of 20 (equivalent to that of a solid wall) while still diffusing natural daylight into the building.

Lumira® is environmentally friendly and widely specified as an essential component of daylighting in many LEED certified projects. It is also a Silver Cradle to Cradle Certified<sup>cm</sup> material. This stringent independent certification process by MBDC examines a product's manufacturing characteristics, its ecological impact and recyclability. The aim is to eliminate waste entirely and to create a healthy and sustainable society.

For more information about Lumira® aerogel visit [www.cabot-corp.com/Aerogel](http://www.cabot-corp.com/Aerogel).