



## Top Ten Ways Willow Went Platinum

- 1 Roof (85 percent recycled stainless steel) shunts rainwater to a 57,000-gallon tank (100 percent recycled plastic) beneath the parking lot. The water is used to flush the low-flow toilets.
- 2 The Barn's solar panels, along with other energy efficiencies, make Willow 70 percent cheaper to run than with conventional power.
- 3 Walls are insulated with material made from recycled cotton such as blue jeans, which takes less energy to produce than fiberglass insulation. Recycled sneaker soles improve floor cushioning.
- 4 Paints, stains, and finishes have low or zero volatile organic compounds to enhance indoor air quality.
- 5 A computer in the front hallway monitors maintenance systems and displays energy usage in real time.
- 6 Recycled materials include stone foundations from three demolished barns. Trees that had to be removed to make way for the school were turned into the buildings' furniture.
- 7 The Schoolhouse is set east-west to avoid hot western sun. Classrooms with floor-to-ceiling windows face north to gather soft daylight ideal for reading.
- 8 Willow planted 70,000 species of native grasses, perennials, shrubs, and ground cover—all drought tolerant and needing no irrigation, fertilizer, or pesticides.
- 9 A constructed wetland of hydroponic plants cleans waste water, removing suspended solids, phosphorus, and nitrogen. The water is then filtered and returned to the ground.
- 10 Paving is kept to a minimum, reducing "heat island effect" that can drive up air conditioning costs. Access roads are as narrow as possible. Water that runs off paved surfaces is caught in vegetated drainage swales, helping retain ground water.

Education Special

# Platinum Green

With its cutting-edge buildings, the Willow School takes green to a new level—platinum—and a new concept: regeneration.

by Merrell Noden

WHEN THE GREEN LIGHT IN EVERY CLASSROOM AT THE Willow School flashes on, even the youngest kindergartner knows what to do: Throw open the windows and let in the fresh air, silly!

The green light—perfect for a green school—means the outdoor temperature is between 65 and 80 degrees, so there's no need to waste precious energy heating or cooling the room. Eighty degrees is pretty warm, "but the building is super insulated," says co-founder Mark Biedron, "so (Continued on page 165)