

# Builder/Architect

Looking at Energy and Air Issues  
from a Broad Perspective

PCBC Bay Area Bus Tours 2006

Key Benefits of WeatherTRAK  
for Shea Homes



**Moroso**  
**Construction, Inc.**  
Master Renovators

## FIBER GLASS INSULATION

New DryRight Fiber Glass Insulation by CertainTeed Corporation is faced with MemBrain film to control moisture within wall cavities. A powerful, first-of-its-kind



combination of fiberglass insulation faced with breathable film, DryRight reduces the risk of mold and mildew growth when installed properly. The film's molecular-scale pores open

under moist, humid conditions during the cooling season to allow moisture vapor to pass. When humidity is low inside during the heating season, the film's molecular-scale pores close to block vapor transmission. The permeance of DryRight is 1 perm or less at normal conditions and increases to greater than 30 perms when the humidity changes to near 90 percent. This allows closed building envelope systems to increase drying potential with seasonal climatic changes. The insulation is available in batts and rolls in R-13 and R-19. The insulation is Greenguard certified.

For information, go to [www.certainteed.com](http://www.certainteed.com).

## WHOLE HOUSE AIR EXCHANGE

E-Z Breathe ventilation unit allows the proper amount of airflow in a home, making the air cleaner and healthier to breathe. The unit helps to remove stale, damp, contaminated air from the lowest point of the home. It works because air holding moisture or contaminants is heavier than clean dry air. As a result, the



damp polluted air settles and builds up in the lowest part of the home. E-Z Breathe expels this bad air from the home. It is a one-unit whole house

solution. The fan for the unit is controlled by a humidistat. Once the humidity reaches the desired setting, the fan slows down. The unit also doesn't collect water like a traditional dehumidifier — it removes the moist air and replaces it with warm dry air from the upstairs. It can be installed over or under drywall.

For information, go to [www.ezbreathe.com](http://www.ezbreathe.com).

## FAN AIR PURIFIER

Although the estimated one billion ceiling fans in the U.S. are popular, the air they circulate is oftentimes loaded with dust, pollen, molds, smoke, animal odors and more, according to Heartland Technologies, Inc.,



which produces the Purifan System. The new product turns any ceiling fan into an air purifier. The self-contained, circular unit takes the place of the paddles of a standard ceiling fan. It uses a three-stage filtration system: a pre-filter, a charcoal filter, and a High Efficiency Particulate Air (HEPA) filter to help remove unwanted and unhealthy contaminants in the home. The Purifan uses natural high and low air pressure in the home to draw up unclean air and recirculate fresh air at a rate of 2,000 cubic feet of air per minute. That means it completely recirculates and refreshes the air in an average 20' x 20' room every 90 seconds.

For information, go to [www.purifan.com](http://www.purifan.com).

## INSULATING HOUSE WRAP

DuPont recently introduced its first insulating, breathable radiant product for the home building industry: Tyvek ThermaWrap. The



product is designed to enhance the thermal resistance of the wall by providing R-2 insulation value when installed with an air space. The house wrap has a breathable aluminum layer that combines high vapor permeability and thermal protection, which guards against condensation and mold. Previous generations were made solely of aluminum foils, which do not permit vapor to pass through. The low-surface of the wrap increases thermal resistance, which ultimately reduces the transfer of radiant heat in and out of the home, allowing up to a 15 percent reduction in heat flow through the walls.

For information, go to [www.tyvek.com](http://www.tyvek.com).

## HIGH PERFORMING A/C

Rheem Air Conditioning Division recently introduced a new lineup of Optimized 13-SEER Residential Package Products. Available from Rheem distributors, these high-efficiency Residential Package Products are available in 2- through 4-ton models and come in durable, all-steel, low-profile cabinets. Models include the RRNA 13-SEER



Gas/Electric Package Unit, RQNA 13-SEER Package Heat Pump, and RSNA 13-SEER Package Air Conditioner. All models feature a smooth-line, easy-to-service cabinet design that significantly decreases the amount of time needed to install or service. The new lineup offers contractor-friendly options