



Timber framers Tony Zaya, left, and Bruce Simmons, are preparing two timbers for donation to the Habitat project.

Timber framers from all over the world will unite to construct two houses for Habitat for Humanity in Hanover. The large, precision hand-worked beams are coming from Germany, Japan, England, France, and all over the United States. In four hours on Thursday, May 18, the men will hand-raise the 560 pieces which comprise the two buildings.

## Timbers speak universal language

### Two families benefit from builders' craft

By Kay Rohrer  
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At 8 a.m. on May 18 over 300 volunteers from the Timber Framers Guild of North America and Habitat for Humanity will converge on a property at Grandview Road near Black Rock Road in Hanover, York County, to erect two timber frame houses which have already been sold to families from Hanover and Seven Valleys.

It is time for the 750 members of the five-year-old Timber Framers Guild to hold their annual conference in Millersville, but this year they decided to make it a giving time as well. When the idea was presented the original response was so overwhelming that the group decided to do two houses. Since they have gotten the project rolling two national magazines and "This Old House" on CNN are committed to covering the unique event, as is the British Broadcasting Company.

Each member of the guild will donate a hand-prepared timber for the houses. The timbers individually take about one day to prepare. According to Tony Zaya and Bruce Simmons, partners in a timber framing business called Woodbutchers, the timbers must be carved out to 1/64th of an inch.

"Each piece fits only one place," said Simmons. "If it is off an eighth of an inch it will throw off the square and everything depends on being square."

There are 280 pieces in each frame, and each may have 6 to 10 joints where they have to meet exactly with the other timbers. "There's no margin for error. It has to fit," Simmons said.

Coordinator of the project was Tedd Benson, a timber-framer from New Hampshire who was one of about 15 who revived the craft. He sent blueprints of the house to each member and also sent them the specs for their individual timber and joints.

The pieces for the houses will come from Canada, two from Germany, one from a master temple builder in Japan, two from England and several from France. They are all being shipped to the site. They would usually be raised by a crane, but the framers are going to do the work by hand. They expect it to take four hours to have the buildings up and have the stress-skin on the outside. From there on it will be the job of the Habitat volunteers to finish the houses. The houses are expected to be ready for the new tenants by early Monday.

Zaya explained that timber framed buildings date back to the

sixth century. The Pagoda and the Golden Temple in Japan are both timber framed. In Europe churches, cathedrals, houses, and barns have been built with timber frame construction.

Timber-frame houses, churches or barns consist of large wood structural timbers which fit together with various mortise and tenon configurations, dovetails and scarfs to form the skeleton. The joints are held in place with one inch diameter hardwood pegs. The skeletal structure is wrapped with stress-skin panels which are a laminate of drywall, foam, insulation and plywood. The stress-skin offers a super insulated outer wall.

The interior beams will be exposed, but the walls will be dry-walled. During the construction they will follow a tradition by putting a pine bough in the peak of the house - a good luck tradition that is even followed through on the scale models they build.

The timber framers' convention will begin at Millersville University on Friday, May 19. Among the framers expected to attend are Lancaster County members, Zaya and Simmons, Charles Dougherty, Gordonville; William Jennings, Litz; William Recarde, Kirkwood and Reuben Riehl, Leola. Local members will help with the coordinating of the tim-

bers being shipped to the Habitat site.

Timber framing has been revived in the last 10 to 15 years. It is not post and beam construction, they are quick to point out, because post and beam can have mechanical connectors. Timber frame buildings have no mechanical facets. The Habitat houses will be built without nails or metal joiners.

A timber frame house has to fit tight and look good to the men who consider it as much an art as a business. "If it is properly built it is extremely strong," Simmons said. "Everyone in the guild is fussy about that."

A razor is used to draw the lines where the cuts will be made because even a pencil line can be too wide and inaccurate. The best tools for working the timbers are made by hand, Zaya said, and all the work is done by hand because that is the most accurate.

"It is all a personal pride," Zaya said of the timber framers craft. And the donation of love for Habitat is a matter of "donating time, labor and skill without relying on the government to do it for us."

Habitat for Humanity works on the premise that everyone should be able to buy a decent place to live. It is a nonprofit organization

which prides itself in not giving away charity. Volunteer labor is used to prepare the dwellings and donated material is sought. The working capital comes from church, individual and corporate donations and the mortgage payments from previously sold Habitat dwellings.

Habitat families are chosen according to need, ability to pay, and character. Need is based on the condition of their present housing. Ability to pay is based on stability of their income. Character is rated on their ability to handle the responsibilities of home ownership and willingness to participate in the program of Habitat. The buyers are required to complete 500 hours of work in the building of their own home and those of other prospective homeowners.

The houses are sold at cost and Habitat does not charge interest on the mortgage. Payments average around \$125 a month. The houses are not temporary. They are simple, but comfortable permanent homes.