Sundeck at Aspen Mountain

In 1999 Aspen Skiing Company hit green development hard with the mother of all projects: the new Sundeck restaurant on top of Aspen mountain. Since the existing fifty-year-old building was slated for demolition anyway, ASC’s planning and Environmental Affairs departments decided to look at ways to make the new building (and the demolition of the old) more environmentally sound. The team came up with a two-pronged approach: first, the sundeck would be deconstructed, not demolished, meaning salvageable materials would be reused. Second the new building would participate in a pioneering program to develop standards for what defines an environmentally responsible building. The “Greening of the Sundeck” has become one of the most ambitious environmental projects undertaken at Aspen Skiing Company.

Taking it Down

Building demolition itself takes a huge toll on the environment. Even though many parts of old buildings are reusable, most materials go to the landfill. In fact, demolition and construction waste accounts for more than 50 percent of the volume of Aspen’s landfill. From a purely economic perspective, it makes sense to avoid landfilling wastes, because each ton dumped costs money in “tipping fees.” The theory behind deconstruction is that through resale of beams, door, windows, and other valuable materials and reduced tipping fees, the process can cost the same as demolition. Materials that can’t be salvaged—such as two-by fours and sheet-rock—will be ground up onsite and turned into compost at the landfill. In return, the landfill manager has agreed to sell mature compost at a discount. A benefit of grinding is that it reduces volume, which in turn reduces hauling costs. By grinding parts of the concrete foundation and using it as backfill, hauling and disposal costs are completely eliminated.

Building it Up

ASC worked with the U.S. Green Building Council, a building industry coalition, to develop the Leadership in Energy and Environmental Design (LEED) program. LEED’s goal is to provide a process builder’s can use to create certified green buildings. As a “LEED Pioneer,” ASC provided feedback from its implementation of LEED 1.0, helped create LEED 2.0 (now being used around the world). In 2001, the Sundeck Restaurant became one of only eleven buildings in the world to achieve LEED certification, with a rating of Bronze.