ENERGY STAR Energy Star Certificate Included in all DBU's Luxury Models!

•Save money •Comfort •Higher home value & faster resale •Ecology

In addition to DBU's "standard" features and specs, these upgrades are included:

Energy Star: **DBU**'s *Luxury Model* homes qualify for EPA's *Energy Star* certificate: To earn the *Energy Star*, a home must meet strict guidelines for energy efficiency set by the U.S. Environmental Protection Agency (EPA). These homes are at least 15% more energy efficient than homes built to the 2004 International Residential Code (IRC), and include additional energy saving features that typically make them 20–30% more efficient than standard homes. Homes achieve this level of performance through a combination of energy–efficient improvements, including:

- •Effective Insulation Systems •High–P
- •High–Performance Windows
- •Tight Construction and Ducts

- Efficient Heating and Cooling Equipment
- Energy Star Qualified Lighting and Appliances

To get the EPA *Energy Star* certificate, third–party verification by a certified *Home Energy Rater* is required. This *Rater* works closely with DBU throughout the construction process to help determine the needed energy–saving equipment and construction techniques and conduct required on–site diagnostic testing and inspections to document that your home is eligible for the *Energy Star* label. See, *EnergyStar.gov* and *EnergyStar.gov/new homes*

410A refrigerant for AC units: Most air-conditioners and heat pumps use a refrigerant called R-22. Emissions of R-22 are a significant factor in depleting the ozone layer that protects animals and people from harmful rays from the sun. However, DBU buys air-conditioner heat pumps that use a more efficient and environmentally friendlier refrigerant called <u>R-410A</u>

Trane SB14c High Efficiency AC heat pump: See, <u>Trane XB14</u> Or, optional **Trane SL16c Ultra Efficiency 2-stage**: See, <u>Trane XL16i</u> Click on brochure for information of savings, advantages, etc.

Digital thermostat: Non-programmable digital thermostats are easy to use and preferred by most people. No batteries are required. It will permanently retain your temperature settings. See, <u>Trane Thermostats</u> or <u>Trane Programmable</u> <u>Thermostats</u>

Efficient air filters: Check your filter every month, especially during heavy use months (summer in Lake Havasu). If the filter looks dirty after a month, change it. At a minimum, change the filter every 3 months. A dirty filter will slow down airflow and make the system work harder to keep you warm or cool — wasting energy. A clean filter will also prevent dust and dirt from building up in the system — leading to expensive maintenance and/or early system failure. See, <u>Air Filters</u>

Low E windows: Low-emittance (Low-E) coatings are microscopically thin, virtually invisible, metal or metallic oxide layers deposited on a window or skylight-glazing surface primarily to reduce the U-factor by suppressing radiative heat flow. See, *Low-E*.

R38 attic insulation: R-factor is a numerical indicator of an insulation's efficiency at retarding the flow of heat. The scale goes from low to high; higher R-numbers mean a given insulation is better able to stop heat transfer or cooling losses. See, *Attic Insulation* and *Blown Insulation* DBU recommends the R50 upgrade.

R19 sidewall batts w/1" exterior foam: Fiberglass insulation with asphalted Kraft paper and stapling flanges. See, <u>Sidewall Insulation</u> 1" foam has an R value of 4.3. ½" drywall has an R value of 0.45. The stucco is 0.20. Thus, the total R value is 26. DBU recommends the R21 batt upgrade.

Air barrier poly-sealing: DBU seals doors, windows, bottom plates, and penetrations including those requiring split batts. See, *Poly Sealing*

Sealing of return/supply cans & R6 flex ducts: Insulated ducts are UL181 listed and have an R-Value of 6 and a 10-year warranty. The duct connections are sealed and tested. See, *Flex Ducts* or *AC Ducts*

Advanced framing techniques: According to the DOE, <u>Advanced Framing Techniques</u> and <u>Optimum Value</u> <u>Engineering</u> are standards designed to improve home energy efficiency. Included are 6" studs at 24" O.C. with steel diagonal bracing, mid-span braces/fire stops, steel plates, nailing, OSB shear panels, and drywall shear panel/nailing. These walls are designed to be stronger with an increased volume of 6"-thick insulation, a double-layer vapor barrier, and 1" of foam all installed to code.

Energy efficient hot water heater: Water heating can account for 14%–25% of the energy consumed in your home. See, *Energy Efficient Hot Water*

Low flow toilets: Colorado River and local code required water saving plumbing. See, Low Flow

Low VOC emission paints & carpets: One of the top 5 leading health risks are in the U.S. according to the EPA is the air in your house. One of the leading causes of that problem is the paints, varnishes and solvents containing VOC's. VOC stands for *Volatile Organic Compound* and has been a key component of the composition of oil based paint and can be a problem even in traditional latex based paints. See, *Alternative Interior Paints*

HERS inspection and rating for the Energy Star certificate: Independent inspection and testing helps make sure a home is energy efficient. See, <u>HERS Inspection</u> and <u>Energy Savings</u> The inspection at \$750 is optional.

Skylight or SolaTube: SolaTubes and similar energy saving products are natural light tubes with reflective material that can transfer up to 500 percent more daylight than other systems such as skylights. See, <u>SolaTubes</u>.

HIGHLY RECOMMENDED OPTIONAL COST-SAVING ENERGY UPGRADES

Energy Star hot water heater upgrade: A single-unit storage water heater offers a ready reservoir—from 60 to 80 gallons—of hot water. See, *Water Heater Upgrades*

Tankless under-counter hot water heaters: Demand (tankless or instantaneous) water heaters provide hot water only as it is needed. It eliminates the standby energy losses associated with storage water heaters. See, *Tankless Hot Water*

Upgraded windows: DBU uses <u>Alside</u> dual pane vinyl performance series windows typically from a local dealer, Havasu Glass & Mirror. Solid vinyl frame and sashes for strength, energy efficiency and ease of maintenance. Integral prepunched nailing fin on all four sides. Mitered and welded construction for strength and beauty. Interlock at locking rail for reduced air infiltration and added security. Tilt-in bottom sash for easy cleaning. Stainless steel constant force balances. Fully extruded lift rail.

Radiant Barrier TechShield Roof Sheathing: LP[®] TechShield[®] is the original radiant barrier roof sheathing. Installed in more than one million homes, this product helps block radiant heat in the roof from entering the attic, keeping the attic cooler, lowering energy costs and making the home more comfortable. See, *LP Tech Shield* and *VaporVents*TM *technology*

R50 attic insulation and **R21** sidewall insulation: Both are among the least costly and best performing upgrades.

Spray foam insulation: Sprayed products helps stop air and moisture infiltration, keeps dust and pollen out, saves on energy costs, and adds strength to the building structure. It's permanent and will not sag. See, *Spray Foam* or *Optimize Performance*

Attic vent fan w/ thermostat: Helps lower the temperature in the attic. See, Attic Fans

Log onto <u>www.dbuhomes.com</u> to access active Internet links shown in blue.

NOTE: DBU as a ROC licensed contractor, certifies contractually that its Energy Star homes meet <u>all</u> conditions and requirements for the EPA's Energy Star certification. The cost to conduct the 3rd party inspections/certification is \$750 and is optional.