

WHICH PPG GLASS PRODUCTS ARE CRADLE TO CRADLE CERTIFIED^{CM}?

All PPG residential and commercial glass products are *Cradle to Cradle Certified*, and therefore eligible to contribute to LEED certification through the “Innovation in Design” category. They include:

- **Solarban[®]** solar control, low-e glasses*
 - Solarban[®] z50* glass
 - Solarban[®] 70XL* glass
 - Solarban[®] 60* glass
 - Solarban[®] 65* glass (residential window only)
 - Solarban[®] 80* glass
- **Oceans of Color[®]** ocean inspired, tinted glasses
 - Azuria[™]* glass (formerly *Azurlite[®]*)
 - Caribia[®]* glass
 - Atlantica[™]* glass (formerly *Solargreen[®]*)
 - Pacifica[™]* glass
 - Solexia[™]* glass (formerly *Solex[®]*)
- **Sungate[®]** 500 passive low-e glasses
- **Sungate[®]** 400 (residential window only)
- **Starphire[®]** ultra-clear (low-iron) glass
- **Solarphire[™]** glass (solar industry only)
- **Vistacool[™]** subtly reflective, color-enriched glasses
- **Solarcool[®]** reflective tinted glasses
- Earth & Sky performance tinted glasses
 - Optigray[®] 23* glass
 - Graylite[®]* glass
 - Solarblue[™]* glass
 - Solarbronze[®]* glass
 - Solargray[®]* glass
- **Sunclean[®]** self-cleaning glass (residential window only)
- **Clarvista[®]** shower glass
- Clear glass

To learn more about the *Cradle to Cradle Certification* for PPG Residential Window Glass, visit www.ppgglass.com/C2C. For PPG Architectural Glass, visit www.ppgideascales.com/C2C.

* Also included *Optiblue[®]* substrate glass.



Green Building Alliance Gold Sponsor



1-888-PPG-IDEA
WWW.PPGIDEASCAPES.COM



1-888-PPG-GLAS
WWW.PPGGLASS.COM

PPG INDUSTRIES · GLASS BUSINESS & DISCOVERY CENTER · 400 GUYS RUN ROAD · CHESWICK, PA 15024

7122 6/09 (10M) Printed in U.S.A.



Recycled
Supporting responsible use of forest resources
www.fsc.org Cert no. SCS-COC-00648
© 1996 Forest Stewardship Council



Cradle to Cradle Certified^{CM}
PPG ARCHITECTURAL GLASSES





our commitment

CRADLE TO CRADLE CERTIFIED^{CM}

PPG is pleased to announce that its entire collection of commercial and residential architectural glass products has been *Cradle to Cradle Certified*^{CM}. PPG is the first glass manufacturer in the U.S. to earn this designation, which signals our commitment to meeting the building needs of our customers and our planet with environmentally progressive, high-performance products.

The following guide explains *Cradle to Cradle Certification* and what it means for customers like you.

Cradle to Cradle^{CM} is a certification mark of MBDC.

WHY WAS *CRADLE TO CRADLE* CERTIFICATION DEVELOPED?

Until recently, the eco-effectiveness of most building products was judged according to specific performance attributes. For instance, their ability to save energy, conserve water, eliminate airborne toxins or make use of recycled materials.

Today, the green building movement is embracing a more holistic view of sustainable building products that assesses their impact on the environment throughout their entire lifecycle. This approach encompasses not just how products perform in a finished building, but what materials they are made from, how they are manufactured and what impact they might have on the environment once their life as a building product is over.

The *Cradle to Cradle Certification* program was created to systematize these principles. It was developed by William McDonough, FAIA, an architect, and Michael Braungart, Ph.D, a chemist, whose aim is to encourage the development of products with materials that can be endlessly recycled, as they are in the natural world. The company they founded, MBDC (McDonough Braungart Design Chemistry), is the sole administrator of the *Cradle to Cradle Certification* program.

HOW IS *CRADLE TO CRADLE* CERTIFICATION EARNED?

Products submitted for *Cradle to Cradle Certification* are assessed according to five basic criteria:

1. *Materials*: The environmental and human health impact of their materials
2. *Material Reutilization/Design for Environment*: The capacity of those materials to be recovered and reutilized
3. *Energy*: The amount and kind of energy used in their manufacture
4. *Water Stewardship*: How water is used and water quality maintained in the manufacturing process
5. *Social Responsibility*: How the manufacturing company practices fair business principles and corporate ethics through interaction with customers and employees

PPG architectural glasses were awarded the *Cradle to Cradle Certification* at the silver tier after a thorough audit of the materials used in their formulation and production, the processes used to manufacture them, and PPG's commitment to a Global Code of Ethics.

WHAT ARE THE BENEFITS OF *CRADLE TO CRADLE* CERTIFICATION?

As green building practices continue to evolve, architects are seeking new ways to minimize the environmental impact of buildings and contribute to healthier ecosystems. One way to achieve those objectives is through the use of products, such as PPG glass, that are *Cradle to Cradle Certified*.

Cradle to Cradle Certified products may also be valuable to architects seeking *Leadership in Energy and Environmental Design* (LEED) certification for their commercial or residential building projects. According to the U.S. Green Building Council, which administers LEED certification, building projects may be eligible to earn one point in the "Innovation in Design" category if the percentage of *Cradle to Cradle Certified* products used in their construction equals at least 2.5 percent of the project's total materials cost.

Advanced architectural glazings from PPG also can contribute to LEED certification of commercial buildings and homes through their ability to transmit light and block solar heat, which can minimize reliance on artificial lighting and air conditioning. These products include *Solarban*[®] solar control, low-e and *Sungate*[®] passive low-e glasses.

In a recent study using the country's most sophisticated energy modeling software, *Solarban* solar control, low-e glasses were shown to lower annual energy costs in a prototypical eight-story, window-walled office building by up to 13 percent, or as much as \$100,000, when they were specified instead of less sophisticated glazing products, such as dual-pane tinted glass.

The same study showed that HVAC equipment costs were lowered by up to 13 percent, or more than \$400,000, in the same type of building.

Finally, depending on the building's location, annual energy-related carbon emissions were reduced by up to 300 tons, enough to equal the yearly output of more than 50 passenger vehicles.

When *Solarban* solar control, low-e glass is used in residential window glass instead of conventional clear glass, it can lower summer cooling and winter heating bills by up to 25 percent.

innovation in design