

# SINGLE-FAMILY HOME CHECKLIST

◆ ADDED VALUE AND HIGH PERFORMANCE

This checklist can be filled out for your home and passed on to the new homeowner if you sell.

	QUESTIONS TO ASK	WHAT TO LOOK FOR		BENEFITS	
		RESALE	NEW		
LOCATION	Is transit readily accessible or can I walk to work, school, and recreation activities?	Whether you're buying a new or existing home, look for a house that's within a 5 to 10-minute walk (400 to 800 metres) of a transit stop, a grocery store, a park, and other daily destinations. Visit: <a href="https://www.walkscore.com">walkscore.com</a>		This is a feature you cannot change. Your location is important in reducing your household energy costs and maximizing the convenience of your lifestyle.	<input checked="" type="checkbox"/>
HOME SIZE	What is the square footage of the home?	A home that provides less than 46 sq. m (500 sq. ft.) per person is more resource efficient than a larger home. Reference: Energy Star for Homes (version 3) and Canada Green Building Council LEED Canada for Homes (version 4).		Choosing the right size of home can save you money on your heating and electricity bills every month.	<input type="checkbox"/>
ENERGUIDE RATING SYSTEM	What is the EnerGuide rating of the home?	Look for a label that indicates that 'this house' uses less energy on an annual basis than 'a typical house'.		EnerGuide for Houses is a measure of the home's energy performance. Not all homes have a label but it's easy to get and is extremely important for determining the energy efficiency of the home. Your energy bills can be among your greatest monthly expenses. Choosing an energy-efficient home reduces your energy costs.	<input type="checkbox"/>

BUILDING ENVELOPE	QUESTIONS TO ASK	WHAT TO LOOK FOR RESALE	NEW	BENEFITS	
	Is the home air-tight?	Ask if a blower door test has been done. A reading of 2.5 ACH at 50 Pa is considered current good practice, whereas an R-2000 home will have a reading of 1.5 ACH at 50 Pa. A lower exchange rate signifies better airtightness.		Reducing the amount of air that leaks in and out of your home is an easy and cost-effective way to cut heating and cooling costs, improve durability, and increase comfort.	<input type="checkbox"/>
	Is the home well-insulated?	A qualified professional can test the level of a home's insulation. Ask if the home has had an energy audit done. This report will indicate the levels of insulation in the home.	<p>The Alberta Building Code specifies minimum insulation standards. But insulation levels that exceed the Building Code are recommended if you want to reduce your home's energy consumption and costs.</p> <p>For example, insulation for a house built to code:</p> <ul style="list-style-type: none"> <li>» Roofs/Attic: R-59, RSI 10.43</li> <li>» Walls: R-17, RSI 3.08</li> <li>» Foundation walls: R-20, RSI 3.46</li> </ul>	<p>Your home's insulation keeps the heat inside when it's cold outside and keeps your home cool when it's hot outside. Ensuring your home is well-insulated is a key to saving on your heating bills and staying comfortable.</p> <p>It also keeps the home quieter.</p> <p>For more information on R-values and what type of energy savings you can expect from improving different components of your home visit: <a href="http://cmhc-schl.gc.ca/en/co/grho/grho_011.cfm">cmhc-schl.gc.ca/en/co/grho/grho_011.cfm</a></p>	<input type="checkbox"/>
	Are the windows ENERGY STAR-labeled and triple-paned?	Check to see that the windows are triple-paned.	<p>If the window isn't ENERGY STAR-rated, look for a window with a high energy rating (ER).</p> <p>As a guide, an ENERGY STAR-qualified window in Edmonton's climatic region will have an energy rating (ER) of 29. The higher the ER, the more energy-efficient the window is.</p>	<p>Energy-efficient windows, doors, or skylights reduce household energy bills by an average of 12%.</p> <p>It also improves comfort near windows and keeps the home quieter.</p> <p>Reference: <a href="http://energystar.gov/products/building_products/residential_windows_doors_and_skylights">energystar.gov/products/building_products/residential_windows_doors_and_skylights</a></p>	<input type="checkbox"/>
	Are the building envelope materials resilient to extreme weather?	<p>Look for:</p> <ul style="list-style-type: none"> <li>» a steeper pitch on the roof</li> <li>» roofing materials that can withstand weather events like hail or wind</li> <li>» durable siding types, like cement board or panels</li> </ul>		<p>Steeper pitched roofs will more easily shed heavy, excess snow and are less prone to hail damage.</p> <p>The appropriate roofing material can help ensure your roof is longer lasting and can decrease the cost of insurance for your home.</p> <p>Siding can be vulnerable to wind and hail damage. Cement board siding or panels are most resilient for fire, hail, wind and UV damage.</p>	<input type="checkbox"/>

	<b>QUESTIONS TO ASK</b>	<b>WHAT TO LOOK FOR</b>		<b>BENEFITS</b>	<input checked="" type="checkbox"/>
		<b>RESALE</b>	<b>NEW</b>		
<b>VENTILATION</b>	<b>Does the home have a heat recovery ventilator (HRV)?</b>	An HRV system would likely only be installed in an existing home if it was already air-tight. If the home's envelope has been upgraded, look for an HRV also being installed.	Although other methods of ventilation are available, if your home has a high EnerGuide rating of 80 or more, an HRV is considered the best solution to provide fresh air indoors while maintaining energy efficiency through heat recovery.	An HRV provides numerous benefits, such as: <ul style="list-style-type: none"> <li>» a healthier home</li> <li>» energy savings</li> <li>» greater ventilation control</li> <li>» prevention of the buildup of contaminants that can enter and become trapped in the house</li> <li>» control of moisture, which can minimize mould growth</li> </ul>	<input type="checkbox"/>
<b>HOME HEATING</b>	<b>Is the home's furnace ENERGY STAR-rated?</b>	If your home's furnace doesn't come with an ENERGY STAR label, look for an EnerGuide annual fuel utilization efficiency (AFUE) rating of greater than or equal to 95% (high-efficiency furnace).  In a resale home, even if the furnace has an ENERGY STAR label, ask when the furnace was replaced. Older ENERGY STAR furnaces would not meet the same standard of the ENERGY STAR furnaces of today.		The heating system is your home's largest energy user, so making it more energy-efficient can make it one of the biggest cost savers.	<input type="checkbox"/>
	<b>Are there programmable thermostats?</b>	Programmable thermostats are an easy and inexpensive way to reduce energy use. Look for an ENERGY STAR-rated, mercury-free thermostat that is easy to program.		Setting back the temperature each night from 21 to 17 C can reduce yearly annual heating costs.	<input type="checkbox"/>
	<b>Is there a drain water heat recovery system?</b>	These systems capture the waste heat passing through the drains from hot water sources like sinks, showers, bathtubs, dishwashers, and clothes washers. These systems can reduce hot water requirements of showering by 40 to 60%.  Reference: <a href="http://cmhc-schl.gc.ca/en/inpr/su/sufep/sufep_003.cfm">cmhc-schl.gc.ca/en/inpr/su/sufep/sufep_003.cfm</a>		Drain heat recovery systems can cut hot water costs in half and have no moving parts so they never break and should last as long as the house.	<input type="checkbox"/>
	<b>Is the home's hot water tank ENERGY STAR-rated, and does it include tankless water heaters?</b>	First, look to see if the home has 1 or more tankless water heaters. If the home has a central hot water tank, check to see if it's an ENERGY STAR model.  If not, the hot water heater should have a high energy factor (EF). The EF measures the efficiency of the water heater by comparing the energy supplied in heated water to the total daily energy consumption of the water heater. Look for an EF of 0.67 or higher.  Check for a drain water heat recovery system.  Reference: <a href="http://energystar.gov/products/water_heaters/residential_water_heaters_key_product_criteria">energystar.gov/products/water_heaters/residential_water_heaters_key_product_criteria</a>		The water heating system is the second-largest user of energy in the average home, so it's another area for excellent savings.	<input type="checkbox"/>

	<b>QUESTIONS TO ASK</b>	<b>WHAT TO LOOK FOR</b> <b>RESALE</b> <b>NEW</b>		<b>BENEFITS</b>	<input checked="" type="checkbox"/>
<b>GREEN RATING SYSTEMS</b>	<b>Is the home certified by a recognized green building rating system?</b>	Look for homes certified by any of these rating systems: <ul style="list-style-type: none"> <li>» BuiltGreen</li> <li>» LEED Canada</li> <li>» Passive House</li> <li>» R-2000</li> <li>» ENERGY STAR for Homes</li> </ul>		A green building certification typically goes beyond energy efficiency, so it can be a useful way to ensure that the home has a wide range of green features.	<input type="checkbox"/>
<b>HIGH-EFFICIENCY APPLIANCES</b>	<b>Are the major appliances ENERGY STAR-rated?</b>	Look for an ENERGY STAR-rated refrigerator, dishwasher, microwave, washer, and dryer. Stoves and ovens aren't ENERGY STAR-rated.  You can also compare EnerGuide labels, which, under federal law, all new electrical appliances in Canada must have.  Look for condensing or heat pump dryers.		ENERGY STAR-rated appliances typically use 10 to 50% less energy. ENERGY STAR dishwashers and clothes washers also save water. A front-loading clothes washer uses 45% less water and 25% less energy.  References: <a href="http://energystar.gov/ia/new_homes/features/appliances_062906.pdf">energystar.gov/ia/new_homes/features/appliances_062906.pdf</a> and <a href="http://energystar.gov/products/appliances/clothes_washers">energystar.gov/products/appliances/clothes_washers</a>	<input type="checkbox"/>
<b>WATER CONSUMPTION</b>	<b>Does the home have low-flush toilets and low-flow showerheads and faucets?</b>	Try to meet or exceed the City's requirements for new homes and major renovations, shown in the column to right.	The City mandates water-efficient fixtures for new homes and major renovations: <ul style="list-style-type: none"> <li>» Toilets: 6 litres per flush</li> <li>» Faucets: 8.3 litres per minute</li> <li>» Showerheads: 9.5 litres per minute</li> </ul>	Simple, low-cost water conserving fixtures can reduce your water consumption and water bills significantly. They also lower your energy costs by reducing the amount of water that needs to be heated. By switching to energy-efficient and water-wise low-flow fixtures and appliances, the average Edmonton household could save over \$300 a year.	<input type="checkbox"/>

	<b>QUESTIONS TO ASK</b>	<b>WHAT TO LOOK FOR</b> <b>RESALE</b> <span style="margin-left: 100px;"><b>NEW</b></span>	<b>BENEFITS</b>	<input checked="" type="checkbox"/>
<b>LANDSCAPING AND OUTDOOR ENVIRONMENT</b>	<b>Does the home's garden and lawn area have low irrigation needs?</b>	Look for native plants and not too much turfed lawn area.	Eco-landscaping not only reduces water use, but typically reduces fertilizer and pest-and-disease-control requirements. Also, how your lot is landscaped has an impact on water conservation and water quality in the North Saskatchewan River.	<input type="checkbox"/>
	<b>Are trees strategically placed on the lot?</b>	Look for a well-placed line of evergreen trees on the north and west side of your home. Deciduous trees along the south side provide summer shade while still allowing winter sunshine.	Well-placed trees provide shelter against winter winds and summer sun, reducing your home's demand for heating and cooling.	<input type="checkbox"/>
	<b>Does the home have an irrigation system?</b>	Look for an existing rain barrel or an area that can easily accommodate a rain barrel. If an underground irrigation system is in place, look for drip or low-volume nozzles as these reduce water flow rates. Automatic shut-off devices or irrigation timers and controllers can further optimize irrigation and reduce wastage.	More than half of the water applied to lawns can be lost to evaporation and runoff due to overwatering.	<input type="checkbox"/>
	<b>Is the lot appropriately graded?</b>	Look for landscaping that slopes away from the foundation, and driveway that slopes away from the garage.	Landscaping that is properly graded will help avoid flooding in your home or garage.	<input type="checkbox"/>
	<b>Does the home have an adequate foundation and flood controls?</b>	Look for homes certified by any of these rating systems: <ul style="list-style-type: none"> <li>» a foundation that is a minimum of 15.25 cm (6 in.) above ground and landscaping that allows water to drain away from the home.</li> <li>» a basement sump pump and backwater valve in good working order</li> </ul>	A good foundation and flood control measures can help minimize the damage to property, should a flood occur.	<input type="checkbox"/>
<b>HEALTHY HOMES AND ENVIRONMENT</b>	<b>Were sustainable materials used in the construction or renovation of the home?</b>	A healthier new or existing home uses low-volatile organic compounds (VOC) paints, glues, and flooring materials, with eco-labels such as Green Seal or Green Label for flooring.	Edmontonians spend a great deal of time indoors (particularly in winter), so it's important to make indoor spaces as healthy as possible.	<input type="checkbox"/>
	<b>Is there ample natural light?</b>	Check to see that there's plenty of natural light in all the regularly occupied rooms.	Homes with abundant daylight create pleasant indoor environments and can contribute to the well-being of home occupants over the long term. However, making sure that the home doesn't lose too much heat in winter may require using triple-paned glass or other strategies.	<input type="checkbox"/>

	QUESTIONS TO ASK	WHAT TO LOOK FOR RESALE	NEW	BENEFITS	<input checked="" type="checkbox"/>
cont.	Have recycled and locally sourced materials been used in the construction?	Depending on when the house was built, the seller may not know the amount of locally sourced or recycled materials used in the home construction. But it doesn't hurt to ask.	Look for recycled and local content in building materials, especially those that make up a large percentage of the overall home materials, such as wood, concrete, and steel.	Local and recycled materials are less greenhouse gas-intensive than new materials shipped from far away.	<input checked="" type="checkbox"/>
SOLAR ENERGY AND HEATING	Does the home include passive design to reduce energy consumption?	It's more challenging to retrofit existing homes for passive design.	Effective passive design can be achieved with careful integration of different design elements on sites with good solar access and potential to orient the home for better performance.	Passive solar design, when done properly, can reduce energy consumption significantly while adding minimal cost.	<input type="checkbox"/>
	Does the unit face north or south?	Optimally, the longer axis of the building should have east-west orientation, within 15 degrees. Most of the window area should be on the south side, with a smaller amount of windows located on the north side.		Not all homes can have this orientation, so try to take the principles of solar orientation and passive solar and apply them (where possible) during your house hunt.	<input type="checkbox"/>
	Does the home have solar panels? If not, is the home solar-ready?	The home may have pre-installed solar panels, or the home may be solar-ready so that you can easily install solar panels later.  If panels are installed, find out how much of the home's energy needs are met by the solar energy system.	Solar energy systems can be sized to provide up to 100% of the energy needs, but older homes aren't usually energy-efficient enough to make this economical. That doesn't mean solar energy systems aren't possible for older homes, just that it might make sense to invest in energy efficiency improvements in combination with solar.	A new home should be built to adapt to new technology. If solar panels don't fit into your current budget plans, ask if the home is solar-ready. (This means conduit and other such provisions have already been added, which makes future installation much easier.)	Solar photovoltaic (PV) electricity generation reduces your exposure to future energy price increases and is a feasible, renewable energy option for Edmonton's climate.
OTHER INNOVATIONS	Does the house have other technology such as geoechange, combined heat and power, or an electric vehicle charging station?	These systems are emerging in the marketplace and it's worth asking the builder or seller if the systems have been installed in the home.		These technologies can provide increased efficiency and/or provide alternative energy/fuel sources.	<input type="checkbox"/>