FIGURE 16-14 and 16-15
In most areas of the country, minimizing construction waste is simply a matter of making it convenient for the subcontractors to separate materials, such as wood, metal, drywall, etc.

issues at the weekly site superintendent meetings, much as they do for job site safety. This practice puts environmental issues squarely into the mainstream of job site activity and helps ensure that nothing is missed.

POST-OCCUPANCY

Once the project is complete, it is important that the design team stay in contact with the building's users and operators to ensure that the building is functioning correctly. Designers should consider creating an operations manual to explain to initial and later operators why particular material and system decisions were made, how they are to operate, and how they are to be maintained. Many materials and maintenance procedures may be new to people. If problems arise, they can be corrected or at least serve as a basis for better decisions in the future.

Ten Simple Things

An environmentally responsible building need not look different from one that is not. To help extend the knowledge of the issues, find innovative ways

to explain to users why the design decisions were made as they were. Simple displays can be very effective in raising the overall level of awareness of environmental solutions. The self-conscious sustainable design process takes account of ten factors:

1. ***Reduce energy use***. Work with the overall building designer to maximize the use of daylight, reduce the use of electric lighting and reduce overall energy consumption. Consider the use of operable windows.

2. ***Use environmentally friendly building materials***. Select building materials based on their entire life cycle, to minimize waste and pollution at all stages while also protecting the health of the building users.

3. ***Plan for user recycling***. Make it easy for the building's users to recycle by providing appropriate space and casework to sort and store recyclable materials both at the point of use—e.g., the coffee station—and at the receiving area of the building.

4. ***Construction waste***. Provide for construction waste minimization in the specifications for each material as well as a recycling requirement in the general conditions of the specification.

5. ***Promote indoor air quality***. Insure that the materials selected promote health with a minimum of off-gassing, that the building is well ventilated before occupancy and during use, and that microbial contamination is avoided. Ensure that the design limits opportunities for mold buildup in ductwork and elsewhere in the building.

6. ***Program carefully***. Ensure that the overall program is necessary and minimized to reduce the overall use of resources.

7. ***Long-term flexibility***. Design for flexibility in every way possible for the long-term use of the initial and subsequent users.

8. ***Maintenance***. Ensure that the building is easy to clean and maintain.

9. ***Learn systematically***. Work toward raising the overall environmental performance of not just a single project but all projects. Do this by learning from each to systematically improve your standard specifications, details, and other aspects of design. Use the LEED rating system (to follow) on all of your projects.