

HAWAII

# RENOVATION

MAY 18, 2008

## Wayne's world

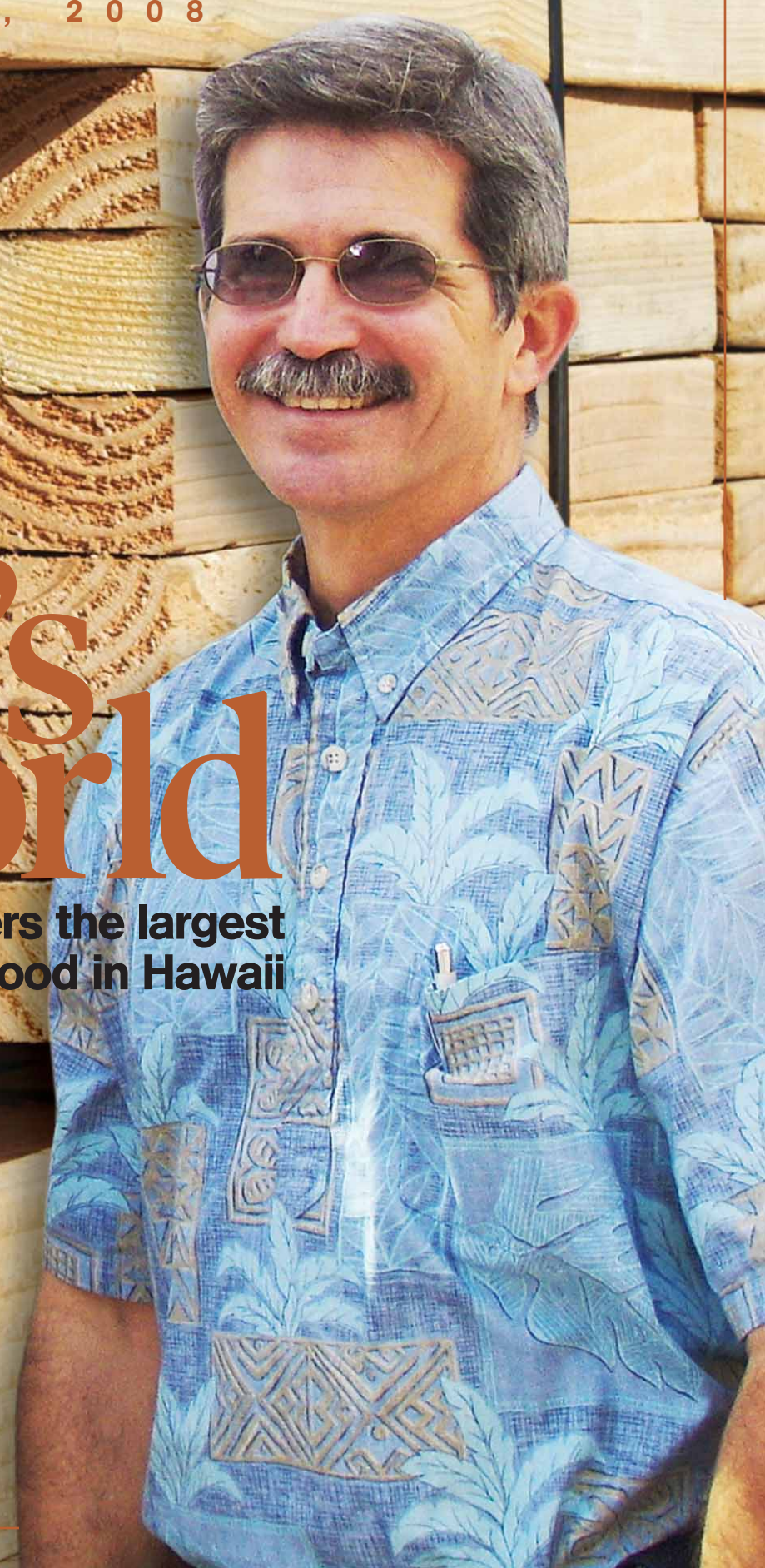
**Wayne's Lumber offers the largest selection of kiln-dried wood in Hawaii**

### INSIDE:

HOW TO AVOID HOME IMPROVEMENT SCAMS

KUKUI LIGHTS: THE LATEST IN LIGHT FIXTURES

**Wayne Rapozzo**, owner of Wayne's Lumber, has seen to it that his company stocks premium lumber, timber and plywood products



# Local company promotes kiln-dried wood

## Wayne's Lumber offers huge supply of treated wood

The beautiful tropical climate for which Hawaii is world renowned — abundant sunshine, marine air, gentle rains, warm temperatures — also makes it an extremely harsh environment for building materials. Whether it is concrete, steel, plastic, wood or any other material, there are environmental factors that will deteriorate, degrade and eventually make each one useless if steps are not taken to prevent it.

This is why local building codes and common sense require that wood products for building construction be preservative treated. Without preservative treatment, lumber and plywood are susceptible to attack by rot, decay and termites. All of these problems can be controlled by using the newer, low toxicity wood preservatives. These are mostly copper or boron-based, water born systems. Water born means that the active ingredients are dissolved in water and then are injected into the wood using a vacuum-pressure process. This is an efficient, economical and uniform way of applying the wood preservative.

Unfortunately, since the preservative is carried in water, it leaves the finished product very heavy and saturated with water.



Dedicated to quality service, the staff at Wayne's Lumber pose for a photo in their lumber yard in Kaneohe.

This is where Kiln drying after treatment becomes a great benefit. Kiln drying is a mechanical means of extracting the excess water from the preserved lumber and plywood.

There are many positive reasons to kiln dry material. One of the most noticeable is the significant reduction of weight. An average sheet of plywood measuring 4 feet by 8 feet can easily weigh in excess of 100 pounds af-

ter treatment. To safely handle that panel could take two or more persons. For the professional builder with specialized tools, construction knowledge and trained labor, this added weight is generally not an issue. However, for the average do-it-yourself-er, it might put some projects beyond their capabilities.

Even the pro-builder can benefit from the lighter weight. The lighter material is quicker and

easier to install, which reduces labor costs and also makes the job safer by reducing the chances of and on the job injury associated with heavy lifting.

Another significant benefit is that dry material doesn't mold. Mold cannot develop unless the right conditions are present. Needed is a food source, such as wood sugars; favorable temperature, which Hawaii has; and sufficient moisture.

Kiln drying treated lumber and plywood removes the moisture, effectively preventing mold growth. The kiln drying process also sterilizes the wood products. Most organisms — such as bacteria, mold spores, termites, etc. — cannot survive temperatures exceeding 133 degrees Fahrenheit. Commercial kiln cycles for treated lumber and plywood run between 150 and 160 degrees Fahrenheit. So long as the kiln-dried product is not allowed to become re-wetted, most wood-destroying organisms cannot re-establish themselves. Heat sterilization in conjunction with preservative treatment makes a durable and long lasting product that extends the life and protects the value of the home or structure.

Another benefit of kiln-dried material is dimensional stability. Once the wood product is kiln-dried, there is very little change in size due to continued drying. Kiln drying minimizes shrinkage, warp, twist, cup and bow. What this means is less chance of nail "pops" and fewer cracks in dry-wall along with straighter walls and fewer "opened" seams, giving a better quality finished product with less call backs and fewer customer complaints.

Other less obvious benefits of kiln drying are better adhesion of construction glues and better nail and screw "hold." Dry lumber has a higher strength value

SEE WAYNE'S, PAGE 11

# Wayne's

FROM PAGE 3

than wet or green lumber. This means less chance of "squeaky" floors or "groaning" walls.

Also, by using kiln-dried lumber, the air-conditioning unit in a new home works less to extract and expel moisture from the interior of the house.

This may not be a large savings for one dwelling, but magnified for the thousands of homes

built every year in Hawaii, it becomes more significant. Also, by lessening the initial moisture and humidity in the home, it lessens the chance of mold or mildew developing on drywall or moldings.

The use of dry floor sheathing under hardwood floors will minimize the chance of swelling which leads to waves and open seams. This is especially true with some of the more exotic and expensive hardwoods, which are extremely sensitive to moisture changes. Once they are sealed, any moisture left underneath is trapped,

and that can cause problems. Using a dry sub-floor even benefits tile and vinyl floors as there is less chance of the grout or adhesive failing due to excess moisture under the finished floor.

Using dry roof sheathing also has advantages. The dry sheathing is much safer for the carpenters and roofers to work on as it is less slippery than non-dried sheathing. It also tends to lay flatter than un-dried panels with less nail "pull" associated with the side exposed to the sun drying and shrinking faster than the non-exposed side, causing the

panel to "curl" much like a leaf will do when left out in the sun.

Most times when kiln-dried lumber or plywood is required, it must be special ordered from the mainland. This can take from six to eight weeks from order placement to delivery. Most builders or do-it-yourselfers don't want to wait that long and will use a locally available "wet" treated product, since it can be ordered and delivered on the same day.

This is starting to change now that Wayne's Lumber in Kaneohe is stocking a wide variety of premium lumber, timbers and

plywood products that are preservative-treated and kiln-dried to the standards of the American Lumber Standards Committee.

Currently, Wayne's Lumber is the only vendor in Hawaii carrying any significant amount of kiln-dried treated wood products. There are a few companies who specialize in hardwood floors that keep a limited stock of floor sheathing on hand, but this is usually for their own jobs.

Wayne's Lumber is located at 45-552 # C Kamehameha Hwy behind Yamashiro Building Supply in Kaneohe, 247-5999.