

H

OME 2000



BUILDING YOUR HOME FOR LIFE

an affordable, healthy home that

adapts to your changing lifestyle

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A Fresh Idea in Housing

Home 2000 showcases some of the most innovative yet practical ideas in housing today. Ideas that meet your need for an affordable, comfortable, high quality home. Design that accommodates your current lifestyle and anticipates your future one, so that you never have to move.

Using FlexHousing and Healthy Housing concepts, Home 2000 shows you how to create a home in which you can be comfortable for life.

The two-story plus attic, 2,000 sq. ft. house was constructed by Britco Structures Ltd. at their indoor building site in just over a month. It was built in six discrete modules that were then interconnected at the construction site.

The home is designed to fit a typical urban lot that is 33 ft. by 122 ft. with rear lane access. It has two main living floors, a convertible attic space and an optional basement. Sound like typical design? Not really! Depending on your needs, Home 2000 can convert from a four-bedroom, single family home to a code-compliant duplex.

The creative ideas in Home 2000 were the result of a team effort by Canada Mortgage and Housing Corporation, British Columbia Institute of Technology, Greater Vancouver Home Builders' Association, Canadian Plywood Association, UBC School of Architecture and a host of other product and service providers.

When the B.C. Home Show ended in October 2001, Home 2000 was relocated to BCIT where it will be open to the public for tours at designated times.

A Home for Life

Home 2000 addresses key housing issues facing today's homeowners: families in flux, concerns about personal health, the environment, durability and affordability. In response to these needs, Canada Mortgage and Housing Corporation (CMHC) developed the FlexHousing and Healthy Housing concepts used in Home 2000's design.

It's an affordable, durable, healthy and environmentally conscious home that is designed to change easily as the lifestyle of its occupants change. Using off-the-shelf technology, a flexible design, and health-conscious, high quality building practices, Home 2000 shows you how to create a home in which you can be comfortable for life.



FlexHousing: Adapts to Your Needs

If you never want to move again, FlexHousing design is for you.

It's a new and innovative approach to housing design developed by CMHC. FlexHousing responds to the needs of today's families, which contract and expand as single-parent households become blended families, adult children leave home, and aging parents move in. It's design that supports independent living for senior citizens and people with disabilities. It's design for life.

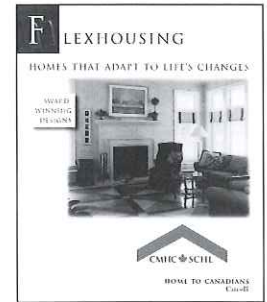
The key to flexible housing design is to think about what your long-term requirements may be before you build or renovate, and to then build in the necessary features during construction. As your lifestyle changes, your home can then be easily and inexpensively adapted to suit your needs.

Adding the right features now can save you time and money later, and help you avoid the heartache and inconvenience of leaving a neighbourhood you've come to know and love.

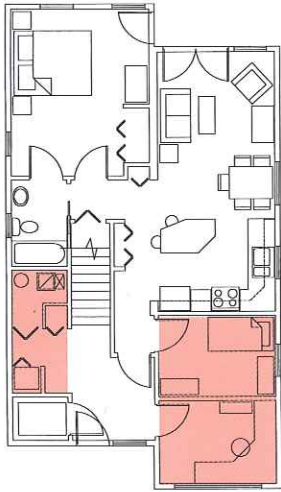
For example, in Home 2000 space was effectively preplanned so that a large, single bedroom could become two rooms. Wide doorways and hallways make it easy to move furniture in and out, give the home an open, airy feel, and make it possible for a wheelchair to manoeuvre should a family member ever need one. In the kitchen, a simple upgrade to the sink counter ensures that it can be used safely and comfortably by anyone - short or tall.

One of the home's most exciting FlexHousing features is its floor plan - it can convert from a four-bedroom, single family home to a code-compliant duplex with two bedrooms per unit. Creative preplanning of the mechanical and electrical systems means that the air supplies to each duplex suite are separate - odours and fires can't travel. It also means that the suites are relatively soundproof.

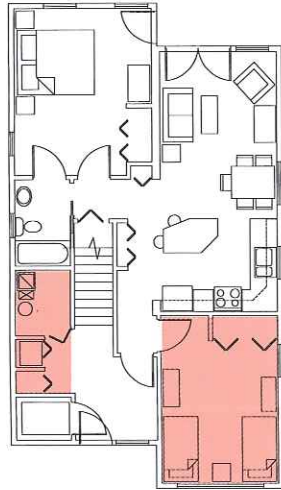
The house is designed to follow a family throughout its entire lifecycle. Young homeowners can rent out one suite as a mortgage helper, then reclaim the house as their family grows. When adult children head to university, they can offer them the suite, and later still, can use it to supplement their retirement income. With FlexHousing there are as many possibilities as there are living arrangements.



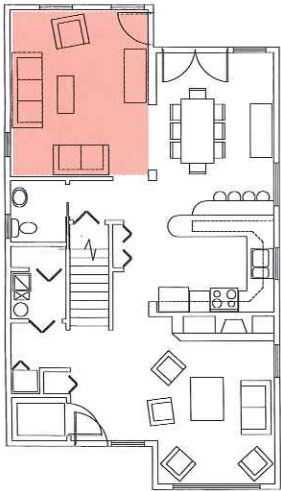
TO ORDER THIS GUIDE, SEE THE ORDER FORM IN THIS BOOK



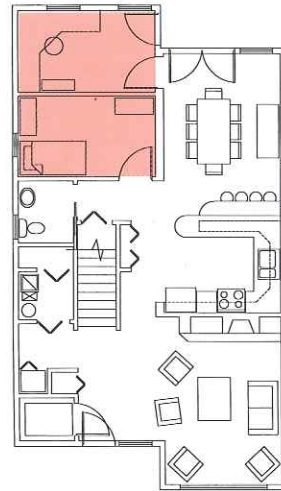
**1ST FLOOR
DUPLEX
OPTION A**



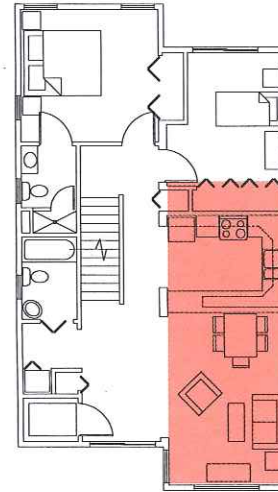
**1ST FLOOR
DUPLEX
OPTION B**



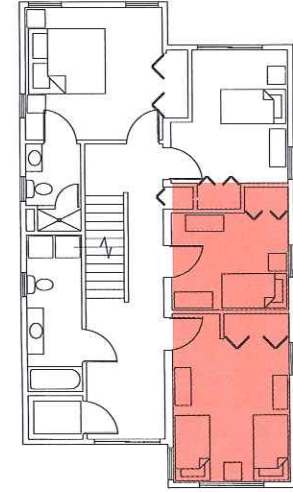
**1ST FLOOR
SINGLE FAMILY HOME
OPTION A**



**1ST FLOOR
SINGLE FAMILY HOME
OPTION B**



**2ND FLOOR
DUPLEX**



**2ND FLOOR
SINGLE FAMILY HOME**

FlexHousing Floor Plan

Home 2000 can convert from a four-bedroom, single family house to a code-compliant duplex with two bedrooms per unit. You can also add a small first-floor office or bedroom at the front or back of the house, or a large first-floor master bedroom with an ensuite bathroom. For maximum sunlight, the living room can be located at the front or back of the house.

Near the entrance, stacked closets on the first and second floor can be turned into an elevator shaft. A chair or platform lift can easily be installed on the straight-run stairs.



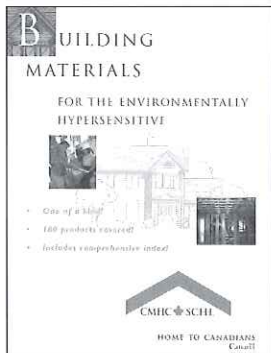
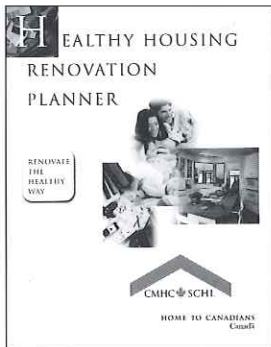
Healthy Housing: Good for You and the Environment

Did you know that indoor air can be more polluted than the air you breathe outside? Facts like that are why CMHC developed the Healthy Housing concept. It's an approach to housing that considers the effect of your home on your health and on the environment.

Poor indoor air quality can trigger asthma and allergies, and it can also be the cause of common ailments such as a stuffy nose, headaches, and fatigue. The irritants floating in your home's air may range from relatively minor ones, such as dust mites and animal hair, to the more serious problems of mould and gasses from building materials, furnishings, cleaning products, and heating systems.

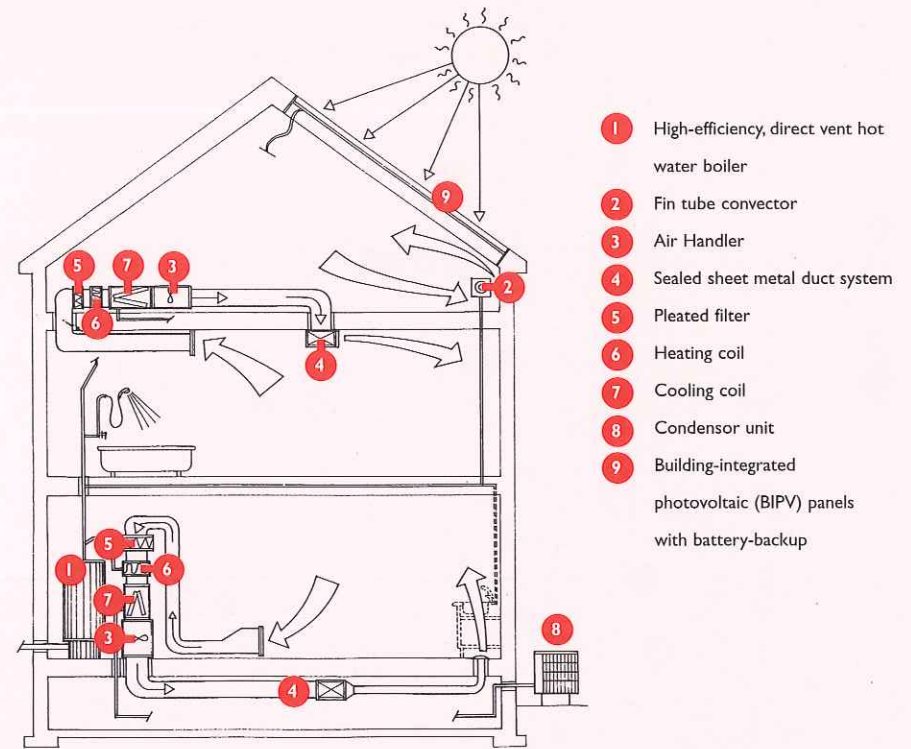
A healthy home is one that helps you breathe easier. It's well ventilated and furnished with materials chosen to reduce off-gassing. For example, in Home 2000 a heat recovery ventilation system supplies fresh air to all living spaces, and exhausts moist, stale air from the bathrooms and kitchen – especially benefiting people with asthma or other respiratory conditions. Low-emission plywood and finishes, hardwood and ceramic flooring, solid wood cabinets, mouldings and baseboards also help to keep the air clean.

TO ORDER ANY OF THESE PRODUCTS, SEE THE ORDER FORM IN THIS BOOK



Heating and Cooling

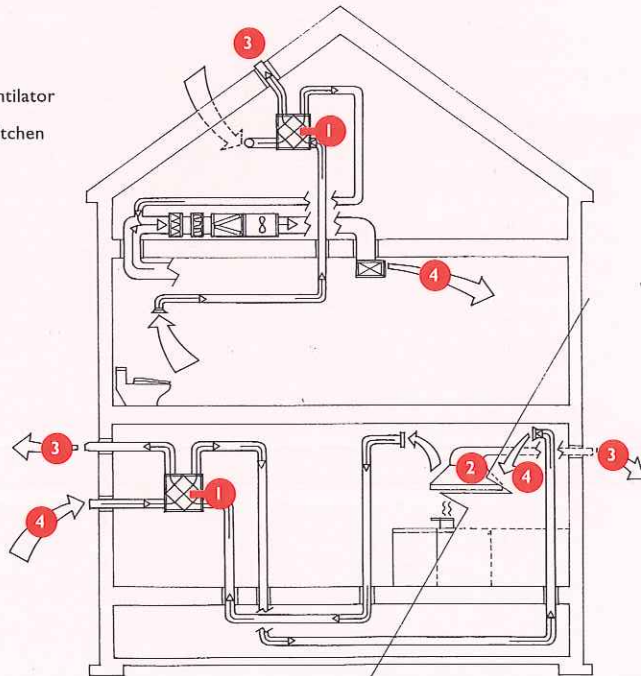
The boiler unit feeds hot water to the two separate heating coils and air handling units located on the main floor and in the attic. The warmed air is then distributed through ducts. The two separate systems for each floor ensure that air, odours, sound and fires don't travel between floors. The system also includes provision for summertime cooling.



Ventilation

A heat recovery ventilator (HRV) operates continuously at low or medium speed to supply fresh outside air to all living spaces, and exhaust moist, stale air from the bathrooms and kitchens. With the flick of a switch, you can increase its speed to quickly clear stale air from a room. The heat from the outgoing stale air is transferred to incoming fresh air – lowering your energy bill. As with the heating and cooling system, separate HRV systems on each floor ensure that air, odours, sound and fires are contained.

- 1 Heat recovery ventilator
- 2 Outside-vented kitchen range hood
- 3 Stale air exhaust
- 4 Fresh air supply



A healthy home is also energy and resource-efficient. Home 2000 uses low-volume toilets and energy-efficient appliances, lighting and windows. If the floor plan is oriented to take advantage of the sun, the high-efficiency hot water heating system can be supplemented by nature.

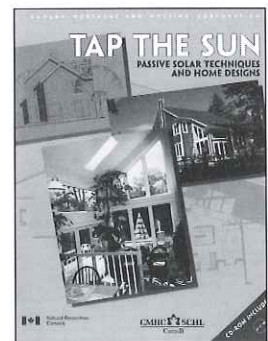
Solar energy can also be used by the building-integrated photovoltaic (BIPV) roof panels to supply most of the home's electricity. If they create a surplus, the BIPV panels can even feed back electricity to the main power grid for use by others! You may think that systems like this are out of reach, but they're not. Affordable, off-the-shelf technology is available in a range of sizes.

Two other key Healthy Housing features in Home 2000 are a durable building envelope, which ensures that moisture doesn't go where it shouldn't, and earthquake-resistant design.

Durable Building Envelope: Keeps You Warm and Dry

Your home's building envelope is all that stands between you and the elements. With a well-designed building envelope you're comfortable all year round, and use less energy for heating and cooling - lowering your operating costs. Durable, long-lasting materials mean that you conserve resources and save on maintenance.

Home 2000's envelope - the exterior walls, roof and foundation - is airtight, well insulated and uses energy-efficient windows. The home was built in modules in a weather-protected factory setting, a method that ensures tight quality control and a dry building. It's constructed of long-lasting materials such as a standing seam metal roof, fibre-reinforced cement siding, and pressure-treated wood decking.

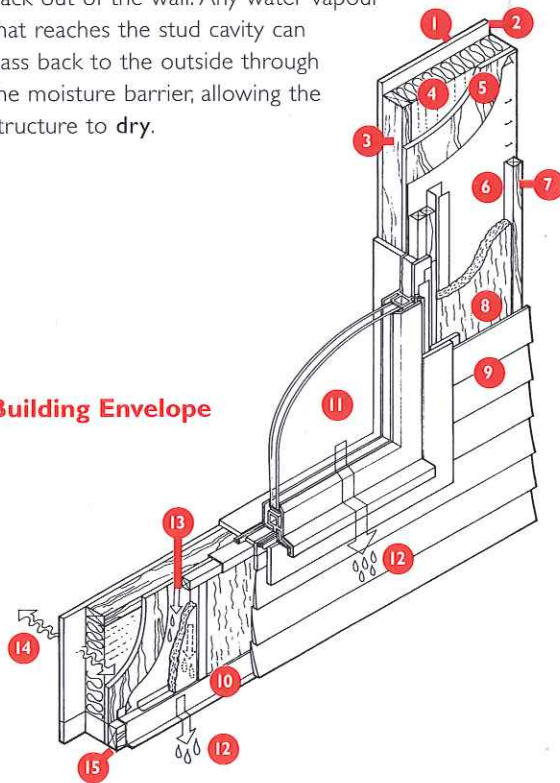


TO ORDER THIS GUIDE, SEE THE ORDER FORM IN THIS BOOK

To really be durable, your building envelope must effectively manage moisture. Large amounts of trapped water can cause your home to prematurely degrade; symptoms such as mould, mildew, and wood rot may appear. There are many ways for water to get into your building envelope: rain and groundwater can penetrate, water vapour from cooking and bathing can pass through the envelope and condense on cold surfaces, and wet lumber or other building materials may be used during construction.

Home 2000 keeps water out with a rain screen wall assembly and CMHC's 4-D moisture management principle. **Durable** building materials are used in areas of the envelope that often get wet. Water is **deflected** from the envelope by roof overhangs, canopies, flashing and bevelled siding. It's **drained** by a cavity behind the cladding and directed down to a metal flashing and back out of the wall. Any water vapour that reaches the stud cavity can pass back to the outside through the moisture barrier, allowing the structure to **dry**.

Building Envelope



- 1 Low-VOC, water-based paint over low-VOC vapour-retarding primer
- 2 16mm (5/8") gypsum wallboard
- 3 38mm x 89mm (2"x 4") kiln-dried SPF stud wall
- 4 RSI2.47 (R14) rockwool batt insulation
- 5 13mm (1/2") plywood sheathing
- 6 Housewrap moisture and air barrier (air tightness of 1.5 ACH @ 50 Pa)
- 7 38mm x 38mm (2"x 2") pressure-treated strapping
- 8 RSI0.95 (R5.4) rockwool draining insulation
- 9 Fibre-reinforced cement bevelled siding
- 10 Preformed metal flashing
- 11 High-performance rain screen windows
- 12 DEFLECTION of water
- 13 DRAINAGE of water
- 14 DRYING of water vapour
- 15 DURABLE materials in moist locations

⚡ Earthquake-resistant Construction: Stands up to Disaster

In a disaster, your home is your refuge.

You can take steps to improve your home's chances of surviving an earthquake - steps that will increase your personal safety during the quake, and your chances of being able to live in the house afterwards.

For most homes the cost of seismic upgrading is relatively inexpensive, and insignificant when compared to the cost of catastrophe. When deciding what to do keep this in mind: any amount of upgrade is an advantage - even minor improvements can make the difference between repair and ruin.

Earthquake-resistance is built into the design of Home 2000. The house is bolted to the foundation and exterior walls are reinforced with plywood sheathing. To ensure good load distribution, the builders used ample quantities of nails that embed securely, and metal ties to attach floors and walls. The water tank is strapped down to prevent it from tipping over, and major appliances are restrained to stop them from sliding across the room. The upper kitchen cabinets have latches to prevent the contents from spilling out during an earthquake.

Affordability is Key

Affordability is a key principle of FlexHousing and Healthy Housing.

While incorporating these features slightly increased the capital cost of Home 2000, homeowners can expect to recover the cost, and actually begin saving, through reduced energy and maintenance costs.

And with FlexHousing design, the money you invest now is usually significantly less than what you'd have to spend later on extensive renovations. Even better, a house like Home 2000 can be turned into a revenue generator if it's converted to a duplex.

Last but not least, if you do decide to sell, because your home suits the needs of a wide range of Canadians and is less expensive to maintain and operate, it's attractive to purchasers.

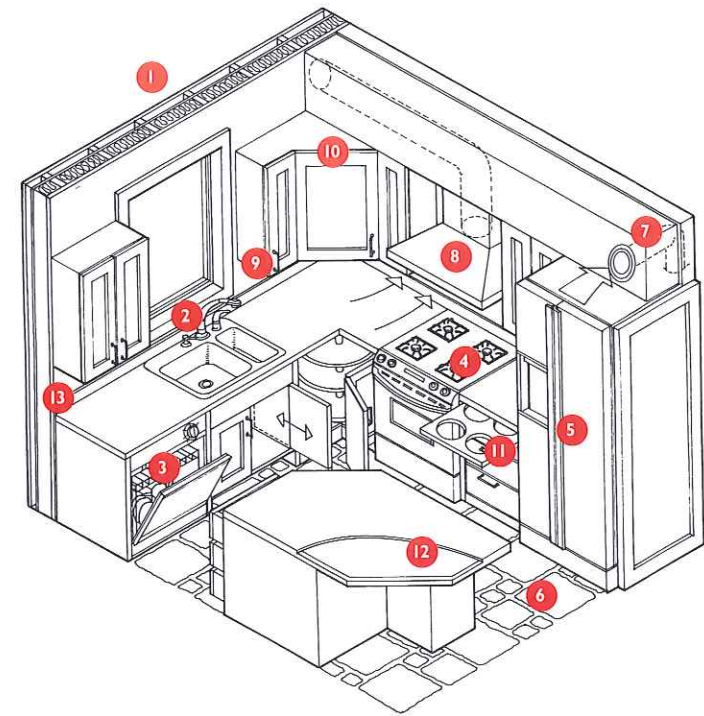
To Find Out More

For more information about FlexHousing, Healthy Housing, durable building envelopes and earthquake-resistant design, contact CMHC's B.C. and Yukon Business Centre (604) 731-5733 or visit our Web site at www.cmhc-schl.gc.ca. You can order a range of publications on these topics – look for the order form in this book.

Kitchen Tips

If your kitchen is like most people's, it's the centre of activity in your home. It's important that everyone in your family can use it safely and comfortably. It's also a good place to start saving money by making it more resource and energy-efficient. Here are some FlexHousing and Healthy Housing tips from CMHC to help get you started:

- Energy-efficient dishwashers and refrigerators cut energy consumption by at least 15%.
- Aerator taps can reduce water consumption by more than 60%.
- Microwaves are an energy-efficient cooking source.
- Lever and D-shaped handles and faucets are easy for stiff fingers to operate.
- Task lighting and non-slip flooring make your kitchen a safer place to work.
- A continuously operating Heat Recovery Ventilator (HRV) controls humidity and exhausts cooking odours.
- Low-emission building materials won't trigger asthma, allergies or chemical sensitivities.
- Solid wood cabinet fronts are durable and emit fewer vapours than pressboard products. Sealing of wood composite products eliminates off-gassing.
- Use of water based finishes on cabinets reduces harmful vapours.



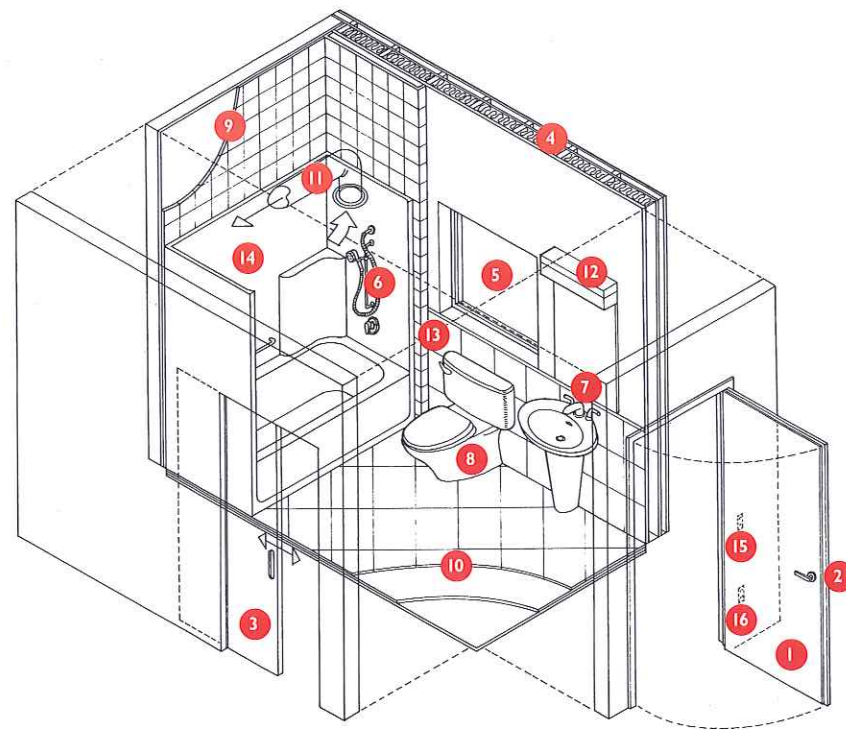
- | | | | | | |
|---|---|---|---|----|---|
| 1 | Thermally efficient wall | 6 | Non-slip, ceramic tile over water-resistant underlay and low-emission tongue and groove plywood | 10 | Low-emission solid wood cabinets with easy-open handles |
| 2 | Low-flow, aerator faucet with pull-out hose and easy-to-use lever handles | 7 | Continuous exhaust to HRV system with manual switch for high speed exhaust | 11 | Microwave installed in easy-access location |
| 3 | Water and energy-efficient dishwasher | 8 | Outside-vented kitchen range hood | 12 | Low-emission adhesive adheres countertop laminate to low-emission plywood substrate |
| 4 | Energy-efficient stove and oven with easy-access controls | 9 | Energy-efficient task lighting below upper cabinets | 13 | GFI electrical outlets |
| 5 | Energy-efficient refrigerator with minimum-clearance swing doors | | | | |

Bathroom Tips

Increasingly, people use the bathroom as a refuge – a place to soak away the cares of the world – so it needs to be both attractive and functional. At the same time, it should offer a healthy environment, be accessible to everyone in the family, and use water and energy efficiently. Nearly 75% of all the water you use in your home is used in your bathroom. Water-efficient fixtures can reduce your consumption by as much as 50%.

Here are some more FlexHousing and Healthy Housing tips for your bathroom:

- Low-volume toilets use 80% less water than a regular toilet.
- An aerator shower head can reduce water use by more than 60%.
- Ceramic tile can easily be kept clean and dry (carpets encourage mould growth).
- A continuously operating Heat Recovery Ventilator (HRV) controls humidity, reducing the opportunity for mould and mildew to grow.
- Thermally efficient windows reduce condensation so mould can't grow.
- Reinforced walls near the toilet and in the tub allow grab bars to be easily and inexpensively installed.
- Outlets placed slightly higher than usual, and switches and controls placed slightly lower, are more accessible.
- Space along the full length of a bathtub and beside a toilet make them easy to clean and accessible.
- A shower with water-temperature regulators prevents scalding and can be used safely by anyone.



- | | | |
|---|--|---|
| 1 Swing out, solid wood, 900mm (36") wide door | 8 Low-volume toilet | 15 Switches and controls 1050mm (41") above floor |
| 2 Easy-to-use lever door handles | 9 Ceramic tile over water-resistant backing | 16 Outlets 450mm (18") above floor |
| 3 Pocket door, 900mm (36") wide | 10 Non-slip, ceramic tile over water-resistant underlay and low-emission tongue and groove plywood | |
| 4 Thermally efficient wall | 11 Continuous exhaust to HRV system with manual switch for high speed exhaust | |
| 5 Energy-efficient window with easy-to-use opening and locking hardware | 12 Energy-efficient task lighting | |
| 6 Low flow aerator showerhead with anti-scald protection | 13 Reinforced walls for future grab bars | |
| 7 Low-flow, aerator faucet with easy-to-use lever handles | 14 Low-emission tub/shower insert with grab bar | |

Where to Find It

The following is a list of the suppliers whose products and services are featured in Home 2000.

Home 2000 Project Management Team

Builder – Factory Assembly
Britco Structures Ltd.
www.britco.com
Jeff Wright
p 604-888-2000 f 604-888-2086

Architectural Design
Russcher & Evans Architects
Bill Evans
p 604-530-9030 f 604-530-9611

Architectural Design
UBC School of Architecture
Sandy Hirshen, Linda Brock,
Elizabeth MacKenzie
www.arch.ubc.ca
p 604-822-2779 f 604-822-3808

Project Management
Canada Mortgage and Housing Corporation
Norm Connolly, Lisa Ono
www.cmhc.ca
p 604-731-5733 f 604-737-4127

Envelope Consultant
ECO-design.ca
Brian Palmquist
bpalmquist@eco-design.ca
www.eco-design.ca
p 604-730-9612 f 604-730-9624

Mechanical System Coordination,
Ventilation System Design
Eneready Products Ltd.
(Member of HVCI)
David Hill
p 604-433-5697 f 604-438-8906

Heating, Cooling, Ventilation,
Controls and Gas Fitting
Helma Home Heating Ltd.
Rob Sawatsky
p 604-437-7580 f 604-437-7590

Building Integrated Photovoltaic
Array, BCIT Site Preparation and
Foundation Construction
BCIT Technology Centre
Norman Streat, Lou Stamenic
www.bcit.ca
p 604-432-8815 / 604-451-6934
f 604-436-0286

Landscape Design and Placement
**B.C. Landscape & Nursery
Association / Calibre Landscaping**
Michael Evison
p 604-926-2892 / 604-922-4355
f 604-922-4355

Facilities Management
**Vancouver Home and
Interior Design Show**
Corinne Johnston
www.southex.com
p 604-412-2286 f 604-434-6853

B.C. Place Stadium
Deborah Dutton
p 604-661-3405 f 604-661-3412
www.bcplacestadium.com

Home 2000 Suppliers

Structural Materials and Components

Cement for crawl space foundation
Lehigh Northwest Cement
www.lehighnw.com
Rodger Nissen
p 604-946-0411 f 604-946-2420

Concrete for crawl space foundation
Rempel Bros Concrete Ltd.
Terry Berget
p 604-525-9344 f 604-533-7235
www.rempelbros.com

Site preparation and
foundation construction
BCIT Technology Centre
John Wong
www.bcit.ca
p 604-432-8299 f 604-436-3255

Low-emission plywood sheathing,
stair treads/risers, counters, LVL
beams, forming plywood
**Canadian Plywood Association
(CANPLY)**
Alberta Plywood Ltd.
CANFOR - North Central
Plywoods
LP Engineered Wood Products
Federated Co-operatives Limited
Richmond Plywood Corporation
Riverside Forest Products Limited
Tolko Industries Limited
Weldwood of Canada
Weyerhaeuser Canada Ltd
Areni Kelleppan
www.canply.org
p 604-981-4178 f 604-981-4196

Miscellaneous lumber products
BC Wood Specialties
Bill Downing, Dave Farley
p 604-556-3373 / 1-877-422-9663
f 604.556.3385

Insulation, Air Sealing and Moisture Protection

Fibrex rockwool insulation
products: MB Plus Batts, EWB
Rigid Wallboard, below grade
drainage media
**Steels Industrial Products Ltd. /
Fibrex Insulations Inc.**
Chris Ishkanian / David Kernohan
www.steels.com / www.fibrex.on.ca
p 604-576-3111 / 1-800-265-7514
f 604-576-0111 / 1-800-363-4440

Tyvek moisture, air barrier & Tuck Tape
**Guardian Building Products /
Dupont Canada Inc.**
Roger Lemieux
p 604-520-0040 f 604-520-1321

Exterior Cladding, Roofing and Finish Materials

Hardi-Plank fibre-reinforced
cement siding
Weyerhaeuser Canada Ltd.
Jim Wilkie
www.weyerhaeuser.com
p 604-607-6888 f 604-607-6898

Metal standing seam roofing
VICWEST
Vance Ford
www.vicwest.com
p 604-590-2220 f 604-590-4835

Gutters, downspouts
Pro-Image Gutters Ltd.
Nabeil Nasser
p 604-533-7325 f 604-533-7309

Aluminum railings, exterior glass for
railings, security shutters
AAA Aluminum Products Ltd.
Steve Henderson
www.aaaaluminumproducts.com
p 604-461-7241 f 604-461-2412

Low-VOC,
ICI DecraShield exterior paint
ICI Paints
Bill Wooffinden
www.dulux.com
p 604-202-3242 f 604-852-1869

Windows and Doors

High thermal performance,
rainscreen windows, sliding doors,
exterior french doors
Euroline Windows Inc.
Isbrand Funk
www.euroline-windows.com
p 604-940-8485 f 604-940-8486

Metal exterior door, solid wood
interior doors, pocket door
Leadwin Decorative Doors Ltd.
Sven Mothe
p 604-589-4717

Lever handle door hardware
Weiser Inc.
www.weiserlock.com
p 604-419-4300 f 604-419-4385

Interior Wall Board, Paints and Primers

Drywall, water-resistant Denz-shield
backer for bathroom tiled areas
Georgia-Pacific Canada Inc.
Marcel Tack
p 604-580-7855 f 604-580-1073

Low-VOC, Ultra-Hide vapour
barrier latex primer/sealer,
LifeMaster 2000 interior paint
ICI Paints
See "Exterior Cladding, Roofing and
Finish Materials".

Millwork

Solid wood cabinetry, laminate
over plywood countertops
Montalco Cabinets Ltd.
Herb Klassen
p 604-273-5105 f 604-273-2963

Solid wood baseboards,
interior finish moulding
Leadwin Decorative Doors Ltd.
see "Windows and Doors."

Solid wood interior
handrails and spindles
Creative Woodworking Inc.
p 604-279-0402 f 604-279-0410

Finishing carpentry
Edgecroft Building and Finishing Ltd.
Chris Lucas
p 604-728-6207 f 604-709-3859

Flooring

Hardwood floor supply
and installation
Metropolitan Hardwood Floors Inc.
Dave Sandover
www.metrofloors.com
p 604-270-7750 f 604-270-7214

Ceramic tiles, grout, mortar,
edging, soap dishes, etc.
Fontile Corporation
Gary Kershaw
p 604-683-9358

Water-resistant Denz-shield
underlay for tiled areas
Georgia-Pacific Canada Inc.
See "Interior Wall Board, Paints and
Primers".

Plumbing

Potable water pipe and fittings
Barclay Sales Ltd.
Bruce Barclay
p 604-945-1010 f 604-945-3030

Low-flow toilets, lever bathroom
faucets, anti-scald shower heads,
bathroom sink
Equipco Ltd.
Doug McLean
p 604-522-5590 f 604-522-0726

Kitchen sink
Kindred Industries Ltd.
Tom Brown
www.kindred-sinkware.com
p 604-720-7323 f 604-589-0841

Kitchen faucet
Westpoint Sales Inc.
p 604-291-7271 f 604-291-8258

Bathtubs and shower units
Venco Products Ltd.
Ralph Pregschat
p 604-940-4960 f 604-940-4962

Plumbing installation
National Plumbing.Com Inc.
Mooshon Mizrahi
www.nationalplumbing.com
p 604-232-4000 f 604-232-4001

Electrical

Building-integrated photovoltaic array (harnessing sunlight to produce electricity), design, supply and commissioning

BCIT Technology Centre

Norman Streat / Lou Stamenic
www.bcit.ca
p 604-432-8815 / 604-451-6934
f 604-436-0286

Lighting fixtures, ceiling fans, door bell, motion sensor lighting, CO and smoke detector

Pine Lighting Ltd. / Progress Lighting

Dave Guthrie
p 604-591-8895 f 604-591-8114

Mechanicals

American water heater, Polaris boiler/tank for domestic water and space heating, boiler, supply and return registers

EMCO

Richard Unfrau
p 604-299-1353 f 604-299-9397

Armstrong heating and cooling equipment (blowers, heating / cooling coils, condensor), sheet metal ducts and fittings

ECCO Heating Products Ltd.

Paul Vaillancourt
p 604-420-4323 f 604-420-6523

Eneready HRVs, ventilation zone control system ('Whisper' POWER Grilles, Poshtime Controls), fittings ('albo' and spedi-sleeve rough-in fittings)

Eneready Products Ltd.

(Member of HVCI)
David Hill
p 604-433-5697 f 604-438-8906

Pleated filters

BC Air Filter Ltd.

Gordon Hoover
p 604-291-2544 f 604-291-2510

Gas fireplace unit

Mr. Fireplace Ltd.

Rod Eide
www.mrfireplace.com
p 604-591-2261 f 604-597-4006

Multi-gas detector and gas shut-off valve to detect gas leaks resulting from earthquake damage to gas lines

GPS Gas Protection Systems Inc.

Stephen Gibson
www.gasprotection.com
p 604-467-2625 f 604-467-2692

Heating and cooling load analysis

Terasen Gas (Member of HVCI)

Gary Way
www.terasen.com
p 604-576-7139 f 604-576-7122

Heating and cooling duct system design (Quality First Standards)

Delta T Engineering

(Member of HVCI)
Doug Harwood
p 604-597-0393 f 604-597-0393

R2000 Energy Performance Analysis

Richard Kadulski Architect

Richard Kadulski
p 604-689-1841 f 604-689-1841

Combination system advice

Modale Industries Ltd.

(Member of HVCI)
Dale Rigg
p 604-224-5527 f 604-224-7230

Interior Furnishings, Appliances, Decorating

Rogers Cablesystems,

computer hook-up

Rogers Cablesystems

p 604-412-2792 f 604-431-1000

Closet organizers, window blinds

Stor-More Closet & Blinds Ltd.

Steve Swift
p 604-533-1128 f 604-533-1106

Mirrors, shower doors

Glass World

Dale Waddell
www.glassworld.com
p 604-534-1515 f 604-852-1850

Bathroom fixtures
(towel bars, soap holders etc.)

Taymor Industries Ltd.

Laurie Hearn
www.taymor.com
p 604-540-9525 f 604-540-2153

Furniture

The Brick

Lyle Griffith
www.thebrick.com
p 604-588-6138 f 604-588-0801

Bedding

Northern Feather Dream Makers

Janette MacDonald
www.nfdreammakers.com
p 604-736-7233 f 604-736-7203

Interior merchandising
and interior finishes

Pier 1 Imports

Valerie Rakush
www.pier1.com
p 604-539-5070 f 604-539-5078

Landscaping

Calibre Landscaping

Michael Evison
p 604-926-2892 / 604-922-4355
f 604-922-4355

Fencing

Creative Vinyl Products

Karen Slack
p 604-574-5040 f 604-574-5303

Home 2000

architectural renderings

Artwave Design

Aleksander Visnjic
www.artwavedesign.com
p 604-990-6729 f 604-990-6729

British Columbia Institute of Technology

The British Columbia Institute of Technology (BCIT) is one of Canada's premier polytechnical institutes with more than 50,000 students and approximately 2,000 faculty and staff.

BCIT delivers full-time and part-time courses of study leading to certificates, diplomas, and degrees in technologies and trades. As a polytechnic institute, BCIT also conducts applied research, technology transfer activities, and corporate and industry training and upgrading.

For more than three decades, BCIT has been a leader in training British Columbians to work in a host of residential and commercial construction-related fields. Included in the School of Construction and the Environment's programs are carpentry, interior design, painting and decorating, joinery, sheet metal, drywalling, plumbing, welding, building engineering technology, and civil and structural engineering technology.

For program information call 604-434-1610 or visit www.bcit.ca.



Greater Vancouver Home Builders' Association

The Greater Vancouver Home Builders' Association (GVHBA) – the voice of the residential construction industry in the Greater Vancouver area and the largest homebuilders' association in BC – is dedicated to promoting professionalism in the homebuilding industry and is committed to providing consumers with a wide variety of timely information on new homes and renovation.

Affiliated with the Canadian Home Builders' Association, GVHBA members include builders, renovators, architects, designers, sub-contractors, manufacturers, suppliers, government agencies, utilities, publishers, bankers, lawyers and other professionals.

A clearinghouse of industry information, GVHBA circulates to its members a wealth of data on housing starts, consumer trends, technical advances, educational opportunities, economic indicators and government legislation that affects the homebuilding industry.

GVHBA is a proud sponsor of two of Canada's largest consumer home shows – B.C. Home & Garden Show and Vancouver Home & Interior Design Show. GVHBA supports a wide variety of community, charitable, and educational organizations.

GVHBA's free seminars on new homes and renovation are popular with consumers, and articles on a range of housing-related topics are also available for the asking. For more information, contact GVHBA at 604-588-5036 or visit our Web site at www.vancouverhomebuilders.org



Canadian Plywood Association

The Canadian Plywood Association (CANPLY) is a non-profit organization representing and serving the manufacturers of plywood, veneer and veneer composite products in Canada.

Founded in 1951 as the Plywood Manufacturers Association of B.C., CANPLY has evolved from an organization of coastal B.C. manufacturers focused on establishing standards, into a multi-faceted organization with both a national and international mandate to serve the many and varied interests of its members.

CANPLY represents 9 member companies in Western Canada. Together, they operate 11 mills and produce approximately 85% of all structural, construction and industrial softwood plywood manufactured in Canada.

CANPLY member mills incorporate state-of-the-art technology to produce high-quality plywood engineered for excellence. This advanced technology also promotes environmentally responsible forest practices – logs in the use of CANPLY plywood manufacture average 10 inches in diameter and are taken from managed sustainable forests. In addition, the waterproof, highly durable phenolic resin in plywood manufacture emits almost zero formaldehyde off gas – ensuring the health and safety of homeowners by promoting a high caliber of indoor air quality.

For Home 2000, our members supplied Douglas Fir plywood (DFP) and Canadian Softwood plywood (CSP) sheathing, and laminated veneer lumber (LVL) for use in roof trusses, floor joists and header beams.

For more information about CANPLY, call 604-981-4190 or visit our Web site at www.canply.org



UBC School of Architecture

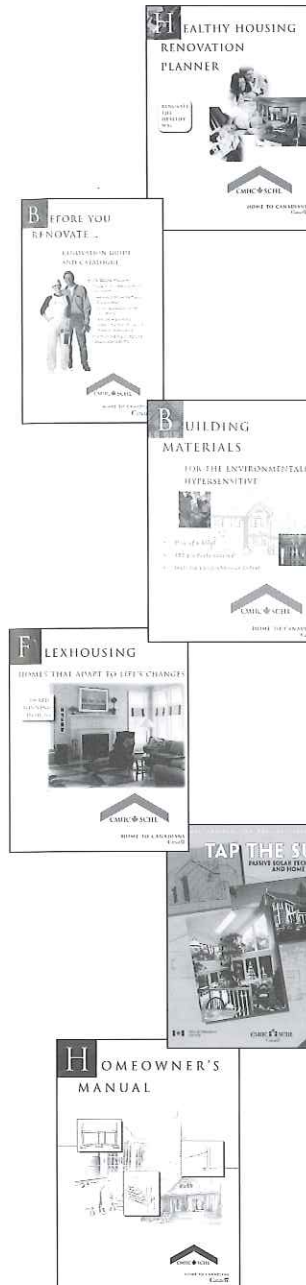
The School of Architecture at the University of British Columbia offers graduate programs in professional studies and advanced research. A concern for environmentally responsible design and appropriate building technologies informs work throughout the School, as well as revealing itself in community-centered activities such as the Design-Build Program.

Students in the MArch program, working under the supervision of Professor Linda Brock and MASA student Elizabeth MacKenzie, provided the primary design parameters for Home 2000. Preliminary research was followed by a three-week design study led by Professor Sandy Hirshen.

Their design had to meet diverse requirements; for example, it had to accommodate changing family patterns while meeting siting restrictions and remaining affordable. The varied expectations of Home 2000 stakeholders also contributed to the students' understanding of the complexity of "real-life" design. And ultimately, the design had to assimilate into the builder's own design parameters.

Student designers on the project included: Jeffrey Anders, Robert Bateman, Kevin Bismanis, Bill Cicvaric, Maxine Cowan, Lisa Ditschum, Graham Elvidge, Varouj Gumuchian, Baldwin Hum, Yvonne Ip, Herman Kao, Savina Praseuth, Joel Redmond, Glenn Ross, Marc Soehngen, Heather Tremain, Jenny Tsai, and George Wang.

For more information about the UBC School of Architecture programs and community outreach initiatives, please call 604-822-2779 or visit our Web site at www.architecture.ubc.ca



Healthy Housing Renovation Planner 60957 (\$34.95)

This book includes detailed illustrations and helpful planning guides to make your home healthy, safe and sound. It provides useful tips on ways to improve the health and efficiency of your home.

Renovation Information Package 62402 FREE

Planning your renovation is the key to a successful project, and healthy options are important. Includes Assessing the Renovation Project, Moisture and Air – Householder's Guide, Healthy Housing Practical Tips, and Ask CMHC About Your Home's Possibilities.

Building Materials for the Environmentally Hypersensitive 61089 (\$29.95)

A practical sourcebook for persons with environmental hypersensitivities, serious asthma or allergies, and for those building them a house. An easy-to-use format with 180 product listings. Includes personal test instructions and comprehensive index.

FlexHousing: Homes That Adapt to Life's Changes 60945 (\$9.95)

FlexHouses are houses that adapt to your changing needs. This book includes design options and floor plans; insights from a top Canadian architect specializing in FlexHousing; decorating hints and tips for hiring a contractor.

Tap the Sun: Passive Solar Techniques and Home Designs 60940 (\$39.95)

The only guide of its kind that's written specifically for Canadian architects and designers. Everything you need to know about designing homes to capture the sun's free energy...plus 20 stunning home designs!

Homeowner's Manual 61841 (\$22.95)

The new Homeowner's Manual is customized and comprehensive with everything homeowners need to know about operating and maintaining their new home. For real estate professionals, it's another tool to help you grow your business and provide quality customer care.



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Canada Mortgage and Housing Corporation

Canada Mortgage and Housing Corporation (CMHC) is the federal government's housing agency and Canada's housing expert.

You may know us as Canada's leading provider of mortgage loan insurance, but we're much more than that. We're your number-one source for up-to-the-minute, reliable, objective housing information. We research all aspects of housing – if you have a question about housing, we probably have the answer.

Many of our research results are featured in Home 2000. It's designed using FlexHousing and Healthy Housing concepts we developed in response to Canadians' need for high-quality, affordable, adaptable and sustainable housing. Highlights include a durable and energy-efficient building envelope, quiet and efficient heating and ventilation system, and earthquake-resistant features. Home 2000 shows you how to incorporate ideas like these into your home in ways that are practical and affordable.

But a demo home can't show everything we do. We also support social housing programs through the Canadian Centre for Public-Private Partnerships in Housing. And we work with exporters in Canada's housing industry to promote their products and services in international markets.

For more information about the products and services that CMHC offers, contact the B.C. and Yukon Business Centre (604) 731-5733 or visit our Web site at www.cmhc.ca. To request a copy of our information products catalogue, call 1-800-668-2642.



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