

KILN DRYING - ANOTHER STEP IN THE TIMBER INDUSTRY

CARL EBY'S KILN

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Clear Spring, Maryland's gently rolling farmlands typically host fields of corn during the summer months. Red brick farm houses, barns, nursery's, and small church buildings complement the pasturelands and fields of corn, wheat, and soybeans that stretch along Maryland Route 68 as far as one can see. A small black mailbox lettered "Carl's Kiln" is not a prominent marker along Route 68, but it is one that points the way to another important business associated with Western Maryland's timber industry.

When driving up Carl's lane, one first notices stacks of neatly arranged hardwood lumber forming a picturesque border to the surrounding cornfields. Near the stacked lumber that waits in various stages of the drying process stands a large metal building enclosing a wood-fired kiln. A soft humming sound, the result of fans creating an air flow through the kiln, is the only noticeable noise on the site. Proprietor, Carl Eby, offers friendly greetings to the customers as they arrive on the parking lot.

Carl explains his association with the lumber industry began with employment in a nearby planing mill that also offered kiln services. "The owner became so busy at the millwork that he couldn't keep up with the kiln. I asked the owner if he believed a kiln business would be successful, and he said, 'Yes.' So, I started my business in 2001. I also wanted a business that would involve the family and the kiln would meet that expectation."

Carl explains the kiln's primary purpose is to remove moisture from the freshly cut timber in a controlled manner so that it will maintain its intended form. According to Carl, "There are three main factors to control in a kiln



operation: air flow, temperature, and humidity. The last two are the ones I need to monitor in the drying process."

Following the initial outdoor drying process that takes two to three months, the wood is moved inside the kiln. Maximum capacity of the kiln is 30,000 board feet. The kiln drying process begins when warm air, fueled by a wood burning furnace, is forced through the stack of lumber in the kiln. To closely monitor the drying process, sample boards are cut and weighed on a small scale outside the kiln door. "I weigh the sample boards and calculate the moisture in them once each day because I am always looking for a given moisture loss. If I'm

not getting that loss, kiln time is being wasted. If the drying process is too fast, the boards will crack, twist, and warp. Typically, I start the kiln cycle at 100 degrees and then move it up to 170 degrees at the end. We also keep a close eye on humidity. Three box vents on each end of the kiln serves to pull fresh air in one side while exhausting it at the other end, thereby regulating the humidity mixture. A nearby controller/recorder instrument, equipped with settings for temperature and humidity, allows for adjustments to be made by the operator. "We can dry about 50,000 board feet each month and we keep about 200,000 board feet on hand in our yard."

Carl's customers live within a 100-mile radius of Clear Spring and he knows each one personally. "We custom dry lumber for five regular customers, and they all live nearby." Religious faith, family, and customers are key ingredients to Carl's life and business. "We are in our work for the benefit and blessing of others."

