# YOUR ECOLOGICAL HOME BY

**Devedoir** Architecture & Écoconstruction

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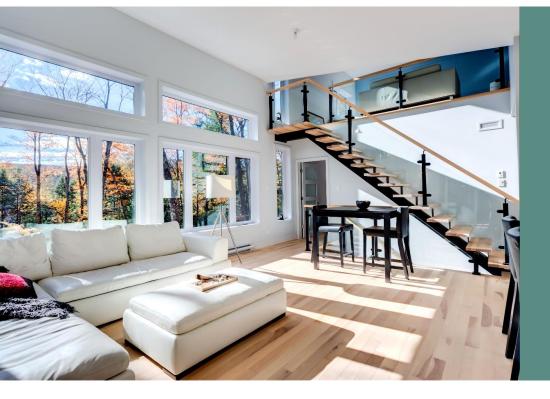
## "DREAMING OF THE FUTURE. BUILD IT."

#### You've been thinking about it for a long time: your ecological home.

A living space dedicated to comfort and well-being, at the cutting edge of design and functional intelligence.

The starting point for your most beautiful everyday moments!





## Spaces filled with natural light

Our passive solar approach creates bright, open spaces while orienting and perfectly dosing the openings, in order to limit overheating and heat loss.

#### It's -20°c outside? relax under the sun!

The building's highperformance shell, combined with the passive solar design, offers you exceptional comfort as well as more resilience in coping with difficult weather and climate patterns.



#### Considerably reduced heating & electrical bill

Thanks to our passive solar concept, the quality of the building, the Watersense and ENERGY STAR appliances, we are committed to upholding the highest standards in energy efficiency.





## Make your health a priority!

We put everything in place so that you breathe clean air: a radon vent, mechanical ventilation that meets the highest standards, natural ventilation that is well thought-out from the beginning, choice of materials and healthy and durable finishes.



#### Enjoy the silence...

Insulation, sealing and triple glazing provide maximum soundproofing to effectively filter out exterior noises.

#### Minimal maintenance

Keep your free time for things you actually love doing! We focus on the performance of the building's shell rather than mechanical systems that can break. We use quality materials and build each part of your home with the greatest care.



#### **Ergonomics!**

We offer a catalogue of customizable construction plans (our lluma homes) and house plans that can be completely personalized.

In any case, we work both the functionality and estheticism of each room. A well-thought-out home is a home that is wonderful to live in.



## A healthy home, a healthy legacy for the future

We build homes for today and for tomorrow. We want to build a healthy, well-thought-out, sustainable future.

#### Confidence

You can also count on us if you have questions after you have moved into your home.

## A POSITIVE PROJECT EXPERIENCE

#### Listening and rigor

We are advisors dedicated to the success of your project. Working in synergy around your needs and your budget, to offer you the best.

#### Transparency and respect

We do everything we can to avoid surprises and unclear information. We explain everything to you every little detail!



## A POSITIVE PROJECT EXPERIENCE

## A contact person each step of the way

#### Together, we are a team.

We work on the construction plans and quotes in a collaborative environment while allowing you to benefit from our expertise. We are here to guide you in creating your future living space.

#### Comprehensive support.

We offer you support and guidance for building permits, land surveying, biologist, percolation test, financing application, etc.

#### Flexibility.

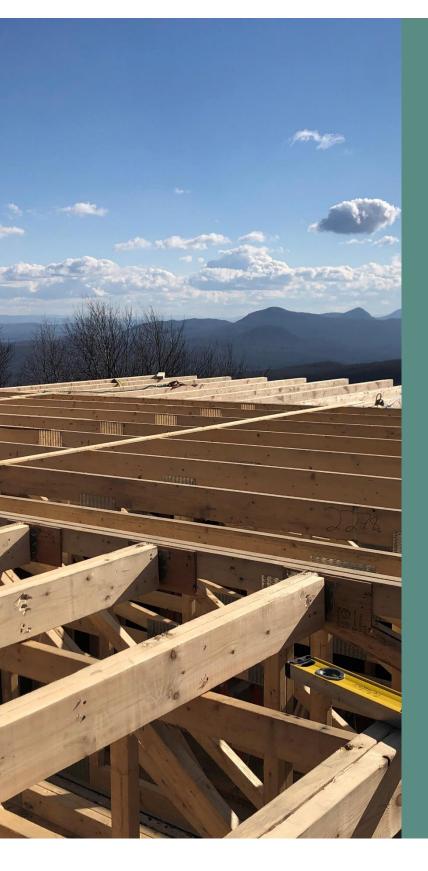
You choose from our wide range of services: custom designs, catalogue of construction plans, turkey projects, ready-to-finish homes, task-shared collaborative projects.

### Multiple areas of expertise in one team.

Our multidisciplinary team is at your service: designers, project managers, estimators, experts in energy efficiency, carpenters, joiners, etc.



## A POSITIVE PROJECT EXPERIENCE



#### The project management

#### Practical tools to help you out.

A few examples: clients' guides, lists for eco-friendly shopping, shared timetables, guide for the ecological design of your land, etc.

Package contracts and based on our own construction plans. Planning helps to avoid extra costs!

#### Quality assurance on site.

Conducted by your project manager. He takes an objective look at the work completed.

#### Regular follow-ups.

You will receive photos from the construction site, summaries of upcoming steps, shared follow-up documents, etc.

#### Two Novoclimat inspections.

You have the guarantee of an independent third-party inspection.

#### Customer service.

Seasonal newsletter to give you tips on house maintenance & post-project follow-ups..

### **DID YOU KNOW?**

**Belvedair** is a construction company that exists since 2007 and was created from the alliance between B.L Ecoconstruction and Synairgis.

Ecology, innovation and individual support are part of our DNA since the day one.





## A COST-SAVING CHOICE

**COMPARATIVE ANALYSIS:** The reduction of energy and maintenance costs makes that though the acquisition cost is higher than for a standard construction, the total cost of an ecological home may actually be cheaper!

#### TOTAL COST = ACQUISITION COST + RUNNING COSTS

	BELVEDAIR Model ADA-4 Basement + Main floor 4 BED + 2.5 BATH 1772 ft <sup>2</sup>	STANDARD CURRENT BUILDING CODE Basement + Main floor 4 BED + 2.5 BATH 1772 ft2
Novoclimat subsidy <sup>1</sup> Green Homes Program <sup>2</sup>	467 808 \$ - 2 000 \$ - 900 \$	<b>421 027 \$</b> 0 \$ 0 \$
TOTAL	464 908 \$	421 027 \$
Dépenses mensuelles Mortgage payments <sup>3</sup> Municipal & school taxes Municipal tax credit <sup>4</sup> Insurance <sup>5</sup> Energy costs <sup>6</sup> Maintenance / Depreciation <sup>7</sup>	2 159,99\$ 275 \$ -13,75 \$ 90 \$ 80 \$ 175,43 \$	1 956,11 \$ 275 \$ 0 \$ 100 \$ 160 \$ 350,86 \$
TOTAL	2 766,67 \$	2 841,97 \$
MONTHLY SAVING	-75,31 \$	

<sup>1</sup> Novoclimat Program = \$2 000 subsidy and an additional \$2 000 if the owners are first-time homeowners

<sup>2</sup> Green Homes Program = Up to \$2 000 if financing is insured by the Caisse Desjardins

<sup>3</sup> **Mortgage payments** = Mortgage loan financing at 75%, monthly payment at an interest rate of 5,59% amortized over 25 years

<sup>4</sup> **Potential municipal tax credit** = Find out more by contact your municipality, <u>here are a few examples</u>

<sup>5</sup> **Insurance** = 10 % off with the <u>Green Homes Green</u> of the <u>Caisse</u> <u>Desjardins</u>

<sup>6</sup> Hydro = Energy savings, a Belvedair home uses 50 % less heating energy according to the <u>PSI</u> calculations (Passive Solar Index)
 <sup>7</sup> Maintenance / Depreciation = 1 % per year of the replacement value for a standard home. A Belvedair home is more durable and requires twice as less maintenance than a standard home.

## **ANNEXE TECHNIQUE**

#### QU'EST-CE QUE LA QUALITÉ DE CONSTRUCTION BELVEDAIR?

BELVEDAIR	STANDARD CODE EN VIGUEUR
<ul> <li>INSULATION <ul> <li>R-33 wall</li> <li>Roof insulation R-60</li> <li>Slab insulation R-16</li> <li>Foundation-wall insulation R-29</li> <li>Insulation from the inside of the foundation: ideal choice for performance &amp; quality (no thermal bridge)</li> <li>Doors and windows with triple glazing, certified Energy Star, choice of options for glass type R-6.9 to R-8.3 depending on the orientation of the land and the home.</li> </ul> </li> </ul>	<ul> <li>Walls R-24.5</li> <li>Roof R-41</li> <li>Slab R-7.5</li> <li>Foundation walls R-17</li> <li>Windows with double glazing, R-2.8 minimum</li> </ul>
<ul> <li>SEALING</li> <li>Perforated drains BNQ (durability, better water draining, easy cleaning even in case of ferrous ochre)</li> <li>Installation of clean-outs: they make maintenance easier</li> <li>Waterproofing of foundations with bituminous coating and addition of insulating SR Drain as a capillary break to protect the foundation from frost damage.</li> <li>Air leakage at fewer than 1.5 air changes per hour, as verified by a Novoclimat evaluator</li> <li>Double coating to avoid any puncturing of the envelope by the electrician</li> <li>Installation of the doors and windows: protection of the jam with two adhesive membranes, to reduce the risk of infiltration and mold</li> </ul>	<ul> <li>Flexible, corrugated farm drains</li> <li>Waterproofing of the foundations with a bituminous coating</li> <li>Air leakage at 2.5 air changes per hour, no inspection</li> <li>Cuts in the vapor barrier and insulation to install each outlet &amp; switch</li> <li>Protection of the jam with Tyvek</li> </ul>
<ul> <li>PLUMBING &amp; ÉLECTRICITY</li> <li>Ecopeak water heater</li> <li>Water efficient plumbing accessories certified Watersense</li> <li>Energy Star (DEL) luminaries/light bulbs</li> <li>Large quantity of electric outputs (outlets, luminaries) that exceed the standards of the existing building code, to avoid any extra costs on site.</li> </ul>	<ul> <li>Choice of standard plumbing and electrical equipment (no specific concerns for water and electricity consumption)</li> </ul>

<sup>1</sup> Windows with double glazing minimum of R-2.8

### **ANNEXE TECHNIQUE**

<ul> <li>HEATING SYSTEMS</li> <li>The best heating system is the one that we don't need to use!</li> <li>Passive solar approach: comprehensive approach that includes proper orientation of the home, taking into account the land, the sunlight, tree cover, shade patterns for each season, providing optimal insulation, airtightness, etc.</li> <li>Analysis of each project in order to advise and adequately dimension the heating systems</li> </ul>	<ul> <li>Heating calculated at 12 Watts per sq. ft. by the electrician</li> </ul>
<ul> <li>AIR QUALITY &amp; MECHANICAL VENTILATION <ul> <li>Radon vent</li> <li>One of the most efficient HRV and certified Energy Star: 70 % heat recovery at -25°C</li> <li>Ventilation installed by a professional accredited by Novoclimat, to meet rigorous standards. Inspected twice by Novoclimat.</li> <li>Gypsum Certified Greenguard (low VOC emissions)</li> <li>Paint without VOC, recycled paint with low VOC emissions, as well as natural paint. Integrated furniture without VOC or with low VOC emissions</li> </ul> </li> </ul>	• HRV with 54 % heat recovery at -25°C
<ul> <li>CERTIFICATION</li> <li>Novoclimat Certification: two inspections by an independent evaluator and blower door test</li> <li>Building standards that give access to various certifications: LEED, Carbon Neutral, Passive Solar Index (PSI)</li> </ul>	<ul> <li>No mandatory inspection by a third party</li> </ul>

<sup>&</sup>lt;sup>2</sup> For more information

<sup>&</sup>lt;sup>3</sup> Radioactive gas and underground, naturally occurring, classified as a carcinogen (second cause of lung cancer in Quebec)

<sup>&</sup>lt;sup>4</sup> Heat recovery ventilator («air exchanger», with heat recovery): average energy savings of 67 % compared to conventional HRV engines

<sup>&</sup>lt;sup>5</sup> VOC: Volatile Organic Compounds. Domestic chemical pollutants and greenhouse gaz (ex: formaldehyde, benzene, etc.)

### 5 KEY FACTORS TO START YOUR PROJECT

