

BY DERMOT MACK

Installing Bamboo Flooring

A hot "green" product, expect bamboo to be flooring one of your projects soon.

Home builders and renovators in Western Canada are hearing more requests for bamboo flooring this year — driven primarily by environmental concerns and a search for a unique look.

"Bamboo is priced lower than oak or cherry hardwoods and it wears like iron," said Vancouver-based renovator **DOUG KERR**, who has been using the product in kitchen renovations. Studies have shown, in fact, that bamboo is 13 per cent harder than red oak.

The price rises and demand falls going east, but high-end builders contacted in Ontario are eyeing it both as a trim material and for full floors because it remains an exotic product that can differentiate a project. Two major Home Hardware builder supply centres in and near Toronto said they have had less than two requests for the material in the past year. "We don't even stock it yet," noted a buyer for Downtown Lumber in Toronto.

Most suppliers treat the bamboo with aluminum oxide and acrylic urethane with UV cure, which gives a resistance to water, mildew, insects and wear.

Bamboo has one big marketing advantage over conventional hardwoods in today's environmentally-conscious world: it is a rapidly renewable grass, not wood. Bamboo produces new shoots each year and is harvested from controlled "forests" within four to five years. The stuff grows like a weed.

Primarily imported from China, bamboo can be bought in slim boards or planks that can be stained to nearly any colour.

The only apparent disadvantage with bamboo is that it is quite brittle. A sharp item falling on it can nick the wood, but this can also be seen in other hardwoods.

Installation

Installing bamboo is not much different than laying regular hardwood and it can be laid over radiant heating if normal care is taken (see below). The planks are milled like most hardwood planks, in tongue-and-groove fashion.

Bamboo flooring should be allowed to

acclimatize on site a minimum of three days. The acclimatization period should also be at expected normal room temperature and humidity levels before and after installation. Damp or cold conditions before installation should be avoided.

Because bamboo is a natural fibre, variations in colour can occur. Each box should be inspected for differences in colour and staggered throughout the floor.

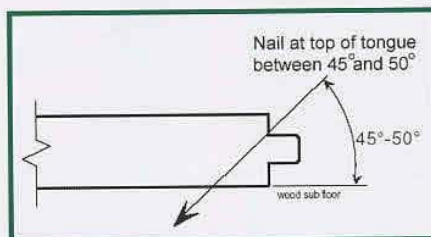
Wood sub-flooring surfaces must be clean, dry and, if gluing the flooring, free of contaminants that would interfere with an adhesive bond. Sub-floor or underlayment nailing surface also must be level and smooth prior to installation of flooring.

For optimal installation, it is best to provide 3/4" plywood as nailing substrate or for a glue application. Or use 5/8" plywood for 12-inch on-centre and 16-inch on-centre floors and 3/4" plywood for 24-inch on-centre floors. (Optimum sub-floor is 1-1/8" plywood over joists at 16-inches on centre.)

Concrete sub-floors must be tested for moisture and a vapour retarder such as 6 mil polyethylene film should be placed in crawl spaces. Surface must be smooth and free of debris, oils, grease and solvents.

Nailing down

Flooring should be square with the space and parallel to its longest dimension. Leave 1/2" expansion space from base plate or wall. Starter rows should be held firmly in place by wedging or blind nailing. Once starter rows are secure, additional rows should be blind nailed directly above the tongue at a 45- to 50-degree angle to the face. Fasteners should be spaced at



10- to 12-inch intervals per plank. Nails or cleats should not be placed closer than six inches from the end of planks to prevent splitting.

Glue-Down

If a glue-down application is the method chosen, use a premium wood flooring adhesive. Flooring should be square with the space and parallel to its longest dimension. Leave 1/2" expansion space from base plate or wall. Starter rows should be held firmly in place by wedging or blind nailing. Once starter rows are secure, use adhesive in a Wet-Lay or Walk-on-Work method of installation.

Wet-Lay Method: Apply adhesive to substrate with suitable trowel. Immediately place flooring onto "wet" adhesive.

Walk-on-Work Method: Apply adhesive to substrate with suitable trowel and allow it to develop tack (may take an hour or more depending on temperature and humidity). Install flooring onto "tacky" adhesive. Immediately roll finished installation with a roller. Room, flooring and adhesive should be conditioned at room temperature for 72 hours before and after installation.

Over radiant heat

The following installation systems can be used successfully over radiant heat according to the U.S.-based National Wood Flooring Association:

- direct nail-to-subfloor,
- tongue-and-groove direct nail-to-sleepers,
- double plywood floating,
- single layer of plywood on sleepers, and
- glue-down engineered/laminated or parquet.

When the concrete has cured, turn the heat on, regardless of season, and leave it on for at least five to six days before installation of the flooring. The radiant heat system should remain in operation after installation.