

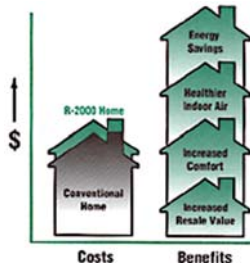


R-2000 Overview

The R-2000 home is recognized as leading edge construction that has had an impact on Canadian housing technology through the "trickle-down" of technologies to conventional construction. The houses built today are much improved over those built a generation ago, and include some technologies that were pioneered in the R-2000 program launched in 1982.

Homeowner Benefits of R-2000 Homes

- ♦ healthier indoor air quality (Health Canada reports 30% improvement in health symptoms)
- ♦ improved comfort
- ♦ independent quality assurance by inspectors licensed by the Government of Canada
- ♦ reduced energy bills
- ♦ reduced greenhouse gas emissions (by 20%)
- ♦ more resource efficient



The R-2000 Technical Standard

The technical standard contains requirements for:

- minimum energy performance standards
- indoor air quality
- environmental responsibility
- quality assurance

Energy Performance:

An annual energy target for heating and hot water energy use is calculated for each house, by HOT2000 computer analysis. The performance standard encourages choice, innovation and measures suited to each builder. Most home designs can be modified to meet performance requirements. This generally means higher insulation levels, where possible optimizing for passive solar gains, high-performance windows, and/or higher efficiency mechanical equipment than may be standard practice. There is also a minimum required air tightness confirmed by testing when the house is completed.

Indoor Air Quality

To achieve superior indoor air quality, a continuous mechanical ventilation system to provide fresh air to all rooms is required. Typically this means using a Heat Recovery Ventilator. Where combustion equipment is used, it must be non spillage-susceptible and measures must be taken to prevent building depressurization. As well, a "pick-

list" of healthier building materials and finishes is offered to reduce off-gassing.

Environmental Responsibility

To reduce the impact a house will have on the environment, it must not only have a low energy consumption, but also use less water, generate less sewage, and be built in a manner to reduce construction waste. That is why water-efficient plumbing fixtures must be used. A "pick-list" of building materials that reduce waste and/or which have recycled material content is also provided.

Quality Assurance

Quality assurance plus training is central to the R-2000 program. This includes training and licensing of R-2000 builders; training and licensing of ventilation and mechanical equipment installers, plan evaluators, air leakage testers and inspectors. Independent third party evaluation, testing and inspection of each R-2000 Home are done to ensure that it complies with the R-2000 Technical Standard

R-2000 Certification

Homes that comply with the standard are issued a certificate by NRCan to the homeowner upon completion of the final inspection and tests. A central registry is maintained in Ottawa.

Requirements for Participation

The R-2000 program is open to all professional builders who are prepared to take a builder workshop (the building technology course offering for CHBA-BC's RHP program) and maintain their status with periodic update courses.

Plans must be evaluated before construction for compliance with the technical standards. The first home built will receive a pre-drywall inspection and a final compliance inspection. At completion, the house is also tested by a blower door test to ensure compliance with the air tightness standard. The mechanical ventilation system must be installed by a qualified installer, who must sign off a form indicating compliance with the CSA F326 standard. At completion of construction, the builder signs a final builder report saying that construction was done according to the technical standards. 🏠

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Can you tell the Difference?

Some of British Columbia's finest homes are using a product that looks like wood, but isn't.

When homeowners are asked what they value most in a home - character, security and safety top the list. Canadian homebuilders are taking notice of a product that meets these needs and are differentiating themselves by using it on their homes. James Hardie fiber-cement siding provides the charm and character of natural wood without the maintenance hassles and unlike vinyl siding, resists damage from impacts, high winds and fire.



Cited as the fastest growing siding brand in North America, the company pioneered the development of fiber-cement technology. It has been installed on over 3 million homes in the US and Canada. Its proprietary formulation won't rot, crack or warp and its dimensional stability enables it to hold paint up to 15 years, making it one of the lowest maintenance exteriors around.

The company credits its success to operating the only fiber-cement research and development center in North America. Its scientists and engineers have over 20 years experience in fiber-cement technology and hold the products to strict testing standards. They are continually modifying and enhancing the company's proprietary technology and manufacturing processes to ensure that James Hardie is producing, or is at the cutting edge of producing, the most durable, long-lasting siding products currently available.

By partnering with James Hardie, for Whistler's Envirohome with a Difference Rod Nadeau says he is confident that the company has the expertise to stand behind its 50-year warranty against rotting, cracking, warping and delaminating. 🏠

For more information on James Hardie siding, call 1-866-4HARDIE or visit www.jameshardie.com.