

SINGLE-FAMILY HOME CHECKLIST

◆ ADDED VALUE AND HIGH PERFORMANCE

| | 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. | | This is a feature you cannot change. Your location is important in reducing your household energy costs and maximizing the convenience of your lifestyle. |
| 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. | | Choosing the right size of home can save you money on your heating and electricity bills every month. |
| ENERGUIDE RATING SYSTEM | What is the EnerGuide rating of the home? | The EnerGuide rating is on a scale from 0 to 100. A higher EnerGuide rating means the home is more energy-efficient. | | 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. |
| | | EnerGuide 66 to 74 (a retrofitted older home). | EnerGuide 80 and above (an energy-efficient new home). | |



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| BUILDING ENVELOPE | 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. |
| | 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 typical EnerGuide 80 house:</p> <ul style="list-style-type: none"> » Roofs/Attic: R-40 to R-50 » Walls: R-22 to R-25 » Foundation walls: R-15 | <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> |
| | 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 your home heating costs by 7 to 12%.</p> <p>It also improves comfort near windows and keeps the home quieter.</p> |
| VENTILATION | Does the home have a heat recovery ventilator (HRV)? | 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. | <p>An HRV provides numerous benefits, such as:</p> <ul style="list-style-type: none"> » a healthier home » energy savings » greater ventilation control » prevention of the buildup of contaminants that can enter and become trapped in the house » control of moisture, which can minimize mould growth |



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| HOME HEATING | Is the home's furnace ENERGY STAR-rated? | 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. |
| | Are there programmable thermostats? | 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 by 4 to 6%. |
| | Is there a drain heat recovery system? | These systems capture up to 60% of the waste heat passing through the drains from hot water sources like sinks, showers, bathtubs, dishwashers and clothes washers. | 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. |
| HOT WATER HEATERS | Is the home's hot water tank ENERGY STAR-rated, and does it include tankless water heaters? | 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 drainwater heat recovery system. | The water heating system is the second-largest user of energy in the average home, so it's another area for excellent savings. |
| GREEN RATING SYSTEMS | Is the home certified by a recognized green building rating system? | Look for homes certified by any of these rating systems: BuiltGreen LEED Canada Passive House R-2000 ENERGY STAR for Homes | 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. |
| HIGH-EFFICIENCY APPLIANCES | Are the major appliances ENERGY STAR-rated? | 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 at least 20% less energy. ENERGY STAR dishwashers and clothes washers also save water. A front-loading clothes washer uses 35 to 45% less water, and 60% less energy. |



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| WATER CONSUMPTION | Does the home have low-flush toilets and low-flow showerheads and faucets? | 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: » Toilets: 6 litres per flush » Faucets: 8.3 litres per minute » Showerheads: 9.5 litres per minute | 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. |
| LANDSCAPING AND OUTDOOR ENVIRONMENT | Does the home's garden and lawn area have low irrigation needs | 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. |
| | Are trees strategically placed on the lot? | 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. |
| | Does the home have an irrigation system? | 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. |
| HEALTHY HOMES AND ENVIRONMENT | Were sustainable materials used in the construction or renovation of the home? | 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. |
| | Is there ample natural light? | 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. |



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| HEALTHY HOMES 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. |
| 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. |
| | 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. |
| | Does the home have solar panels? If not, is the home solar-ready? | <p>The home may have pre-installed solar panels, or the home may be solar-ready so that you can easily install solar panels later.</p> <p>If panels are installed, find out how much of the home's energy needs are met by the solar energy system.</p> | | Solar photovoltaic (PV) electricity generation reduces your exposure to future energy price increases and is a feasible, renewable energy option for Edmonton's climate. |
| | | 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.) | |
| OTHER GREEN INNOVATIONS | Does the house have other green technology such as geexchange, 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. |

