Skip Clark used a 40 by 40-ft. quonset building to cover the top floor of his new two-story house. Both ends of the upper floor are virtually all glass.

Low-Cost Two-Story "Quonset House"

When Skip Clark bought a used 40 by 40-ft. quonset building, he planned to use it for hay storage.

To everyone's surprise he ended up using it to cover the top floor of his new two-story house.

He did it because as he planned the house he realized it would be an inexpensive way to keep costs down.

The quonset building sits on top of the 10-ft. tall ground floor walls that stand on a cement foundation. The exterior walls are finished with Hardy concrete siding. The interior walls are finished with sheet rock.

Because the quonset overhangs the bottom floor by 12 in., rain runs off without ever touching the ground floor.

Clark sprayed 5 in. of polyurethane foam insulation on the outside of the steel quonset to insulate it to R-35.

"We then sprayed a latex rubber coating over the insulation with hard flint-like granules to give it a rough appearance and make a harder surface that would be impervious to birds pecking, etc.," Clark explains. "Inside the second floor, it's mostly open with the original steel walls which we like because of the brightening effect the reflective surface has. Little 4-ft. interior stub walls provide some room definition for the kitchen, office, half-bath, dining room and living room, which are located upstairs. The living room has a 13-ft., 2-in. ceiling."

The first floor contains three bedrooms, two bathrooms, a mud room, and a utility room.

Thanks to bargain windows Clark found at a local window dealer's boneyard (containing miscellaneous mis-ordered items), both ends of the upper floor are virtually all glass - especially the south end which opens onto a large deck.

The north end has a smaller second-story deck for access to a 30 by 10-ft. covered bridge leading to the road.

Because Clark made the window dealer an offer on his entire boneyard stock, he was able to get all 35 for $1,500, including two sliding glass doors. Their list price would have totaled $7,800.

"We've been going to marble, slate and tile auctions for years and picking up bargains, so we were able to put in all granite counter tops in the kitchen and all marble or slate floors on both stories," Clark says. "We did all the work ourselves, so it took us about 4 1/2 years to build, but the cost worked out to about $25 per sq. foot including all of the floors and countertops."

For heat, the family has a Monitor fuel oil stove on the bottom floor and an Efflu oil stove on the top floor. In an average year, they use about 300 gal. of oil.

To build their 2,880 sq. ft. home, the family spent a total of $73,000.

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Electric Cart Built Out Of Old Garden Tractor

Bill Wilson converted a garden tractor to electric power so he can drive it around at auctions and farm shows without bothering other people.

"It runs quiet and costs very little to operate," says Wilson, who started with an early 1980's Massey tractor.

Amazingly, he made his own electric motor using a Delco starter and the fields and generator out of a Chevy car. The motor, located under the seat, belt-drives the tractor's original transmission. A cable runs from it to a pair of 12-volt deep discharge marine batteries under the hood. To reduce the tractor's speed, Wilson mounted a small 3 1/2-in. dia. pulley on the motor and a 5-in. dia. pulley on the transmission. A foot-operated switch is used to put the tractor in motion. "Every gear has a constant speed. The only time I change speeds is when I shift gears," says Wilson.

He started out by removing the tractor's original engine, then cut the tractor in half and mounted a metal platform down low to make it easier to get on and off. To make the electric motor, he had to connect the armature in the starter motor to the roller bearings on the generator. One end of the armature shaft was too small to fit into the generator bearings, and the other end was too big. So he made a bushing to make one end of the armature bigger and turned down the other end to make it smaller.

He made the seat by covering sections of plywood with foam.

"It's fun to drive and runs quiet," says Wilson. "It always attracts a lot of attention wherever I go. In fact, I haven't been to an auction yet where someone didn't want to buy it. A lot of people who see it for the first time ask me where the motor is. When they see it, they can't believe how small it is.

"To operate the tractor, I put the transmission in gear and then use my foot to push the starter switch. I usually go in second gear. Top speed in third gear is about as fast as you can go at a real fast walk, and in first gear it just creeps along. The farthest I've driven the cart on a single charge is about three miles, which I think is pretty good. I've even gone to two-day auctions without ever having to recharge the batteries."

When Bill Wilson converted a garden tractor to run on electric power, he made his own electric motor.

Wilson says he came up with the idea because he goes to a lot of auctions and needed something to get around that would run quiet. "I had been using a garden tractor but sometimes it caused problems with the public address system. If the tractor got between the microphone and the remote speakers, the magneto on the tractor's ignition would cause a lot of static on the speakers.

"I mounted a 24 by 12-in. metal platform on back of the tractor so if I buy something at a sale I can carry it with me. It also comes in handy for hauling a cooler."

Why did he build his own electric motor? "Just to see if I could do it," he answers.

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Pat Prom's home-built Deere motorcycle has big implement-style wheels with spokes.

Home-Built Deere Motorcycle

A home-built motorcycle painted Deere green and yellow gets a lot of looks when Pat Prom, Eden Prairie, Minn., takes it to shows.

Prom built the motorcycle from scratch, using square tubing to build a frame. The first things you notice are the big implement-style wheels with spokes. The rear wheel measures 6.70 by 15; the front wheel is 4.00 by 18.

Power is provided by a 2-cyl., water-cooled gas pony motor off an old Deere 49 R diesel-powered tractor. The engine chain-drives the rear wheel via a right angle gearbox and clutch off the same tractor. The steering yoke is off a Honda 350 motorcycle, the tin seat is off an old manure spreader, and the fuel tank in front of it is off an unstyled Deere 37A tractor. The radiator is from a Deere Gator.

The Deere A originally was equipped with a 15-gal. kerosene fuel tank with a small 1-gal. gas "bubble tank" on back of it that was used to start the engine. Prom cut 1 1/2 ft. off the front part of the 15-gal. tank so it would fit. The cut-down tank is just for looks - only the 1-gal. bubble tank contains any fuel. The rear fender is off a trailer and the front fender is off another motorcycle.

"The pony motor didn't have a water pump or a magneto on it so I used the water pump and distributor off a Subaru car. The carburetor is off a Deere 110 garden tractor."

Prom also built his own Deere "Gator" out of a pair of old golf carts.

Prom also built his own Deere "Gator" out of a pair of old golf carts. Power is provided by a Honda 11 hp engine that mounts under the seat. The frame is built from 1 by 2 tube steel. The front end is off a Yamaha golf cart and the rear end is off a Harley Davidson golf cart. The rear wheels measure 10 by 12 and the front wheels are off a golf cart. The fenders are off an old Deere 110 garden tractor. The rig has two seats, both of them off old Deere garden tractors. A 30 by 34-in. manual dump bed mounts behind the seats.

"I built it mainly for show," says Prom. "I call it my Croc. It cost about $400 to build."

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