# INNOVATION

In Construction

Welcome to the World of ....

## OLED LIGHTING





"Quality Construction Through Innovation"

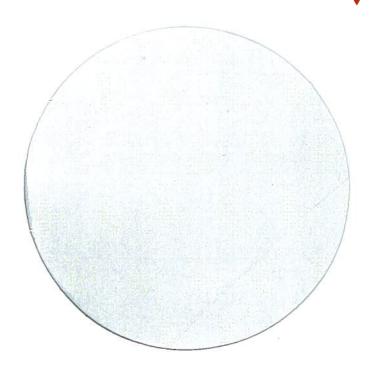
629 Old White Plains Road Tarrytown, N. Y. 10591
Tel: [914] 631-6070
Fax: [914] 631-5172

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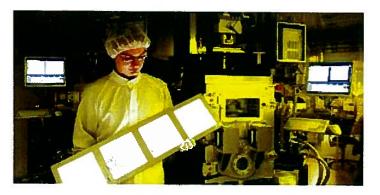
# **OLED** Lighting: New Design Frontiers

OLED lighting is poised to burst onto the interior design scene of virtually all types of building construction within the next 12 to 36 months and can potentially revolutionize the world of interior construction. OLEDs...or organic light-emitting diodes...are one step up from LEDs, but unlike LEDs, create uniform, diffuse light across ultrathin sheets of material that, in the future, can be made to be flexible.

Remember the architectural dream of pushing a button to instantly change the color of the walls in an entire room?

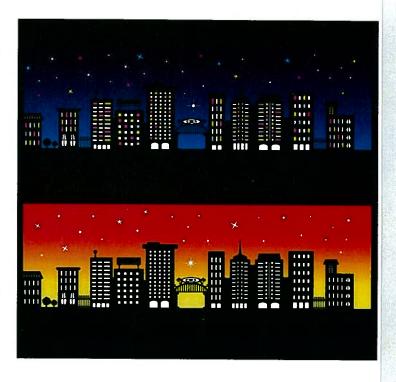


Technologically, we knew how to achieve that effect decades ago, but OLEDs can make that economically feasible within the next few years. OLEDs can be manufactured in sheets, produce a long-lasting, highly- efficient illumination in a wide range of colors and a diffuse light across ultrathin sheets of materials, unlike LEDs which provide points of light, like standard incandescent bulbs.



Its initially higher costs may limit OLEDs uses to highly-decorative wall dividers. However, General Electric is developing a roll-to-roll OLED manufacturing process. It plans to have OLED sheets in the marketplace by this time next year. GE is racing such other giants as Armstrong World Industries, Konica Minolta, Philips, Osram Sylvania and Universal Display to market with this product.

OLED panels are only 0.07 of an inch thick. When lighted, the panels give off no heat. European manufacturing of



OLED panels is moving ahead just as swiftly. The Zumbotel Group of Austria and the Fraunhofer IPMS have created a new joint venture called "Ledon OLED Lighting" based in Dresden, Germany [photo left].

Initially, OLEDs will most likely *supplement*, not *replace*, other energy-efficient technologies, because of the even, diffuse light they emit. Specialty applications could include embedding them in Venetian blinds, so occupants would always think it is still light out, even at night [like our little illustration above].

For more information on OLEDs, contact any of the manufacturers mentioned above and/or JUST Google: "OLED Information". The Universal Display web site: www.universaldisplay.com is also very good.



#### ECOX....A CONCRETE MADE OF RECYCLED GLASS

Looking for a way to score some definite green building points? Check out EcoX....a precast concrete made of about 75% post-consumer and post-industrial *glass!* Developed by Meld USA. EcoX is being used on countertops, high traffic seating areas, furniture, sculptural objects and a host of other non-structural applications spawned by imaginative architects.

Visually, EcoX appears very different from conventional precast concrete. Estimates are that over 7 million tons of glass are sent to the landfills each year. If EcoX grows in popularity, it could divert a significant amount of that glass from the waste stream. For more information, check Meld's web site at <a href="https://www.meldusa.com">www.meldusa.com</a>.



## CAI TO LAUNCH ENGINEERS' CE COURSE



CAI Is pleased to announce that its new 6-PDH Continuing Education course for engineers, "Incorporating Tomorrow's Solutions Into Today's Construction Engineering Designs", has been validated for NYS and the first session is to be held May 6, 2010.

A second, all-day, 6-LU course for architects is scheduled for Oct. 6, 2010. Both courses will be held in Tarrytown, NY. Attendance will be limited to 40 people. To be guaranteed a seat for either course, call John R. Kubasek & Associates now at 718-727-4366.

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