Consumer Features & Benefits of Energy Efficient Products

Summary of the ENERGY STAR ® Features Campaign





Our Role

- In-Depth Product Research
- Consumer Centric Language
- ✓ Visually Appealing Images
- How it Works Diagrams



"Energy-efficiency isn't just about saving money"

Stronger Consumer Pull From:

Personal/Household Motivations

How you want your home to look

How you want your home to feel



Personal/Household Priorities

Healthy home with superior indoor air quality

Environmentally friendly home with low GHG footprint

Maximizing use of space in small home or desire for openness of open concept design

Lower cost energy bills

Maximum comfort (radiant warmth)



"People want energy efficiency, but what they really want is comfort, health, quality and value"

City Green

Questions/More Information manager@citygreen.ca



Come Home to a Home that is Built Right

With a tight air barrier and ample insulation.

A modern, healthy, energy-efficient home that is built right is tightly sealed, well insulated, and properly ventilated. Such a home lets you and your family enjoy year-round quiet and consistent comfort, lower energy bills and a smaller environmental footprint.





A tight air barrier and ample insulation are a few of the many components that work together to make an ENERGY STAR $^{\circ}$ certified home.

Ask your builder or energy advisor how these features could transform your home.

Air Barrier & Insulation

Three essential elements of an energy-efficient home are airtightness, high levels of insulation, and whole-house ventilation with heat recovery. Combine all three, you get a comfortable, low-energy, lower carbon home with excellent indoor air quality year-round and lower heating and cooling bills. Additional benefits include reduced drafts, noise, and moisture problems.

What are the Benefits?

Consistent comfort: Reduces drafts and maintains more even temperatures throughout your home.

Quiet comfort: Reduces unwanted outdoor noise.

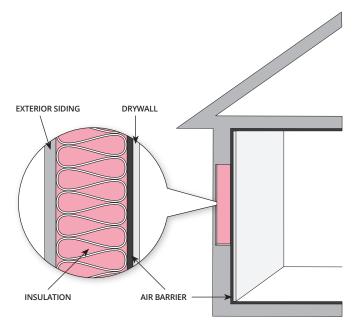
Save money: Reduced energy consumption results in lower utility bills.

Climate friendly: Reduced heat loss means less energy needed to heat your home resulting in a smaller carbon footprint.

Reduced maintenance costs and improved durability: Your home lasts longer due to reduced condensation. This helps to prevent rot, mold, and mildew.

How does it Work?

A tight air barrier and ample insulation are critical parts of your home's building envelope. The air barrier can be on the inside or outside of the wall and reduces air leakage. Ample insulation slows down the transfer of heat and cold between the inside and outside, keeping your home warm in the winter months and cool in the summer.



What are the Costs?

Typically it is more cost-effective to build a well-insulated, airtight house with mechanical ventilation than build a poorly insulated house and rely on leaks and holes in the walls for fresh air. The increased cost of a tight air barrier and ample insulation is offset by reduced heating and cooling costs over the life of the home.

The Best Building Envelope for Your Home

Proper installation and attention to detail is critical to ensure your home has an optimal building envelope.



Consult with experts: Ask your builder or energy advisor how a tight air barrier and ample insulation could transform your home.



Buy quality: Ask your builder about different types of insulation and air barrier systems to ensure long life and optimal performance.



Use an accredited installer: Use an accredited BCICA (BC Insulation Contractors Association) installer to ensure proper installation.



Ensure optimal performance: Talk to your builder about careful placement of insulation to eliminate gaps, voids, and compression; a tight air barrier to control the movement of air and moisture. and appropriate ventilation with heat recovery.



Maintain your home's envelope: Inspect your home's exterior regularly for any damage from weather or pests and repair promptly to ensure your building envelope is intact and performing properly.

Your Home Energy Label

A tight air barrier and ample insulation are two of the many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR® label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

https://tinyurl.com/insulate-energystar-info

Come Home to Comfort You Can Feel

A high-efficiency gas boiler is a wonderful addition to many homes.

ENERGY STAR® certified boilers are designed and installed for peak performance, providing luxurious radiant warmth, zonal temperature control, smaller space requirements and the versatility to offer both space and water heating in one system.





A high-efficiency gas boiler is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

High-Efficiency Gas Boiler

Many new homes have improperly sized and poorly installed heating equipment. This can cause uncomfortable rooms and increased energy costs, while shortening the life of the equipment. An ENERGY STAR® certified boiler is a common solution chosen by many homeowners in areas with gas service to bring the benefits of luxurious radiant warmth and cost savings to their home.

What are the Benefits?

Radiant warmth: Delivers cost effective radiant warmth evenly and consistently throughout your home, warming your body rather than just the air in the room.

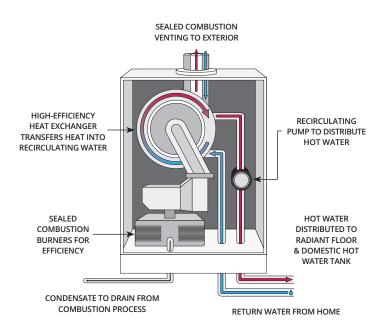
Zonal heating & choice: Separate areas or individual rooms can have their own temperature setting, adjusted to your preference. Choose between radiators or radiant floor heating.

Smaller space requirements: Compact size and ductless design allows for valuable space savings in your home. Ideal for open concept designs or homes of any shape or size.

Versatility: Options for space and water heating in one system provides versatility and less mechanical equipment in your home.

How does it Work?

A boiler heats your home by burning natural gas to heat water that circulates to wall mounted radiators or radiant floor systems. This type of heating technology distributes radiant heat for your home through a series of insulated pipes to individual rooms, rather than through a forced air duct and vent system. Radiant heat warms objects in the room and your body rather than just the air in the room, providing a comfort you can feel.



What are the Costs?

Costs for purchasing and installing a high-efficiency boiler system can vary significantly based on the size of your home, the type, make and model of boiler selected, as well as design and installation considerations. Be sure to get multiple quotes from contractors to compare costs, installation approach and warranties.

The Right System for Your Home

Getting optimal performance from a new ENERGY STAR certified boiler depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Get a heat load calculation: Ask the builder to confirm that the heating contractor calculates the heat requirements to ensure your gas boiler is sized properly.



Ask about hydronic design: To ensure optimum performance and efficiency, make sure your builder talks to you about all of the components, design and installation details for your system.



Don't forget about commissioning: Commissioning is a critical quality assurance step that should not be overlooked to verify and document that the engineered performance has been achieved.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing. Make regular adjustments to the controls of your system to ensure optimal functioning. Consult the owner's manual for details.

Your Home Energy Label

A high-efficiency gas boiler is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.

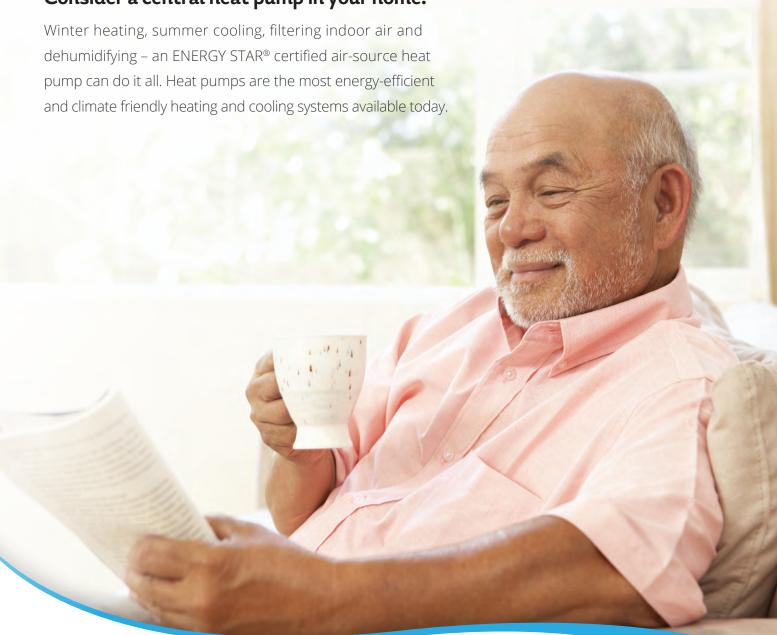


For more information about this ENERGY STAR® certified feature:

https://tinyurl.com/heating-energystar-info

Come Home to Year-Round Comfort

Consider a central heat pump in your home.





An air-source heat pump is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

Central Heat Pump

Space heating is the largest use of energy in homes and a significant contributor to greenhouse gas emissions. An ENERGY STAR® certified heat pump is a highly efficient, climate friendly, and modern alternative to gas or electric furnaces.

What are the Benefits?

Year-round comfort: Enjoy energy-efficient heating in the winter and cooling in the summer.

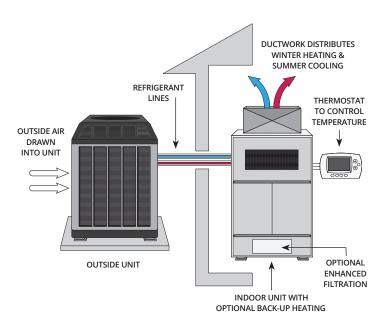
Maximum efficiency: Heat pumps are the most energyefficient heating system currently available.

Climate friendly: Where low carbon hydroelectricity or other renewable resources are available, heat pumps provide a clean energy alternative to natural gas or wood heating that reduces your space heating carbon footprint by over 95%.

Better indoor air quality: Heat pumps provide air filtration and dehumidification with options to add an enhanced filtration system to clean the air circulating through your home of indoor pollutants, dust, pollen, and other allergens.

How does it Work?

A heat pump takes heat energy from one place and moves it to another by compressing and expanding refrigerant. A heat pump extracts heat from the air and transfers this heat to either the inside or outside of your home, depending on the season. A central heat pump distributes heat and cooling through ductwork connected to vents in each room.



What are the Costs?

Costs for purchasing and installing a central heat pump can vary significantly based on the size and floor plan of your home, the type, make and model of system installed, as well as design and installation considerations. Check with your local utility for available rebates and incentives. Be sure to get multiple quotes to compare costs, installation approach and warranties.

The Right System for Your Home

Getting optimal performance from an ENERGY STAR certified heat pump depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy quality: Look for an ENERGY STAR certified heat pump to ensure a quality system.



Use an accredited installer: Use an accredited TECA (Thermal Environmental Comfort Association of BC), ASTT (Association of Applied Technologists and Technicians), or HRAI (Heating, Refrigeration and Air Conditioning Institute of Canada) approved installer.



Ensure optimal performance: The quality of the installation can have an enormous effect on system performance and home comfort. Ask your builder questions to ensure your system is properly sized, installed and commissioned for optimal performance.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing. Clean air filters regularly. Consult the owner's manual for details.

Your Home Energy Label

A central heat pump is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

http://tinyurl.com/heatpumps-energystar

Come Home to Efficient Hot Water

A condensing water heater is a wonderful addition to many homes.

ENERGY STAR® certified storage tank water heaters with condensing technology offer all the benefits of a standard hot water tank but with much higher efficiency and durability.





A condensing storage tank water heater is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

Condensing Storage Tank Water Heater

An ENERGY STAR® certified storage tank water heater with condensing technology operates much like a conventional gas hot water tank but with technology enhancements designed to increase energy efficiency and durability.

What are the Benefits?

Save energy and money: The most energy-efficient, gas-fired storage tank water heater on the market.

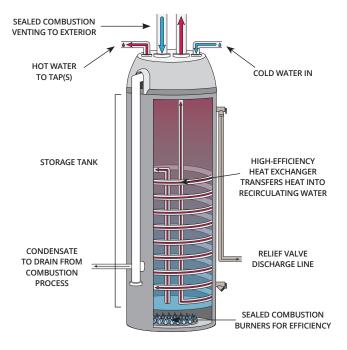
No more waiting for the water to heat up: A correctly sized condensing storage tank water heater has faster recovery rates than a non-condensing water heater, meaning you'll never run out of hot water.

More durable: Improved operational reliability and longer service life with superior protection against tank corrosion.

System versatility: Space heating and domestic hot water production can be integrated into one system.

How does it Work?

A condensing storage tank water heater offers a ready reservoir of hot water just like a conventional gas water heater but is much more efficient because of how heat is transferred from the energy source to the water. A condensing heat exchanger has more surface area than a conventional non-condensing heat exchanger, enabling water condensation from flue gases. This process captures more heat, greatly improving efficiency. They also have more efficient burners, heat exchangers and better insulation.



What are the Costs?

The average cost range for purchasing and installing an ENERGY STAR® certified storage tank water heater with condensing technology is from \$2,900 to \$3,600. The cost can vary significantly based on the size of your home, amount of water use, and the efficiency of the unit. Be sure to get multiple quotes to compare costs, installation approach and warranties. It's also a good idea to estimate its annual operating costs and compare with other water heating technologies.

The Right System for Your Home

Getting optimal performance from a condensing storage tank water heater depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or registered energy advisor how this ENERGY STAR certified feature could transform your home.



Installation Considerations: A condensing storage water heater has the same footprint as a conventional gas water heater but has different installation requirements, including venting exhaust gases through a vertical or horizontal PVC pipe and a condensate drain.



Size your system correctly: Talk to your builder to ensure the condensing storage water heater is sized correctly for your family's hot water demands.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance on your equipment is a good investment to minimize future problems and unwanted costs. Arrange for annual servicing that should include flushing to remove excess sediment and an exhaust vent piping inspection to look for any signs of blockage, leakage, or deterioration. Consult the owner's manual for more details.

Your Home Energy Label

A condensing storage water heater is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

https://tinyurl.com/hotwater-energystar

Come Home to Year-Round Comfort

A ductless heat pump can be a wonderful addition to many homes.

Heating, cooling, air filtering and dehumidifying – an ENERGY STAR® certified ductless heat pump can do it all! Quiet, stylish, and compact, a ductless heat pump is the most energy-efficient and most climate friendly form of home heating and cooling currently available.





A ductless heat pump is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

Ductless Heat Pump

An ENERGY STAR® certifed ductless heat pump (also known as a mini-split heat pump) is the most energy-efficient and most climate friendly form of home heating and cooling currently available.

What are the Benefits?

Year-round comfort: Enjoy energy-efficient heating in the winter and cooling in the summer.

Maximum efficiency and cost savings: The most energy-efficient heating system currently available. Ductless design and maximum efficiency allows for cost effective installation and operating costs.

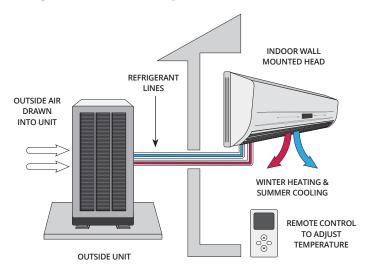
Climate friendly: Where low carbon hydroelectricity or other renewable resources are available, heat pumps provide a clean energy alternative to natural gas or wood heating that reduces your home space heating carbon footprint by over 95%.

Zonal heating: When multiple indoor units are installed, separate areas can have their own temperature setting, adjusted to your preference.

Better indoor air quality: Provides air circulation, air filtration and dehumidification when in cooling mode.

How does it Work?

A heat pump takes heat energy from one place and moves it to another by compressing and expanding refrigerant. A heat pump extracts heat from the air and transfers this heat to either the inside or outside of your home, depending on the season. An outdoor unit connects to a wall-mounted indoor unit by a small bundle of cables, including the refrigerant line. A remote control is used to adjust settings for maximum efficiency, comfort and control.



What are the Costs?

Costs for purchasing and installing a ductless heat pump system can vary significantly based on the size and floor plan of your home, the type, make and model of system, number of heads installed, as well as design and installation considerations. Check with your local utility for available rebates and incentives. Be sure to get multiple quotes to compare costs, installation approach and warranties.

The Right System for Your Home

Getting optimal performance from depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy quality: Look for an ENERGY STAR certified ductless heat pump to ensure a quality system.



Use an accredited installer: Use an accredited TECA (Thermal Environmental Comfort Association of BC), ASTT (Association of Applied Technologists and Technicians), or HRAI (Heating, Refrigeration and Air Conditioning Institute of Canada) approved installer.



Ensure optimal performance: The quality of the installation can have an enormous effect on system performance and home comfort. Ask your builder questions to ensure your system is properly sized, installed and commissioned for optimal performance.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing. Clean air filters regularly. Consult the owner's manual for details.

Your Home Energy Label

A ductless heat pump is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

http://tinyurl.com/heatpumps-energystar

Come Home to Efficient Comfort

Consider a high-efficiency gas furnace.

ENERGY STAR® certified furnaces are designed and installed for peak performance, heating your home quickly while delivering enhanced comfort and cost savings.





A high-efficiency gas furnace is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

High-Efficiency Gas Furnace

It is not uncommon to find new homes with improperly sized and poorly installed heating equipment that can cause uneven temperatures, noisy operation and increased maintenance cost for the owner. An ENERGY STAR® certified forced-air furnace is a popular choice in areas with gas service, heating your home quickly while delivering enhanced comfort and cost savings.

What are the Benefits?

Cost effective home comfort: Natural gas heating provides cost savings while delivering whole home warmth and comfort.

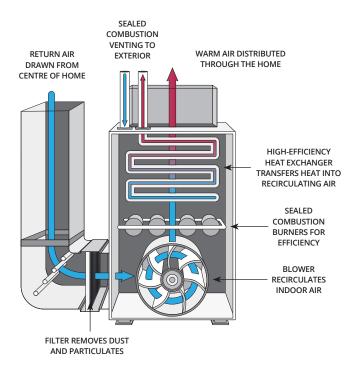
Fast, efficient heating: Bring your home to the desired temperature quickly and efficiently.

Better indoor air quality: Add an enhanced filtration system to clean the air circulating through your home of air pollutants, dust, pollen, and other allergens.

Adaptability for cooling: Option to enhance your system with air conditioning for year-round comfort.

How does it Work?

A high-efficiency furnace provides heat by burning natural gas to generate warm air that is distributed throughout your home through ductwork and vents connected to each room. Modern gas furnaces protect indoor air quality by using sealed combustion to isolate the burner and flue from the indoor air and by circulating the air in your home through an air filter.



What are the Costs?

Costs for purchasing and installing a high-efficiency gas furnace can vary significantly based on the size of your home, the type, make, and model of furnace selected, as well as design and installation considerations. Be sure to get multiple quotes from contractors to compare costs, installation approach and warranties.

The Right System for Your Home

Getting optimal performance depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Get a heat load calculation: Ask the builder to confirm that the heating contractor calculates the heat requirements to ensure your gas furnace is sized properly.



Ask about duct design: Have your builder show you a layout of where the equipment and ductwork will be installed. Confirm that the duct connections including vents and registers are going to be well-sealed.



Don't forget about commissioning: Commissioning is a critical quality assurance step that should not be overlooked to verify and document that the engineered performance has been achieved.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing. Clean and replace air filters regularly. Consult the owner's manual for details.

Your Home Energy Label

A high-efficiency gas furnace is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

https://tinyurl.com/heating-energystar-info

Come Home to Hot Savings

Consider a heat pump water heater.





A heat pump water heater is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

Heat Pump Water Heater

An ENERGY STAR® certified heat pump water heater is the most efficient way to heat hot water with electricity and in many locations, the most climate-friendly form of water heating available.

What are the Benefits?

Saves energy and money: Uses significantly less energy than a standard electric water heater resulting in significantly lower energy consumption and bills.

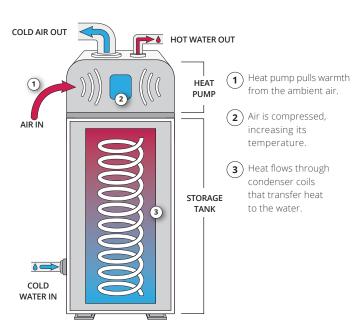
Climate friendly: Where low carbon hydroelectricity or other renewable resources are available, heat pump water heating systems provide a clean-energy alternative to natural gas that reduces your home water heating carbon footprint by over 95%.

Reliability: Provides the same reliable hot water you are accustomed to.

Smart controls: Adjust operating mode to find the setting that best meets your hot water needs.

How does it Work?

A heat pump water heater takes heat from one place and moves it to another by compressing and expanding refrigerant. To heat water, the heat pump pulls warmth form the ambient air by compressing the air to increase its temperature. The heat flows through a condenser coil inside the hot water system to transfer heat to the water. During times of high hot water use, there is a backup electric heat element to provide hot water on demand.



What are the Costs?

The average cost for purchasing and installing a heat pump water heater ranges from \$3,000 to \$6,000. Be sure to get multiple quotes to compare costs, installation approach and warranties.

The Right System for Your Home

Getting optimal performance from an ENERGY STAR certified heat pump water heater depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy quality: Look for an ENERGY STAR certified heat pump hot water system to ensure a quality system.



Use an accredited installer: Use an accredited TECA (Thermal Environmental Comfort Association of BC), ASTT (Association of Applied Technologists and Technicians), or HRAI (Heating, Refrigeration and Air Conditioning Institute of Canada) approved installer.



Ensure optimal performance: The quality of the installation can have an enormous effect on system performance and home comfort. Ask your builder questions to ensure your system is properly sized and installed for optimal performance.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing. Examine the heat pump's filter, lines and drain pan regularly. Consult the owner's manual for more details.

Your Home Energy Label

An air source heat pump water heater is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

http://tinyurl.com/heatpumpwaterheater-info

Come Home to Hot Water on Demand

A tankless water heater can be a wonderful addition to many homes.

Compact, long lasting and efficient - ENERGY STAR® certified tankless systems heat water on demand, resulting in less wasted energy while providing as much hot water as you need, when you need it.





A tankless water heater is one of many components that work together to make an ENERGY STAR $^{\! \circ}$ certified home.

Ask your builder or energy advisor how this feature could transform your home.

Tankless Water Heating

An ENERGY STAR® certified tankless water heating system is an efficient way to heat water, providing a constant supply of hot water only as it is needed for timely convenience, reduced energy use and space-saving design.

What are the Benefits?

Energy savings with less waste: ENERGY STAR certified tankless water heaters are much more efficient than a storage tank water heater and water is only heated as needed, so less energy is wasted.

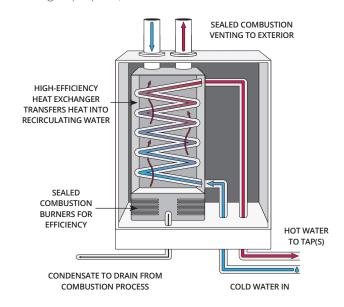
Endless supply of hot water: When your home hot water needs are high, enjoy the convenience of a continuous supply of hot water.

Longer equipment life: Equipment can last up to 20 years - a much longer lifespan than standard hot water storage tanks.

Optimize your space: Compact design and wall mounted installation helps to save space in your utility room. Some models can even be installed under a sink.

How does it Work?

Unlike a storage tank water heater that keeps a large volume of hot water ready to go at all times, tankless water heaters provide the amount of water you need, only when you need it. When hot water is turned on, cold water travels through a pipe into the equipment and either a gas or propane burner or an electric element heats the water that is distributed throughout the home. Tankless water heater fuel availability (electricity, natural gas, propane) varies across Canada.



What are the Costs?

The average cost range for purchasing and installing a tankless hot water heater is from \$3,500 to \$4,300. The cost can vary significantly based on the number of people in your household, amount of water used, type of equipment and efficiency factor. Before buying a tankless water heater, be sure to get multiple quotes from contractors to compare costs, installation approach and warranties.

The Right System for Your Home

Getting optimal performance from a new ENERGY STAR certified tankless water heater depends on more than just choosing the right equipment



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy Quality: Look for an ENERGY STAR certified tankless water heater to ensure a quality system.



Size your system correctly: To provide your household with enough hot water and to maximize energy performance, you need a properly sized water heater.



Ask about costs: Before you purchase a tankless water heater, it's also a good idea to estimate its annual operating costs and compare those costs with other water heating technologies.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance on your equipment is a good investment to minimize future problems. Arrange for annual servicing to keep the equipment free of scale deposits and clean filters. Consult the owner's manual for more details.

Your Home Energy Label

A tankless water heater is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

https://tinyurl.com/tankless-energystar

Come Home to Fresh Air

Consider a heat recovery ventilator.

Most homes inefficiently exchange air through cracks in their building envelope – wasting energy and letting in dust and allergens.

All new homes require continuous balanced ventilation but better new homes can have a dedicated breathing system – a heat recovery ventilator – that provides ample fresh air even when the windows are closed, filtering incoming air for better health and exchanging heat to save energy.



A heat recovery ventilator (HRV) is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

Heat Recovery Ventilator

Mechanical ventilation and filtration with an ENERGY STAR® certified heat recovery ventilator (HRV) is an essential means of providing fresh air and maintaining healthy indoor air quality in a modern, well-sealed and insulated energy-efficient home. Older homes, and less efficient new homes, may have higher heating and cooling costs, poor indoor air quality, and higher humidity levels because they have insufficient ventilation systems and leak air and moisture through cracks and holes in the building envelope.

What are the Benefits?

A breath of fresh air: Stale air is replaced by a continuous supply of fresh air in your home.

Superior health: Enhanced indoor air quality by exhausting indoor pollutants and replacing it with filtered fresh air.

Improved comfort: More even temperatures through improved air circulation.

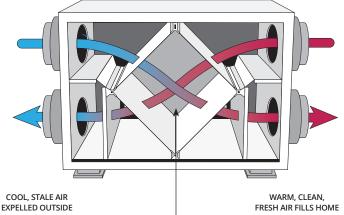
Energy savings: Recovers heat normally lost through conventional ventilation systems, reducing energy costs and your carbon footprint.

How does it Work?

An HRV is a balanced ventilation system that uses a heat exchanger and a series of ducts and fans to blow stale air outside and bring filtered fresh air inside.

It reduces heat loss by exchanging heat from outgoing stale air to warm up incoming fresh air. It also exhausts excess humidity to the outdoors.

FRESH, OUTSIDE AIR WARM, STALE INDOOR AIR DRAWN INTO HRV DRAWN INTO HRV



HEAT FROM INDOOR AIR TRANSFERRED TO INCOMING FRESH AIR STREAM

What are the Costs?

The average cost for purchasing and installing an HRV ranges from \$2000 to \$5000. Factors that influence the cost include the size of your home, the model/brand and efficiency rating of the equipment and potentially the quality of the installation and system balancing. Be sure to get multiple quotes from contractors to compare costs, installation approach and warranties

The Right System for Your Home

Getting optimal performance from a new ENERGY STAR certified HRV depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy quality: Look for an ENERGY STAR certified HRV to ensure a quality system.



Use an accredited installer: Contact an approved TECA (Thermal Environmental Comfort Association of BC) or HRAI (Heating, Refrigeration and Air Conditioning Institute of Canada) installer.



Ensure optimal performance: The quality of the installation can have an enormous effect on system performance and home comfort. Ask a builder, contractor or installer questions to ensure your system is properly sized and balanced for optimal performance.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing, keep the unit clean and inspect air filters every 1-3 months. Consult the owner's manual for details.

Your Home Energy Label

A high-efficiency HRV is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

http://tinyurl.com/hrv-energystar-info

Come Home to Fresh Air

Consider a heat recovery ventilator.

Most homes inefficiently exchange air through cracks in their building envelope – wasting energy and letting in dust and allergens.

All new homes require continuous balanced ventilation but better new homes can have a dedicated breathing system – a heat recovery ventilator – that provides ample fresh air even when the windows are closed, filtering incoming air for better health and exchanging heat to save energy.



A heat recovery ventilator (HRV) is one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

Heat Recovery Ventilator

Mechanical ventilation and filtration with an ENERGY STAR® certified heat recovery ventilator (HRV) is an essential means of providing fresh air and maintaining healthy indoor air quality in a modern, well-sealed and insulated energy-efficient home. Older homes, and less efficient new homes, may have higher heating and cooling costs, poor indoor air quality, and higher humidity levels because they have insufficient ventilation systems and leak air and moisture through cracks and holes in the building envelope.

What are the Benefits?

A breath of fresh air: Stale air is replaced by a continuous supply of fresh air in your home.

Superior health: Enhanced indoor air quality by exhausting indoor pollutants and replacing it with filtered fresh air.

Improved comfort: More even temperatures through improved air circulation.

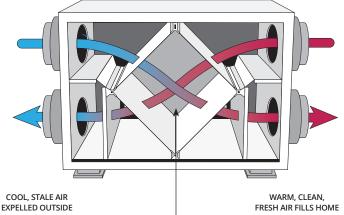
Energy savings: Recovers heat normally lost through conventional ventilation systems, reducing energy costs and your carbon footprint.

How does it Work?

An HRV is a balanced ventilation system that uses a heat exchanger and a series of ducts and fans to blow stale air outside and bring filtered fresh air inside.

It reduces heat loss by exchanging heat from outgoing stale air to warm up incoming fresh air. It also exhausts excess humidity to the outdoors.

FRESH, OUTSIDE AIR WARM, STALE INDOOR AIR DRAWN INTO HRV DRAWN INTO HRV



HEAT FROM INDOOR AIR TRANSFERRED TO INCOMING FRESH AIR STREAM

What are the Costs?

The average cost for purchasing and installing an HRV ranges from \$2000 to \$5000. Factors that influence the cost include the size of your home, the model/brand and efficiency rating of the equipment and potentially the quality of the installation and system balancing. Be sure to get multiple quotes from contractors to compare costs, installation approach and warranties

The Right System for Your Home

Getting optimal performance from a new ENERGY STAR certified HRV depends on more than just choosing the right equipment.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy quality: Look for an ENERGY STAR certified HRV to ensure a quality system.



Use an accredited installer: Contact an approved TECA (Thermal Environmental Comfort Association of BC) or HRAI (Heating, Refrigeration and Air Conditioning Institute of Canada) installer.



Ensure optimal performance: The quality of the installation can have an enormous effect on system performance and home comfort. Ask a builder, contractor or installer questions to ensure your system is properly sized and balanced for optimal performance.



Maintain your equipment: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Arrange for annual servicing, keep the unit clean and inspect air filters every 1-3 months. Consult the owner's manual for details.

Your Home Energy Label

A high-efficiency HRV is one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

http://tinyurl.com/hrv-energystar-info

Come Home to Clear Comfort

ENERGY STAR® certified windows can be a wonderful addition to your home.

Beautiful, practical, and energy-efficient, ENERGY STAR certified windows are an investment in comfort, long-term energy savings, and value for your home.





Energy-efficient windows are one of many components that work together to make an ENERGY STAR® certified home.

Ask your builder or energy advisor how this feature could transform your home.

ENERGY STAR® Certified Windows

Beautiful and practical, ENERGY STAR certified windows will increase the energy efficiency of your home and save you money on utility bills. They also reduce condensation, decrease outside noise, protect furniture from sun damage, and provide increased temperature regulation during summer and winter.

What are the Benefits?

Increased comfort: Improved temperature regulation throughout the year, keeping you cooler in the summer and warmer in the winter.

Peace and Quiet: Double (or triple) pane windows better insulate your home from exterior noise.

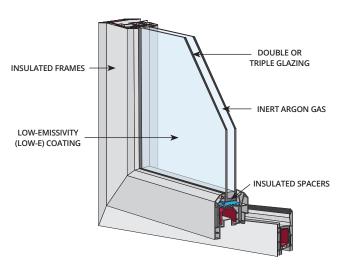
Protect your interior: Furniture, flooring, and art is protected from harmful UV radiation.

Increased home value: Efficient, quality windows improve the aesthetics and increase the value of your home.

Save energy and money: Lower utility bills through energy savings.

How does it Work?

The following advances in technology mean that energy-efficient windows are more efficient than ever: low-emissivity (low-E) coating reduces the ability of heat to pass through them preventing heat from escaping your home in the winter and keeping cooler air in your home in the summer. Double or triple glazing improves efficiency while reducing exterior noise. Inert argon gas between the window panes prevents heat transfer and minimizes condensation. Insulated spacers and frames also prevent heat loss.



What are the Costs?

ENERGY STAR certified windows may cost more than standard windows but they are up to 40% more efficient. Installing efficient windows can also increase the resell value of your home. Prices vary greatly based on the number of windows required, size, type, material, warranty, quality of installation and manufacturer.

The Right System for Your Home

Getting optimal performance from ENERGY STAR certified windows depends on more than just choosing the right type and style of window.



Consult with experts: Ask your builder or energy advisor how this ENERGY STAR certified feature could transform your home.



Buy quality: Look for ENERGY STAR certified windows to ensure a quality product.



Hire professional installers: The quality of the installation can have an enormous effect on window performance and home comfort. Hire experienced and professional contractors. To ensure that the company you select provides the best possible installation.



Maintain your windows: Similar to servicing a vehicle, preventive maintenance is a good investment to minimize future problems. Undertake a thorough inspection of all window components (glass, frames and seals) every season looking for any signs of damage or condensation. Keep windows and surrounding wall areas clean. Consult the owner's manual and ask the installer for details.

Your Home Energy Label

ENERGY STAR certified windows are one of many components that work together to make an energy-efficient new home. Ask your builder to have a registered energy advisor provide an EnerGuide rating and ENERGY STAR label to recognize your investment and verify the energy efficiency of your entire home.



For more information about this ENERGY STAR® certified feature:

http://tinyurl.com/windows-energystar