

FOLLOW THE GREEN LINE HOME

Welcome to Shastan Homes. We are excited to present our newest neighborhood of 57 **energy efficient and solar powered** homes on Glenwood Avenue. But first, we would like to introduce ourselves and give you some important background about our company.

My name is Jay Halbert. My wife, Linda, and I founded Shastan Homes in 1977. Over the past 30 years we have been involved in the construction of over a thousand new homes and apartments in the Chico area. In January of 2006, our daughter Holli, and her husband, Beau Anderson joined our family business and they are now responsible for Shastan's construction management and home sales.

Linda and I are natives of Northern California (Chico and Chester). We graduated from Humboldt State University as newlyweds. Although Linda's degree was in English and Education and mine was in Fisheries Biology, our dream was to become homebuilders. Growing up in Northern California, combined with our diverse educational backgrounds has helped us to develop a strong passion for our environment. This awareness has created a strong personal desire for us to build and develop new homes using **responsible, healthier, and sustainable building practices**. Simply put, our goal is to make a lighter impact on our environment by:

- The efficient use of land resources
- The efficient use of energy resources
- The efficient use of water resources
- The efficient use of building materials
- Enhanced indoor environmental air quality

One thing we have learned over the years is that the future constantly brings homebuilders better options for achieving these goals. This happens through more education, better building designs, and product innovations. We never stop learning. Our **Architect, Frank Glazewski**, has been a tremendous help analyzing these options and developing the plans to reflect our choices. We are very grateful to him for his hard work and his commitment to our task. (Because we are learning more every day, we do reserve the right to change our building plans in order to meet our goals.)

We have also relied on **Bill Dakin** of Davis Energy Group (bdakin@davisenergy.com) for advice on energy conservation, heating, ventilation and cooling. Bill is a leader in mechanical engineering and energy conservation and his firm has helped us design homes that qualify for the California New Solar Homes Partnership (Tier 2) program. Our homes perform significantly better than the minimum requirements of California's Title 24 energy regulations.

Best of all, our Shastan Homes at Glenwood Avenue are being built using local building contractors. This benefits the entire community we live in. All Shastan contractors and their crews are picked primarily for their excellent reputations for quality work and exceptional after sale service.

The following alphabetical list describes the products and materials we have chosen for our homes. We feel that these choices will make our homes the best value that you will find anywhere. We look forward to working with you soon.

JAY HALBERT, President
Shastan Homes, Inc.

Please call us anytime at 530-343-2641
Or visit: www.ChicoShastanHomes.com

Or visit our homes: Go west on Sacramento Avenue then right on Bidwell / Glenwood Avenue.

CHICO REAL ESTATE MARKET

The Chico real estate market is truly unique. While Chico experienced an unprecedented rapid appreciation from 2000 to 2005, just as many other communities did, the declines in home sales experienced in Chico in the last two years have been far subtler than many other markets.

According to data provided by the Chico Association of Realtors, 996 Chico homes were sold in 2005, 904 in 2006, and 873 in 2007. Chico housing suffered a 12% decline in those two years, compared to a statewide figure of 50%.

In parallel with the California housing market, Chico housing values have declined in the last two years as well, but not significantly. The median sales price of Chico homes increased slightly between 2005 and 2006, from \$335,000 to \$336,000. In 2007, the median sales price of a Chico home dropped to \$325,000, a 3% decline, compared to a statewide decline of 11.9% in 12 months.

For many reasons, such as Chico's often contentious politics on the issue of growth, the Green line, and an active environmentalist community, the residential Chico real estate market has been less impacted than other areas by the housing downturn. These factors have all contributed to a limited amount of available land for development. As a result, when home values stopped appreciating in 2005, Chico homebuilders were not left with a large number of unsold homes, helping to stabilize the Chico housing sale prices.

The Chico real estate market has been remarkably resilient, despite a widespread housing downturn. So not only is Chico a great place to live and work, Chico real estate is a smart investment.

APPLIANCES

To help conserve energy, all of our appliances are ENERGY STAR PARTNER qualified through the U.S. Department of Energy. **A-1 Appliances** in Oroville will be providing all the appliances for our project.

We have chosen Bosch dishwashers (www.boschappliances.com) because J.D. Power and Assoc. ranked them "highest in customer satisfaction". Bosch dishwashers are among the most efficient and quietest available. They can save you up to 20% in energy use as well, but most importantly, they are engineered to spotlessly clean your dishes.

General Electric (www.geappliances.com) is our choice for the remainder of our appliances. We chose GE because the U.S. Department of Energy has awarded their appliances with the 2006 Sustained Excellence Award. This is for their

commitment to creating appliances that help reduce energy costs. Standard with every home are the Profile Series built-in cook tops, ovens, hoods, and microwave ovens. Our largest plans, 3 through 10, include a wine cooler or beverage center and every home includes a 22 cubic foot freezer/refrigerator. Plans 2 through 10 have thirty-six inch wide gas cook tops with optional electric cook tops available for all plans if you desire.

AREA AND LOCATION

Chico has a dry, mild, Mediterranean-like climate. The town is also blessed with abundant ground water flowing out of the Sierra Nevada Mountains. West Chico, where our project is located, is known for its 20-foot deep loam soil.

Shastan Homes at Glenwood Avenue is the last infill property in the popular Emma Wilson School District. Our new neighborhood is on the urban (east) side of the Chico Green Line, a boundary that was established in the 1980's to protect agricultural areas from being lost to urban sprawl. About two miles to the west, through these agricultural areas, runs the Sacramento River State Park and public access to many recreational possibilities on the river. To the east of the neighborhood sits downtown Chico, Enloe Hospital, Chico High School, Chico Junior High School and Chico State University. Chico also offers the full range of medical services, guest lodging, shopping areas, diverse restaurants, fitness centers, cultural events and sporting events.

Our new neighborhood is designed with cul-de-sac streets plus connecting paths, which are owned and maintained by the City. We do not have expensive private streets with expensive homeowners association dues for maintaining them.

It took us three years to obtain our subdivision approvals from the City of Chico. Our civil engineering firm is North Star Engineering. **Jim Stevens** and **Jay Lowe** of North Star Engineering have been instrumental in helping us through this arduous process. They have designed streets and storm drain systems that are very environmentally friendly. Our storm drain system is owned and maintained by the City of Chico. It is a fully contained, underground system, which recharges the ground with water, rather than dumping the water directly into Chico Creek and potentially adversely affecting the fish population.

Our sidewalks are 5 feet wide. Most neighborhood sidewalks are too narrow for two people to walk side by side. Our sidewalks are also located on both sides of the road. Between the curbs and the sidewalks we have large parkways with many street trees, old-fashioned streetlights and mail box centers. The street trees and the front yard landscaping are made up of plant varieties that will shade the streets but not the solar panels on the roofs. We have set a minimum standard of 14 feet between our homes in most cases. Almost all of the homes are single story with seven-foot tall fences between them. We have tried to create an old fashioned Chico neighborhood that takes into account our natural

human scale, handicapped accessibility, modern and alternative modes of transportation and the need for privacy in the homes. Shastan Homes at Glenwood Avenue is a small oasis of a few homes, which are in a prime location.

CABINETS

Contractor **Scott Bechhold**, of Oak Ridge Cabinets (www.oakridgecabinets.com), well known for his custom work on a wide range of projects for over 25 years, uses lumber and glues that are low or no emitters of Volatile Organic Compounds (VOC). Some of his standard features are:

- Adjustable shelves in all upper cabinets, pantries, and laundries.
- Tilt out trays at the sink areas.
- Raised panel or Inset style cabinet doors.
- Crown moldings.
- Roll out trash bins.
- Hidden European hinges.
- Melamine interior shelves.
- Self-closing drawers in the kitchens
- Corner access systems for difficult cabinet corners.
- Pull out shelves in the lower cabinets.

Our standard cabinets are made of oak, hickory, maple, beach or paint grade hardwood, with a clear conversion lacquer finish or paint that is low or no VOC. Our finishes are extremely hard, non-yellowing, and water-resistant.

CARPET/CARPET PAD

Henry Inouye, owner of Town Carpet & Drapes will be installing our carpets and pads. We have worked with Henry for many years and he has always done a great job for us. Our carpet is manufactured by Shaw Industries (www.shawfloors.com). They are the world's largest manufacturer of carpeting and a leader in environmentally friendly floor covering. Philadelphia Carpet by Shaw Industries comes with a 7-year Quality Assurance Warranty. This warranty certifies that your carpet will be free of manufacturing defects for 7 years.

Our carpet features Shaw's R2X combined soil and stain resistance system, a patented treatment that offers a 7-year limited warranty against soiling and liquid spills. Shaw carpets, made of Anso nylon, are engineered to provide unsurpassed quality and outstanding performance. Anso nylon makes a yarn of superior volume and consistent quality. This results in a better feeling carpet with uniform colorations. On a scale of 1 to 5, our carpet is rated a 4. Carpet with a 4 or better rating is considered outstanding and is recommended for heavy traffic locations, including family rooms and children's areas.

The style we have chosen is Shaw's Imperial style. It is FHA certified, low in Volatile Organic Compounds (VOC), so it is good for the indoor air quality of your home. Since it is 100% recyclable, it is environmentally friendly as well.

Shastan's Homes use a 7-pound, high-density carpet-pad under the carpet. Our carpet-pads are FHA Green Label Certified. They come with a 15-year warranty and are hypoallergenic.

CENTRAL VACUUM

The Beam Central Vacuum System (<http://www.beamvac.com/usa>) is a built-in cleaning appliance that lets you clean your floors and improve the indoor air quality of your home at the same time. Research at the University of California Davis has proven that a Beam System provides measurable relief from major allergy symptoms... as much as 61%. Standard in our homes, you will receive the Beam Base Unit that can easily handle up to a 3,500 square foot home, the 30' Beam Solaire Power Team Kit, a Deluxe Car Care Kit and an Automatic Dust Pan in the kitchens.

Beam vacuum systems are up to five times more powerful than a standard upright vacuum and remove 100% of contacted dirt, dust mites, dander and other allergens and carry them away from living areas. The self-cleaning filter, located in the garage, is made of GORE-TEX fabric, which is five times stronger than other leading filtration media.

CERAMIC TILE

Our tile contractor, **Steve Groos of Steve's Tile**, comes very highly recommended. Steve and his crew will be installing all the tile, stone and granite in our homes. We build our shower walls the old fashioned way, using thick, wire-mesh reinforced cement mortar over a vapor barrier to form a base for our tile. The floors in the entry, kitchen, bathrooms and laundry are ceramic tile over an acrylic thin-set base. Crack membranes are used to help prevent cracking. We offer the "Sabrina" line of tile from the Tilecrest Collection. Sabrina Glazed Porcelain Tiles are available in five beautiful colors with a full compliment of trim designs. **Stratta Stone and Tile** is our supplier of all tile material. They have many other tiles you can choose from as well.

CLOSETS

Sam Leaf Construction will be outfitting our bedroom closets with a single pole and double shelves rather than just the typical single shelf and pole. The extra shelf provides additional storage capacity in the closet. The master closets also have a combination of double poles and double shelves. Shoe racks are included in all walk-in master closets as a standard feature. For ease of cleaning and durability, we use enamel paint in our closet interiors and shelves.

COUNTER TOPS

Steve's Tile will be installing all of our countertops. You may choose from tile, Corian or granite slab counters in the kitchens with a full backsplash of your choice. These counters are standard features and include your choice of an inset cast iron or a stainless steel kitchen sink. The bathroom countertops are tile with vitreous china sinks.

DOORS (EXTERIOR)

Our wood entry doors will be manufactured by T.M. Cobb (www.tmcobb.com). The California Craftsman Collection has many different variations and shapes to give the street scene a more custom look. These solid, straight-grained Douglas fir doors may be painted or stained.

We have chosen Thermatru (www.thermatru.com) for all other exterior doors and French doors. They are fiberglass and Energy Star Certified. Fiberglass exterior doors take paint nicely and are not prone to warping and are highly weather resistant. Under our metal door thresholds we use an entire tube of caulking, which sets up hard, giving a solid feeling when stepped on.

DOORS (INTERIOR)

Ron Caparel, owner of Sam's Door Company, will be supplying all of our exterior and interior doors. For our interior doors, we have selected Cambridge style raised panel interior doors made by Jeld-Wen (www.jeld-wen.com). Some are 8-foot tall, while others are 6-foot 8-inch tall doors with tempered glass transoms above. Our 9-foot ceilings throughout the homes allow us plenty of clearance for these features. We also insist on three hinges per door rather than only two. This helps prevent warping of the doors. When hanging the doors, **Sam Leaf Construction** uses cedar shingles shims so that all of the doorjambes are straight and true.

DOOR HARDWARE

Shastan Homes uses Kwikset door hardware (www.kwikset.com) with a satin nickel finish. Our homes all have lever type hardware rather than knobs at all doors for easier operation. We also install one-inch dead bolt locks on all of our swinging exterior doors for added security.

DRYWALL

John Mulrennan is the owner of Great Western Drywall and will be responsible for all the drywall on our project. Many drywall contractors will use standard half-inch gypsum board for their ceilings. Over time, this can result in unsightly sags. John uses only 5/8-inch thick ceiling board or half-inch thick ToughRock on all

ceilings. He also uses screws instead of nails to fasten the gypsum board to the wood framing. This helps to reduce annoying "nail pops".

Many homebuilders will use a heavy texture on their walls, enabling them to more easily camouflage wall imperfections. John applies a "prep coat" to the wall prior the texture, which helps to hide seams and other imperfections. This enables us to use a finer, smooth texture. This texture is more visually appealing, easier to clean and works better with wallpaper. The outside sheetrock corners are bull nosed rather than square.

ELECTRICAL

Philip Egan of Egan Electric is our electrical contractor. Philip and his crew are highly trained and qualified for this complex job.

All Shastan Homes have 200 amp electrical service panels as a standard feature. This provides you, the homeowner, with the capacity to add features to your home such as a pool, spa, or a room addition. You could even accommodate an electric car or golf cart. To make future additions even easier, we install (2) conduits from the attic into the electrical panel for any future electrical requirements. This means you will not have to tear into the wall finishes in your garage to simply add an electrical circuit somewhere down the road.

Dedicated outlets are provided in the garage for a future refrigerator/freezer and irrigation controls. These outlets are not equipped with "ground fault interrupters" or GFI's, thus avoiding the risk that the outside freezer or the landscape sprinklers might accidentally be shut off while the homeowner is out of town.

Shastan Homes installs a Structured Media Panel (SMP) in every home as a standard feature. This affords you a great deal of flexibility with your current and future communication wiring needs. SMP's are a very clean and organized way to handle all your cable, phone and computer network cabling. The cable TV and phone cables are all "home runs" to this panel. The Cable TV "home runs" to the SMP result in the highest quality signal possible for your cable TV, satellite TV or cable modems. As a standard, TV jacks are provided in every bedroom, family room and den. In the family rooms and master bedrooms, two outlets are provided in most cases to allow flexibility in furniture placement.

Phone jacks are provided in all bedrooms, family rooms, dens and kitchens. Telephone jacks are wired with Cat 5e cables. Each cable has 4 pairs of wires, accommodating up to 4 phone lines. Just think, you will have enough phone lines for your home office and a fax, and still have enough lines to accommodate your teenagers! Don't try that in your old home.

Our kitchen ceiling recessed lights are manufactured by LED Lighting Fixtures, Inc. (www.llfinc.com). These LED fixtures use 85% less energy than conventional incandescent bulbs and less than half that of a comparable

fluorescent. They are bright, cool to the touch, contain no mercury, and they can last as long as 20 years.

If you choose to purchase ceiling fans for your new home, many rooms in our homes, including bedrooms, family rooms, living rooms and kitchen nooks are pre-wired for ceiling fans with lights, making it much easier for you to install your fixtures.

Depending on the stage of construction in which you purchase your new home, you may be given an opportunity to select certain decorative light fixtures using our pre-established lighting budget.

We provide smoke detectors in all rooms and locations as required by Code, and all of our smoke detectors are wired in series so all detectors sound off simultaneously, within 3 seconds, in case of smoke or fire. As an additional safety feature, we provide a smoke detector in the garage, even though it is not required by Code. We install 10-year lithium backup batteries in the detectors to save you the trouble of having to change batteries every year.

ENERGY PERFORMANCE

We have contracted with **Davis Energy Group** in Davis, California (www.davisenergy.com) to evaluate the energy performance of our homes. Their engineers performed complex cost-benefit studies evaluating various combinations of enhancement measures in order to select a combination of elements that would provide the greatest benefit to our homeowners. We think you will be pleased with our selected features, especially when you are paying your utility bills.

Shastan Homes at Glenwood Avenue

Chico, California

Performance data provided by:

Davis Energy Group

123 C Street

Davis, California 95616

Title 24 2005 Energy Compliance Requirements

All data effective March 27, 2008

Plan number;	1	2	3	4	5	6	7	8	9	10
Square footage;	1707	1804	1862	1928	2169	2384	2410	2509	2795	3107
Exterior wall insulation	R-15	R-15	R-15	R-15	R-15	R-15	R-15	R-15	R-15	R-15
*House infiltration/Blower door testing	HERS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Attic Radiant Barrier										
*Verified Insulation Credit	HERS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Attic insulation	R-51	R-51	R-51	R-51	R-51	R-51	R-51	R-51	R-51	R-51
Attic insulation - garage	R-51	R-51	R-51	R-51	R-51	R-51	R-51	R-51	R-51	R-51
AFUE (Furnace)	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
SEER (AC Unit)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
EER (AC Unit)	HERS	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
*Thermostatic Expansion Valve (TXV)	HERS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Duct Insulation	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R-6	R-6
*Low Leakage (Tight) Ducts	HERS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Water Heater	Tankless	Tankless	Tankless	Tankless	Tankless	Tankless	Tankless	Tankless	Tankless	Tankless
<u>Glass Properties</u>	<u>U-Value</u>									
Picture Windows	0.32									
Operable Windows	0.35									
Patio Doors	0.33									
Skylights	0.50									
Glazing percentage	23.8%	24.7%	24.5%	22.3%	22.2%	24.7%	19.9%	20.9%	21.9%	25.5%
Percent Better Than Title 24 Overall	35.0%	35.0%	35.0%	37.1%	35.1%	36.4%	35.2%	36.0%	35.6%	35.1%
Percent Better Than Title 24 Cooling	48.4%	47.8%	50.0%	54.8%	53.6%	58.3%	54.0%	54.5%	52.8%	56.3%

*Verified Insulation Installation, AC Unit EER, Thermostatic Expansion Valve (TXV), Low Leakage (Tight) Ducts, and Blower Door Tests are HERS items. All HERS items require Third Party Field Verification and/or Testing by a Certified HERS Rater.

FENCING

Martin White and Mike Smith, the owners of M & M Fencing, will be building high quality fences in our new neighborhood. Many subdivisions have cheap 6-foot fences with wood posts, boards with loose knotholes and peck (rot) patterns in their fence boards. All of our fences are 7-feet tall with galvanized metal posts, metal hangers and high-grade cedar fence boards. Along with our minimum standard of 14 feet between our homes (in most cases), these 7-foot tall, cedar capped fences are designed to ensure maximum privacy.

FINISH CARPENTRY

Sam Leaf Construction will be performing all finish carpentry tasks such as installing exterior and interior doors, trimming the doors and windows and installing all of the door hardware and baseboards. Sam has a wide range of experience ranging from building custom homes to commercial buildings. All of his finish carpentry will be completed to the highest standards in the industry.

FIRE EXTINGUISHERS

We provide two ABC Class fire extinguishers in every home. One is placed under the kitchen sink and the other is mounted in the garage. These are the areas where most home fires happen. We want to help our homeowners be safe and prepared.

FIREPLACES

Our homes come with clean burning natural gas fireplaces manufactured by FMI (www.fmifireplace.com). We are using the Tudor series, which includes a remote control and a variable speed fan for heating efficiency. Also, this series includes split oak ceramic fiber logs in a "campfire" arrangement with charred features and glowing highlights. No more bugs and dirt being brought into your home from the use of regular firewood!

Unlike most other types of fireplaces, the Tudor does not consume indoor air, and it won't negatively affect indoor-air quality with emissions. With the glass doors closed, all exhaust gases are vented outside of the home and air needed for combustion is brought in from the outside.

Our fireplaces are finished with fluted wood columns and a wood mantle. Additionally, we include granite surrounds and hearths that match the granite kitchen counter tops in most cases.

FOUNDATIONS, DRIVEWAYS AND WALKWAYS

Our concrete contractor is **Andy Sprague**. His crew has been doing concrete work for Shastan Homes for many years. We like working with them because

they know their job very well and they do many extra things to ensure customer satisfaction.

Our foundations have 2 horizontal steel reinforcing bars, one top and one bottom. Steel reinforcing in the foundation improves the strength and ductility of the concrete footings. This helps minimize cracking and the effects of soil heave and settlement.

If you took a cross section through one of our typical floor slabs, you would find our slabs are reinforced with a 6 x 6 W1.4 x W1.4 welded wire mesh. Under the slab you would find a sand layer over a 10-mil vapor barrier over 4" of gravel fill. Each of the various components of this assembly has a purpose. The 10-mil vapor barrier and the gravel fill help prevent moisture found in the ground below from getting into your floor slab. The sand protects the vapor barrier while the concrete is being placed. The wire mesh is not required by the building code, but we install this as another measure to help minimize slab cracking. We also install control joints in key locations throughout the house, garage and driveway to further minimize and control the inevitable irregular cracking that will occur in concrete slabs.

FRAMING

Local framing contractor **Keith White** (KW Builders) and his highly trained crew of experienced carpenters and support staff, are well known for their high quality work. They take pride in their work, putting a great deal of effort into making sure the homes are framed "true and square".

Collins Company (www.collinswood.com) of Chester California is providing our framing lumber and TruWood siding. They have been leaders in sustainable forest practices for over 60 years. Collins was the first privately owned forest products company in the United States to be comprehensively evaluated and independently certified by Scientific Certification Systems under the principles and criteria of the Forest Stewardship Council. One of their mills is in nearby Chester and others are nearby. We will not buy foreign lumber that has been transported long distances.

Our walls are framed with Douglas fir (DF) lumber. While we could use the lesser 'Stud' grade, we instead use DF#2 and better, because of its superior strength and quality. All of our exposed wood beams are DF#1 and better. Our walls are framed with the studs spaced 16 inches o/c. Many builders have resorted to studs that are 24 inches o/c to save costs. Using studs at 16 inches o/c ensures stronger and straighter walls. After the framing is done and prior to the installation of drywall, the framing contractor checks all of the walls with a straight edge to make sure they are within a ¼ inch tolerance.

For our roof trusses, we use one of the most reputable truss companies in our area. The owner, **Jim Ratekin** of CFS Builders, uses the latest state of the art equipment to manufacture his trusses to exceed ANSI/TPI 1-2002, the national design standard for metal plate connected wood truss construction.

For roof sheathing we are using TechShield Radiant Barrier by Louisiana Pacific (www.lpcorp.com/radiantbarrier), a qualified Energy Star Partner. TechShield uses a patented aluminum layer on their plywood to minimize radiant heat gain in summer, and to minimize radiant heat loss in winter. TechShield blocks up to 97% of the radiant heat and can cut monthly energy bills up to 20%.

GARAGES

You will find that many homes will only have 20-foot deep garages, with a 7-foot high garage door. Most of the garages on our homes are typically larger, and are designed to accommodate larger vehicles. We fully insulate the walls and ceilings, and use only insulated garage doors. All this insulation helps to make the garage more comfortable and “user friendly” year-round. Insulating the garage also helps improve the comfort of the house, depending on how much foot traffic there is in and out of the garage. In addition, our garage walls and ceilings are fully finished and painted. The concrete floors in our garages are sloped to the garage door to allow the garage to be hosed out when necessary. Plans 5 & 10 have workshop areas in the garages and Plans 8, 9 & 10 have three car garages.

GARAGE DOORS

R.J. & Tyler Sharp of Sharp Garage Doors will be installing our insulated, carriage style doors made by Steelhouse Doors (www.steelhousedoor.com). Steelhouse Doors are made of 23-gauge steel and each will have a very quiet belt driven automatic garage door opener. These doors are also 8-feet tall to accommodate SUV or truck parking.

HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

Our HVAC contractor is **Fritz Lugenbeel** of Park Sheet Metal. In 2006, the California Energy Commission (CEC) enacted tough efficiency standards for all new homes. Fritz and his crew are helping us exceed those standards in every category.

	<u>CEC STANDARDS</u>	<u>SHASTAN STANDARDS</u>
AIR-CONDITIONING	13.0 SEER /11.0 EER No TXV	14.0 SEER/12.0 EER Includes TXV
FURNACE	80% AFUE No variable speed fan	92% AFUE Includes variable speed fan
INSULATED DUCTING	R-4.2	R-6.0
PROGRAMMABLE THERMOSTATS	Not required	Included
WHOLE HOUSE FAN	Not required	Included

SEER, or Seasonal Energy Efficiency Ratio: The higher this number is, the lower your cooling costs will be. The EER is related to the SEER, but may vary depending on the climate where you live. Again, a higher number means a more efficient air-conditioner. A TXV is a valve that regulates refrigerant flow based on need, thereby causing the cooling unit to operate at maximum efficiency.

AFUE, or Annual Fuel Utilization Efficiency: This factor is used to rate the efficiency of heating units. Our heating units are considerably more efficient than the already high California Energy Commission (CEC) standards.

Our ducting has a 42% higher insulation value (R-value) than the CEC standard. In addition, our ducts are clamped and caulked to reduce leakage. We also retain an independent rater to check each and every home we build to ensure that the leakage is less than what is allowed by CEC standards.

Programmable thermostats give you the ability to save 5% to 15% of your heating and cooling costs by automating the system.

Whole house fans give you the ability to cool off a warm house and attic with cool evening air through opened windows.

INSULATION

In our ceilings we use R-51 fiberglass insulation, while the minimum required by the CEC is R-38. Our exterior walls have R-15 fiberglass batts with one-inch rigid foam board insulation behind the stucco areas. This adds an R factor of 4 to the stucco walls. Counting the total wall assembly at the exterior walls with stucco we achieve R-19 when the minimum required by the CEC is R-13. We also insulate many interior walls at key locations such as bedrooms, bathrooms, kitchens and laundry rooms that are next to living space for noise reduction between adjacent spaces.

We have chosen local **Meeks Lumber** to provide and install CertainTeed insulation (www.certainteed.com). CertainTeed is committed to promoting sustainable green building practices. CertainTeed is a member of the United States Green Building Council and their products are manufactured with no formaldehyde. CertainTeed is third party tested and certified by GREENGUARD for superior indoor air quality. In addition to using high quality insulation, Meeks Lumber adheres to the ACM Residential Manual, Appendix RH - High Quality Insulation Installation Procedures, and Thermal Bypass Checklist Guide as published by the United States EPA.

LANDSCAPING

All of our homes have complete front yard landscaping. We have hired **Mike Hradecky, Landscape Architect and owner of Alpine Landscaping** to help us design every home and landscape it on an individual basis. Special attention is paid to solar shading, street shading, water conservation, storm water run off and low cost landscape maintenance. We are using Irritrol (www.irritrol.com) Smart Dial Series irrigation controllers for our homes. Smart Dial irrigation systems are Weather TRAK enabled. These wireless (no separate phone line is needed) irrigation controllers save water by reprogramming based on local weather data downloaded daily via satellite. This reduces over watering and runoff problems and saves thousands of gallons of water for a small satellite service fee of \$4 per month.

PAINTING

Russ Watson is our painting contractor. Along with his good eye for details, he will use only the highest quality Sherwin-Williams interior and exterior paints. On the interiors we use the environmentally preferable ProGreen 200 because it meets or exceeds the stringent GS-11 criteria and it is a low-VOC, low-odor formula. Our living areas are painted with a washable flat paint. The kitchen, bathrooms and all exterior doors are painted with industrial grade water based enamel. There is absolutely no lead in any of our paints. Our plaster areas are painted with a high quality latex paint. This helps reduce moisture penetration of the plaster areas. By painting the exteriors we achieve more true vivid colors and the new homeowner will have the ability to "touch up" later if necessary.

PLASTER

Our plastering contractor, **Dan Eckelbarger**, will be using a two-coat stucco system that is applied over a 1" rigid insulation foam board and a layer of wire lath, nailed to the studs through a layer of waterproof Kraft Paper. Shastan Homes spends extra money on a fine texture for the finish coat, as it looks better and catches less dust.

PLUMBING

All of our water lines are made of cross-linked polyethylene (PEX). Green Builder Magazine on 8/07 states; "Inert PEX pipe does not emit VOC's, is sustainable and environmentally friendly. It insulates against heat loss, and a well-designed system can speed water to outlets quicker than rigid piping, saving energy and water over the life of the home. PEX also has a longer life span than copper, is not affected by electrolysis, and does not transmit noise." Additionally we insulate all of our looped hot water pipes where they run through the attic space.

We take extra care to properly size our piping, to ensure adequate flow of water to our showers. Additionally, we use a special loop system with a re-circulating pump that can be set to run during times of day that you will need hot water most. This avoids wasting water and time while waiting for hot water to reach your faucet at the far ends of the house.

Our homes have tankless, on demand water heaters made by Rinnai (www.foreverhotwater.com). Rinnai tankless water heaters are the best alternative available to homeowners to reduce their residential energy consumption. We not only provide all natural gas water heaters and home furnaces, but we also provide gas pipes to the kitchen range, the clothes dryer and the fireplace.

PLUMBING FIXTURES

Our plumbing contractor, **Rod Imes**, has a well-trained crew that we have enjoyed working with for many years. They are installing all Kohler (www.kohler.com) toilets, tubs, sinks and faucets in these homes. Kohler is widely known in the industry for making custom home products that perform well and are visually appealing.

ROOFING

Terry Taylor, owner of Four Seasons Roofing, will be installing Oakridge Pro 40 shingles by Owens Corning Roofing (www.owenscorning.com). These architectural grade shingles have a 40 year limited warranty. They are extra weathering-grade asphalt shingles bonded together with a tough fiberglass mat core. They also have the industry's highest fire rating of Class A from Underwriters Laboratory.

RECYCLING

Long ago we made a commitment to encourage the Shastan team and our homeowners to recycle their solid waste when possible. First, we have recycle and regular garbage containers at every house when we start construction. We also have a special dumpster for wood only. Every contractor on our job site has made a written commitment to use them properly. Then we make it easy for our customers by providing recycle bins in the new kitchen cabinets. Since the garbage containers are already at the house, the rest is easy.

SECURITY

We have gone to the extra effort of pre-wiring our homes for future security systems. **Bill McNair**, owner of Defcon Security Systems, will be installing our Beam Central Vacuum systems and he will also install the pre-wire for our security systems. This gives our homeowners the ability to install a security system later if they wish, with minimal trouble and expense.

SOLAR POWER PRODUCTION

Our Glenwood Avenue project is the largest solar subdivision in the Chico area, and all 57 homes in the subdivision will have a solar power generation system. This feature will make our development stand out in the Chico real estate market.

In 2011 the State will require that all California homebuilders offer homebuyers the option of installing solar panels. Our customers are showing a growing concern about global warming, impacts on the environment and our need to lessen our dependence on fossil fuels. We have decided to include solar power generation systems as a **standard feature** at Glenwood Avenue.

Our solar power generation systems use roof-mounted solar panels with photovoltaic (PV) cells, and the systems are manufactured and installed by SunPower Corporation (www.sunpowercorp.com). The largest plans, 7 through 10, will have a 2.87kWp (kilowatt-peak) system, and the smaller plans, 1 through 6, will have 2.46 kWp systems. We chose SunPower to provide and install our solar power generation systems because they have so much to offer our homebuyers.

SunPower Corporation...

- provides the highest efficiency solar cells available today.
- is a world leader in manufacturing and installations of solar PV systems.
- provides Internet based monitoring of each solar PV system. In addition to enabling SunPower to service and monitor system performance, this would enable Shastan Homes and their homeowners to track solar power production.

And..... New homeowners who buy our homes with a standard solar power generation system are eligible for a **federal tax credit for up to \$2,000** for the tax year that they purchase the home.

WINDOWS, SLIDING GLASS DOORS AND SKYLIGHTS

When we designed our floor plans, much thought was given to the placement of windows and doors. An antiquated floor plan or improperly placed windows and doors may cause you some grief when you can't find a place for a favorite piece of furniture. A home with a well planned layout will also have better resale value if or when you need to move again in the future.

Miller Glass of Chico will be providing us with all of our windows, sliding glass doors and skylights. They will also be installing all of our mirrors, glass shower enclosures, cabinet glass doors and glass transoms over the interior doors.

The windows and sliding glass doors are manufactured by Alpine Windows (www.alpinewindowssystem.com). Alpine windows and doors are Energy Star Partner qualified. They were designated Energy Star Partner of the year three years in a row.

We are using Solarban 70XL glass in our windows and sliding glass doors, which is a revolutionary new Solar Control, Low-E glass that brilliantly combines the clear appearance of transparent, color-neutral glass with an unprecedented combination of solar control and visible light transmittance. Combining the Solarban 70XL with an insulating glass unit filled with argon gas results in a high performance system that will lower your cooling bills in the summer, as well as your heating bills in the winter.

We use quality skylights that are manufactured by Velux (www.veluxusa.com). They are Energy Star Partner qualified and well known for their quality product and energy conservation features.

NEW HOME SERVICES

Shastan Homes provides its clients with the personal attention necessary to get the job done right. We work directly with our homebuyers. Holli and Beau Anderson are available Mondays through Fridays, 8 to 5 by appointment. They are also available to meet at other times that may work better for you if necessary. If you need to speak to them immediately, **their phone number is 530-343-2641**. References are available upon request.

PLEASE USE THIS BROCHURE AS A CHECK LIST WHEN DOING YOUR HOME SHOPPING.
IF YOU FEEL SOMEONE ELSE IS DOING A BETTER JOB THAN WE ARE, PLEASE LET US
KNOW HOW WE CAN IMPROVE.