GERLACH DESIGN STUDIO

ARCHITECTURAL SERVICES (830) 228-5941 www.gerlachdesignstudio.com

GREEN BUILDING SOLUTIONS & ALTERNATE ENERGY SOURCES

Exterior Wall Systems

- Insulating Concrete Form (ICF): block exterior walls with 6-10 inch thickness ARXX Building Products 800-293-3210 www.arxx.com
- Autoclaved Aerated Concrete (AAC): block exterior walls with 4-12 inch thickness Aercon AAC 800-830-3171 www.aerconaac.com
- Structural Insulated Panels (SIPS) for all exterior wall and roof applications with 4.5-8.25 inch thickness (Southwest Region) Vantem Panels 830-632-1500 www.vantempanels.com
- Tempshield Reflective Insulation: Use in 6 inch exterior wall with two 1 inch air spaces between sheetrock and 4 inch glass fiber insulation

(Southwest Region) Innovative Insulation, Inc 866-718-4905 www.radiantbarrier.com

- Reflective insulation or radiant barrier applied as house wrap, pipe insulation and duct insulation Reflectix 800-879-3645 www.reflexinc.com
- Super R Premium for house wrap and radiant barrier at crawl space, walls and attic: Use vapor barrier fabric on inside sheetrock wall application. Requires 6 inch exterior wall with 2 inch air space between sheetrock and 4 inch glass fiber insulation.

(Southwest Region) Innovative Insulation, Inc 800-825-0123 www.radiantbarrier.com

Roofing Systems

- Radiant barrier reflective shield installed under roof deck, bottom of roof rafter or over ceiling insulation (Southwest Region) Innovative Insulation, Inc 800-825-0123 www.radiantbarrier.com
- Sealection Agribalance (Demilec) spray foam insulation installed on exterior walls and roof rafters:

No radiant roof reflective shield. Reduces moisture intrusion and energy loss. No ceiling insulation needed. (Southwest Region) South Texas Insulation 210-599-6881 www.southtexasinsulation.com and Superior Insulation Systems 210-340-1488 www.superiorinsulationsystems.com

Other Energy Conservation Techniques

- Use tankless water heaters
- Use gas in lieu of electricity, for water heaters, furnaces, ranges and clothes dryers
- When specifying aluminum windows, use Don Young windows with double flange seals reducing energy loss and eliminating interior moisture condensation
- Solar hot water systems
 Silicon Solar 877-786-6299 www.siliconsolar.com
- Apricus solar hot water systems
 (Southwest Region) Cincosolar 830-885-5110 www.cincosolar.com

Alternate Energy Sources

- Photovoltaic power
- Passive solar energy
- Wind turbines
- Geothermal energy: also known as Geo-exchange heat pump systems

Note: The intent for contractor/supplier listings are to provide product quality and description. Other reputable contractors can provide equal service. Gerlach Design Studio is not affiliated with any of the listed service providers, nor does it support or endorse external links: They are provided for informational purposes only.