Focus on good design and clever construction

## Solar Timber-Frame Pergola

There's something poetically efficient about using solar panels to provide shade. The 6.5 kilowatt system shown here generates 26 to 30 kilowatt hours per day, about what the average

U.S. household uses. Total cost for the project, including the pergola, ran about \$40,000; after federal and state tax incentives (30 and 35 percent, respectively) are accounted for, payback for the homeowner should take only eight or nine years, says Russell Seifert of Creative Solar USA (creativesolarusa.com) in Woodstock, Ga. Because the pergola serves as the "rack" to support the panels, it was eligible for the incentives as

well. Timber-framed with cedar by RL Smith and Associates (rlsmith andassociates.com) of Maysville, Ga., it sports 8x8 posts, 6x10 and 6x12 beams, and 4x10 rafters, says Daniel Sims, coowner of the company. Angle irons that are both structural and decorative (inset photo, left) attach the pergola to the house framing. They were made by The Iron Twig (theirontwig.com), which is also co-owned by Sims. — *Laurie Elden* 



Professional Deck Builder · November 2012