

**FIGURE 16-1**

High performance glass products are now quite common. Their thermal performance is far superior to the glass of just a few years ago and is improving every day. This triple-glazed system at the Federal Reserve Bank of Minneapolis helps to keep valuable heat inside the building during winter months.



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## PRACTICAL PROBLEMS IN SUSTAINABLE DESIGN

# The challenge for designers

The challenge for designers is to understand the overall impact of their individual design decisions on human health and the health of the world around us. This issue must become as important and intuitively understood as cost and schedule decisions are today. As daunting as this sounds, the good news is that today there is a growing list of better choices and resources to help us make those choices. The key is to understand the central goals of sustainable design, the obstacles facing designers, and the life “history” and life cycle of a given material or product.

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### Environmental Goals

After they take account of the true costs of a building and the benefits of sustainable design, how can designers define the overall environmental goals that the society as a whole and the design industry should seek? The following are key goals for the interior design profession.

- *To promote the efficient use of resources, including materials, water, and energy*
- *To understand the life cycle of all the materials we use in order to understand the overall environmental impact of our decisions*
- *To create healthy indoor environments for building users*
- *To protect ecosystems in the selection of the materials that go into a project*
- *To move toward eliminating waste in the production, transport, installation, and use of materials*
- *To help users move toward eliminating waste by making recycling easy*
- *To move away from the use of fossil fuels and toward the use of sustainable energy resources*
- *To find ways to let building users know why the building has been designed the way it has, to help raise the general awareness of the issues and opportunities*

### **Obstacles**

There is no shortage of obstacles to achieving the goals of sustainable design applied to buildings. For one thing, there are many unanswered questions. While there is generally widespread agreement within the scientific community that the environment has been degraded, there is disagreement as to particular causes, effects, and timing in many areas. Many manufacturers literally cannot tell us exactly what goes into a given product. In many areas, it may seem at first that the design industry has limited choices available for environmentally responsible products. While the design industry is, generally, more and more aware that environmental issues are part of the professional equation, it is also to a great extent ignorant of the specific issues involved and how they should be addressed. Moreover, there is vocal resistance in many areas of society and within the profession concerning environmental issues. Some designers mistakenly fear that considering environmental issues will challenge their “artistic expression.” Others think of the topic as a confusing addition to an already crowded design agenda. Unlike the largely nonparti-