RURAL RETREAT

STRINGENT SUSTAINABILITY STANDARDS ARE ACHIEVED IN THIS 21ST-CENTURY IDYLL IN QUEBEC’S ROUGE RIVER VALLEY.

Beyond House 104, inside the Côte-Nord, Quebec, L’architecte LÉVEIL s.r.c.

By David Theodore

THE STRUCTURAL DESIGN

Architect Daniel Pearl of L’ARCHITECTE LÉVEIL took us to see the house in Four Fields to the winter. With project manager Simon Jones at the wheel, we turned off the highway about two hours north of Montréal near the small town of Mont-Tremblant. The famous ski hills were visible beyond, the surrounding fields were deep in snow that also blanketed the trees lining the lazy oxbows of the Rivière Rouge. The house came slowly into view as a series of buildings suspended in the landscape: the grey of reciprocated cedar boards used as vertical cladding, recalling the weathered planks of an old barn; the variegated blues and browns of a low wall made from local stone; the Payne’s grey of the sky; the blue and green shaping stands of cedar. One house near the visitors’ parking, a young orchard hid under sturdy burlap protection, as if a final burst of colour was waiting for spring. Isn’t this exactly what a modern house in the country is supposed to look like?

Pearl designed this 3,720-square-foot house for Stephen and Claudine Bronfman. It is a holiday home, but it is also a rural villa. Stephen Bronfman is a foodie and an environmental activist, so the house was designed to small scale dedicated to organic agriculture. The land forms an unusual scale of rural living, bigger than a garden plot but not quite a full-fledged farm. The house is a small domain that defines contemporary approaches to food, characterizes the architecture of the house. The house is thus not rustic, nor perhaps, in the end, Modernist, for it neither frames nor structures views—the classic picturesque box—but it does offer a promenade architecture. All the same, the design aspires to the merging of inside and outside. The climate-controlled Passive House House in Massachusetts, and the Farmhouse House, a juxtaposition created in recent Canadian examples from the likes of Pierre Thibault, FRAC, and Brian MacKay-Lyons, FRAC. It is a stunning reminder that Modernist design can work better to the country than in the city.

The house showcases a zealous design. Low-tech passive strategies combine with high-tech engineering and products in a "complex" mix—Pearl’s term—maintained by a calm, light-filled interior. The design features reclaimed building materials and is built targeting the Passive House standard, which focuses on energy efficiency. The idea is to make the house so tight that the air exchange system is not necessary. The prefabricated walls and roof are super-insulated, and careful construction details eliminate all thermal bridges. The architects also incorporated triple-glazed windows manufactured in Germany and programmable blinds. The triple-glazed windows and roof are super-insulated, and careful construction details eliminate all thermal bridges. The architects also incorporated triple-glazed windows manufactured in Germany and programmable blinds. The triple-glazed windows and roof are super-insulated, and careful construction details eliminate all thermal bridges. The architects also incorporated triple-glazed windows manufactured in Germany and programmable blinds.

On the outside, the house has the simplicity of a child’s drawing, featuring a gable, pitched zinc roof, and square windows. Architects from
LOREIF, including Paul Jones, Matthias Schleiss and Morgan Carter worked with engineer Fielder Ginet to conceive minimal, near-invisible construction details such as a concealed gutter and thin metal window surrounds. One reason for this simplicity is that the Passivhaus program asks designers to use software to achieve a low surface-area-to-volume configuration and to ensure optimal passive ventilation and solar gain throughout the four seasons. The house's shape also derives, however, from careful observation of the nearby rural vernacular of barns and sheds. The architects designed two minimal sheds as well, one for gardening and one for a photogenic herd of longhaired Highland cattle. The animals are kept from the house by a stone hedge designed by landscape architects RJP garage. Due to budget cuts, there is no swimming pool—although the design was a 2012 Canadian Architect Award of Excellence-recognised one. In its place, there is a hot tub that holds twelve.

A stone wall anchors the house's efficient and open interior floor plan. The northern edge of the house aligns with an existing port-and-parapet fence. A new wooden breezeway marks the southern edge. The wall cuts across them both, designating a public entrance on one side, and on the other providing an edge for a series of activities inside and out. There's a carport (the clients agreed to dispense with a garage), the family entrance and a mudroom, and a chef's kitchen. A series of sliding doors leads across the breezeway to a screened porch and a greenhouse.

The ground floor also contains a living room and a double-height dining area. The basement hides laundry machines and extra refrigerators (they do like to entertain) as well as the mechanical room. Upstairs, reached by a glass, steel and wood stair, the pitched roof shelters a family room, a master bedroom and bath, and the children's bedroom and bath. The family enjoys wood fires, so a chimney stack joins a high efficiency
living-room fireplace with a second one in the master bedroom. Carter worked with the Blondin’s interior designer Cynthia Addisom of Addisom Design to create furniture and built-in millwork made from reclaimed red oak throughout.

A post-and-beam structure designed with consultants Joe Verna and Jean-Marc Weil holds up the house. The timber pieces share the same profile about six inches square. The profiles are nominal, however, because the structure is made from pitted and cracked reclaimed wood full of holes, cuts, doors, dovetails, hatcher marks and nails. The posts are kept inches away from the thick walls, which means that—usually for Quebec—it is a domestic environment filled with columns. Many people in Quebec live in post-and-beam loft buildings; however, the p extents are usually embedded in structural walls. The reclaimed wood eloquently speaks of the fragility of age, letting the architecture tell a story. The effect is most pronounced on the east facade, where a thick glass corner reveals a pitted and cracked red oak post.

It is difficult to understand exactly how the Blondins will live here over long periods of time. This is definitely not a suburban house. For instance, they have four children who have must share one bedroom filled with bunk beds and ladders. In the end, the family will have to learn small but important new routines, as the building’s “complex” environmental systems, while robust, are affected by the casual actions of everyday life: opening windows, closing blinds, or using a fireplace. Pearl’s team has installed a set of sensors that will collect data on the house’s operation over the next year or so, allowing them to fine-tune the equipment.

So far, it seems to work well. As Jones explains, the problem this winter has been how to cool down the house, not how to heat it. Pearl, however, has his eye on a bigger prize. He argues that low energy consumption can be a goal for all kinds of housing. A project like this gives his firm tools that can be used in broader environmental and social movements. To that end, LODES has several projects that move towards Passivehaus standards, including subsidized urban community housing.

Overall, the House in Four Fields presents a new kind of commission, neither vacation home nor second house. The house is an unusual, 21st-
The house and landscape were designed in tandem; window frames and the roof gutter are carefully recessed; a detail of the roof trusses; an upper mezzanine accesses the bedrooms; a detail of the steel, glass and wood stair.

century hybrid retreat for entertaining and farming. I wonder if the Bronfmans could be persuaded to rent out the home to the combination of foodie and design addict that the house is meant to inspire? Or another thought: since Stephen Bronfman is a serious collector of contemporary art, could the house be deployed as a stunning venue for themed exhibitions?

Idle speculation, perhaps, but the closest parallels to the project are the rental retreats commissioned by Alain de Botton in Britain under the Living Architecture program. The aim in both cases is the same. This is good architecture built with good intentions.

David Theodore, MLAIC, is Assistant Professor at the McGill University School of Architecture.