

Quarterly Newsletter Q3 2016



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InHaus Development: Mount Pleasant project addresses sustainability, densification, and character

retention program

Rededication of three single family houses form 16unit sustainable townhomes, with retention of 1920's façade.



Photo courtesy of InHaus Development Ltd.

After spending time in the mid-2000s buying and renovating homes, Dave deBruyn became increasingly aware of the waste going into dumpsters. "We challenged ourselves to minimize waste and increase the material recycled with every project we did," says deBruyn. "With some practice, we were wasting virtually nothing, however there was no industry recognition or value upon resale for minimizing construction waste."

With ever-increasing concerns over the environment, residents, business, and government have turned their attention to how climate change can be mitigated. In residential building, consistent with other sectors focused on sustainable business practices, significant emphasis is placed on energy efficiency. This is well-founded, and there's little dispute on the impact of reduced energy usage.

There are however, other, less glamourous components of green building, of which waste management is one. The residential building sector is responsible for significant total waste generated in Canada. According to the Canadian Home Builders' Association, construction and demolition materials make up some 25 per cent of non-hazardous solid wastes across Canada. Addressing garbage and landfill capacity includes this waste. Read more here.

Greener Homes takes provincial Green Home Award

The residential building industry recently gathered at Canadian Home Builders' Association - Alberta BUILD 2016 annual conference to focus on the past, present, and future—and to celebrate the accomplishments of



Photo courtesy of Greener Homes.

volunteers, builders, and renovators in the residential building industry. Nestled in Jasper National Park, the conference includes the Awards of Excellence, where successes within the industry are celebrated, and those who made it happen are recognized.

While this recognition is important within the industry, it is equally important to recognize both the builder—who goes above and beyond—and those who will enjoy the benefits of these quality homes: in particular, homebuyers who want to make informed purchasing decisions. This year, CHBA received over 400 entries for over 30 housing awards—finalists and winners alike, from across the province, were commended. Award categories range from safety to customer satisfaction, from single family to multifamily, from estate homes to builder of the year awards, and finally, for those who are building sustainably.

Many of the finalists are members of Built Green Canada and in the Green Home Award category they include: Avalon Master Builder, Greener Homes, and Habitat Studio. Greener Homes' award-winning home may look "ordinary", but it's actually an extraordinary performing house. Ordinary doesn't refer to curb appeal, layout, finishes, or special features—some of the criteria used to select the winners; rather, it refers to what is not visible, as many green features cannot be seen. Read more here.

Built Green Canada Supports Ft. McMurray Rebuild

In light of the unimaginable destruction of the Ft. McMurray wildfires and subsequent flooding that has left thousands of Albertans displaced, Built Green Canada is working to support the Regional Municipality of Wood Buffalo's (RMWB) rebuilding efforts.

While the rebuild has been of paramount concern since the earliest days of recovery, a thoughtful, deliberate approach is required to progress this construction. With the barrage of challenges and opportunities facing RMWB, Built Green Canada has been monitoring the situation to find an appropriate time to extend our support. On the heels of the municipality issuing its first rebuilding permit, Built Green Canada is offering financial support to those who want to integrate green features into their builds: all residential builders on the RMWB Registry will receive a 50 per cent discount on their membership fees with Built Green Canada, as well as a full financial waiver for home certification fees for projects going through the BUILT GREEN® Single Family program as part of the rebuild. This will remain in effect through 2017 to help relieve the financial burden on both builders and homeowners.

"Alberta's residential building industry has historically shown—and continues to show—tremendous environmental leadership," says Built Green Canada Executive Director Jenifer Christenson. "With a spotlight on Ft. McMurray's rebuilding efforts, there is an opportunity to showcase the good work happening in sustainable development, while the Municipality, trades, and organizations like Built Green Canada come together to rebuild and strengthen this community." Read more here

BUILT GREEN® Sponsor Featured: All Weather Windows

All Weather Windows is Canada's largest privately owned window and door manufacturer—they're also both a BUILT GREEN® Product Catalogue contributor and a BUILT GREEN® Bronze level sponsor, showing tremendous commitment to sustainable development.



Photo of Horizon 7100 series courtesy of All Weather Windows.

For the first time, building code (9.36) directly addresses energy. High energy efficient products like those at All Weather Windows are key to builder's success in meeting and exceeding code. See their BUILT GREEN® Approved products—and how they earn our builders checklist points—

here: http://builtgreencanada.ca/all-weather-windows

The latest addition to All Weather Windows' award-winning lineup of beautiful, durable and energy efficient windows is the Horizon 7100 series, which brings a new level of customization to both slider and single hung window units. Read more here.

Built Green in Your Community

Built Green at Canadian Home Builders' Association – Alberta BUILD 2016

September 15 – 18 saw industry from across the province convene in Jasper National Park for BUILD 2016, which included the Alberta Awards of Excellence in Housing. These awards celebrate excellence and the very best in new homes, home renovations, community development, green homes, and marketing awards Finalists and winner alike were all recognized for top honours at the housing awards.



Jenifer Christenson, Executive Director awards Green Home Award to Dave Wolfe, Greener Homes.

Executive Director Jenifer Christenson was thrilled to be in attendance and

watch BUILT GREEN® builder members being recognized, while awarding the Green Home Award. These included:

- Albi Homes, Single Family: \$475,000 \$525,000
- · Brookfield Residential, Community Development
- Christenson Group of Companies, Multi-family Apartment: \$350.000 - \$500.000
- · Douglas Homes, Medium Volume Builder of the Year
- Empire Custom Homes, Multi-family Luxury Over \$500,000
- · Greener Homes, Green Home Award
- Habitat Studio, Estate Home Over \$1,500,000
- Mattamy Homes, Single Family: \$340,000 \$380,000

Updates from Built Green Canada @ BUILD 2016

We also had the opportunity to report on the organization's continued growth, 9.36 requiring higher efficiency in housing and how BUILT GREEN® programs are complementary and offer a competitive advantage, government's increasing focus on the environmental agenda, the rising demand for sustainable builds as evidenced by the Canadian Home Buyer Preference National Study, and more.

Beyond this, our message was about industry's readiness for sustainable build demands. Built Green Canada is increasingly

receiving requests for permission to include our tools and materials into the curriculum at colleges and universities; we're receiving requests for our participation in career days at high schools and junior highs. And, we've been presented to grade one students who are surprisingly knowledgeable about sustainability.

Simply: let's keep up with the homebuyers of today and tomorrow.



Built Green Canada at BUILD 2016.

CARE Awards Recognizes Built Green Leadership

The 2016 Construction Achievements and Renovations of Excellence (CARE) Awards saw more than 300 builders, designers and renovators of the Victoria Residential Builders Association turn out to the Fairmont Empress Hotel in Victoria to celebrate innovative home design.



2016 CARE Awards BUILT GREEN® Leadership recipients, from left to right: John Sercombe, Limona Group; Doug Larson, Limona Group; Chad Bryden, Verity Construction (seated); Mike Dalton, Città Group; Mike Baier, Limona Group (seated); Tim Schauerte, Chair, 2016 CARE Awards. Missing: Bill Patterson, Città Group.

This included the prestigious Built Green Leadership award that was awarded to Città Group. Limona Group, and **Verity Construction** recognizing their pioneering roles in affordable, energyefficient subdivisions. Bravo to these market leaders and to VRBA for recognizing these progressive builders.

construction with a twist—the bulk of the insulation is on the exterior of the structure, EPS under the slab and footings, Roxul exterior of the wall sheathing, and Polyiso exterior of the roof sheathing. Two notable additions to the insulation is a highly effective air barrier and the elimination of all thermal bridging to the exterior. Big thank you to NZ Builders.

Checklist Management Systems

While we were in Victoria, we also learned about Horizon Pacific Contracting's system for checklist management: a system that breaks down the checklist based on trades and suppliers with associated checklist items included for each. The system enables streamlined processes and improved channels of communication for greater operational efficiencies.



Nicole with their BUILT GREEN® binders keeping their system intact.

Habitat for Humanity Edmonton Dedicates BUILT GREEN® Six-plex at Largest Habitat Build in Canadian History

September 23 marked the dedication of another six-plex at Neufeld Landing, leaving only one nine-plex to complete for this project. Neufeld Landing is Habitat for Humanity Edmonton's largest build to-date, and the largest Habitat development in

Canadian history with all homes BUILT **GREEN®** certified. which when completed will families.



Photo courtesy of Habitat for Humanity Edmonton.

be home to 64

Habitat for Humanity Announces 2017 Jimmy &

Rosalynn Carter Work Project in Edmonton & Winnipeg On October 10th, Habitat for Humanity's 34th Jimmy & Rosalynn Carter Work Project announced it will take place July 9-14,

2017 in Canada. Volunteers will work alongside future Habitat homeowners and build 150 homes in celebration of Canada's 150th anniversary. The project will take place in several cities across the country, with President and Mrs. Carter focusing their efforts in Edmonton, Alberta, and in Winnipeg, Manitoba.

House built entirely of ICF Material—aiming for Platinum in West Vancouver

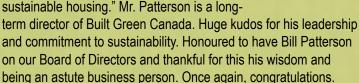
Thermal imaging camera is being used here to identify areas of air leakage and thermal bridges, while Alex Barbachkov from Total Construction uses a can of red spray paint to mark each spot as a guide for workers who will follow the thermal inspection with sealer and repairs.



Alex from Total Construction at build in progress.

Board of Director, Bill Patterson's Lifetime Achievement Award

A highlight of the evening was the Lifetime Achievement Award given to Bill Patterson of Città Group for his "strong contributions to heritage preservation and creating affordable, sustainable housing." Mr. Patterson is a long-



Built Green Visit to Victoria Island

Built Green Canada was on Victoria Island July 5 and 6 for a series of scheduled meetings, which included an onsite open house. Meeting with long-standing supporters of our programs as well as newer builders who are still learning about us was invaluable. The opportunity to say thank you, in-person, to all those who



From L to R: Stuart, Damon, Jacques & Dave from NZ Builders.

are progressing sustainable building was important, and we were grateful for the time folks spent with us, as we were able to address your needs, clarify misinformation, and provide updates.

The open house was held at BUILT GREEN® member NZ Builders' build in progress. For this build, they were creating a continuous wrap of insulation around the entire building for a durable, energy efficient, thermally comfortable home. The build is a standard wood frame

FortisBC's New Home Program—BUILT GREEN® Builders & Eligibility

BUILT GREEN® builders labelling under BUILT GREEN® whose projects meet the New Home Standard and are natural gas heated homes and electrically-heated homes in the FortisBC electric service territory, will be eligible for the FortisBC incentives.

For more information: www.fortisbc.com/newhome

Built Green Canada Toll Free: 1.855.485.0920 New Home Program Toll Free: 1.855.888.4633

Manitoba Hydro's Power Smart for New Homes and Built Green

BUILT GREEN® builders labelling under BUILT GREEN® whose projects meet Manitoba Hydro's Power Smart for New Homes' technical requirements, through the prescriptive or performance path, may be eligible for financial incentives offered through Manitoba Hydro. Power Smart for New Homes offers design and energy modelling incentives to encourage builders to construct homes at least 20 per cent more energy efficient than new, comparable homes—including covering the blower door test cost.

Built Green in the News

Over the third quarter of 2016, related media coverage was picked up by a number of outlets, including Calgary Herald (x2), Sustainable Bix Canada, Press Reader, Business Examiner Vancouver Island, Victoria Times Colonist, BC Building Info (x2), BC Hydro Conservation News, Construction Links, Canada News, Decentralized Energy Canada mag, Canadian Contractor, Yahoo Biz and Yahoo Finance, Press Enterprise, Okanagan Life, Industry Visions, Construction Canada, NOR-ON Supply E-News, The Green Link, NEW Homes & Condos Edmonton (x3), Kijiji, Craigslist, Marketwired, Search Engine placement—Google, Yahoo!, Financial Buzz, The Canadian Business Journal, Reputation.ca, and more. Select CHBA affiliates and key stakeholders have posted Built Green-supplied content onto their website—thank you to CHBA Calgary Region and Horizon Contracting.

Selling Built Green

Whether you have your own sales staff or have contacted a realtor, be sure they're communicating the benefits of Built Green and taking the opportunity to educate on individual green features and their value. We have marketing materials to educate—make sure these are in your marketing/sales people's hands.

My House Focuses on the Benefits of BUILT GREEN® Certified Home – Video

For anyone looking for a video to convey the benefits of a BUILT GREEN® home, check out this excellent "My House Design Build Team: My House Education – Built Green" video: www.youtube.com/watch?v=zLcTW7bMYM4

Energy Advised

Service.

Gael Cooper, Tierra Diosa

With building code changes and the increased emphasis on sustainable building, of which energy efficiency is a key component, the role of an Energy Advisor (EA) has become ever more important. Experts in energy efficiency, they're licensed by Natural Resources Canada to deliver the EnerGuide Rating

These folks have honed strong energy advising skills through years of related practice, and their role is invaluable in sustainable building practices. Our programs are fortunate to work with very knowledgeable, experienced Energy Advisors. We encourage you to fully utilize these folks in your builds; they have so much to offer you and your customers.

Gael Cooper is a seasoned environmental building consultant who's been working in the residential housing industry since 2004. As Principal at Tierra Diosa, her mission is to remove any barriers that hamper the adoption of environmental building practices. This is evidenced by her motto "environmental building can be easy, let us show you how" alongside countless recommendations:

"Your company is by far the best [company] that I have ever dealt with in terms of customer service. Your follow through is outstanding and you are never "too busy" to listen or to help in any way so we as a homebuilder can accomplish our goals and meet our customer's needs. I always appreciate the wonderful service that you provide now and in the future". More here: http://tierradiosa.com/

Working with consumers, builders, and renovators, the company is driven by two key areas: improved comprehension of the programs available in the marketplace and providing assistance with obtaining rebates for environmentally responsible projects.

They have a team of licensed Energy Advisors who will share the commitment to service. Services include EnerGuide Rating New Home labelling, EnerGuide Pre-Evaluation, house plan benchmarking, house plan modelling, blower door testing, builder envelope consulting, builder mentoring, air quality investigation, training etc.

On Giving Back:

Tierra Diosa has given back to a number of causes including Plan Canada, Habitat for Humanity, Centre for Newcomers, and her most recent contribution to those effected by the Ft. McMurray wildfires. Gael will work with Energy Advisors involved in the rebuilding efforts and donate the EnerGuide label and report free-of-charge.

For a list of Energy Advisors in your area please contact the Built Green Canada office.

PROGRAM UPDATES

Master Builder Training Credit Updates

Professional Home Builders Institute will accept BUILT GREEN® Program Fundamentals online module, as well as Construction Technology Modules for Master Builder Training credits. More information on these modules here:

www.builtgreencanada.ca/built-green-training

EnerGuide v.15 & Built Green

As previously communicated, Built Green Canada is updating our requirements to reflect the needs of industry. Our timelines are based on industry consultation and intended to support those set out by Natural Resources Canada and the new building code.

Based on recent feedback from industry and discussion with NRCan, we will be extending the transition period through March 31, 2017. As of April 1, 2017 only HOT2000 v.11 and the ERS v.15 (GJ/year) will be used for certification with Built Green Canada.

Whether using Hot2000 v.10.51 or ideally v.11, our interest is in the energy requirements of the reference house as defined by 9.36.5 building code.

For those using ERS v.15, the energy requirement for each BUILT GREEN® certification level is based on the percent lower than reference house (% LTRH). In other words, the ERS v.15 rating must meet the required percent lower than the corresponding ERS v.15 reference house.

Note: The % LTRH lower than reference house marks a change in the language we were previously using—percentage improvement—as it is a convenient metric that can clearly communicate to all interested parties, and it aligns with other key stakeholders. For the purposes of public communications the % LTRH targets can be described as "X percent better than the national building code". And specifically, "X percent better than the energy performance required by the national building code".

- Bronze certification: house rating meets the energy requirements of 9.36 reference house and earns 25 points.
- Silver certification: house rating is 10% lower than reference house and earns 30 points.
- Gold certification: house rating is 20% lower than reference house and earns 35 points.
- Platinum certification: house rating is 30% lower than reference house and earns 40 points.

The 2016 Single Family checklist for ERS v.15 includes space to input the ERS v.15 "As Built" house rating and the ERS v.15 "Reference House" rating and from there, the checklist will calculate the percentage lower than reference house.

** Your percentage will vary from your ERS label as Built Green removes the electric baseloads from both the "As Built" house rating and the "Reference House" rating to ensure that your home's energy improvements are not affected by your electric baseloads, which are constant through all homes and cannot be improved upon.

It should also be noted that based on ongoing energy modelling work, the platinum requirements have been updated from 25% to 30%. This is, in part, due to the 0 – 100 EnerGuide rating scale not converting perfectly to the new EnerGuide Rating System v.15 (GJ/year rating scale).

To wrap up, here is what you need to know about the ERS versions and BUILT GREEN® home certification:

- For the EnerGuide portion of BUILT GREEN® Single Family certification, you may use either the new or old EnerGuide system up until March 31, 2017—we have 2016 checklists for both ERS versions (identical checklists, other than ERS).
- The 2017 BUILT GREEN® Single Family Checklist will be coming out shortly—it uses ERS v.15 only and can be used January 1, 2017 onwards. Note: minimal updates have been made to the 2017 checklist from the 2016 checklist.

2017 Checklist Updates

We are finalizing our 2017 checklists, and these will be sent out during the Fourth Quarter. A reminder that the 2017 Single Family and High Density Checklists are effective on January 1, 2017; however, builders may elect to use the 2016 Checklist versions to enrol projects up to and including March 31, 2017.

Renovation Program: Trials Encouraged

The program soft launched earlier this year and is currently in trials. We would like to encourage those who work in the renovation market to consider test piloting this.

For simplicity, we have created three renovation types: whole house (75% or more), renovation (40 - 70%), and small home improvements (less than 40% and/or bathroom, or kitchen, or basement).

Each of these maintains the same seven categories, consistent with our Single Family and High Density (HD) programs.

BUILT GREEN® Certificate of Authentication Available for Your Show Home or Sales Center

Showcase your BUILT GREEN® home by proudly displaying the authentication of your third-party

certification in a highly visible location, like a show home or sales center.

Contact our office with project details, and we're happy to send this off to you.



Are You Utilizing the Full Benefit of Belonging to the BUILT GREEN® Community?

Whether an active BUILT GREEN® member or new and learning about how Built Green sets you apart, we encourage you to familiarize yourself with the Membership Package, including our *Marketing Toolkit and the consumer-focused tools found there*, which will assist you in in strengthening the benefits you receive for building to BUILT GREEN® certification and provide tools to assist you in your sales and marketing efforts.

Product Catalogue Connection

The BUILT GREEN® Product Catalogue is an online resource for builders and renovators for use in sustainable construction. Products have been approved by Built Green Canada, giving builders peace of mind and saving them time sourcing materials. Our programs are based on checklists that guide our builders to achieving BUILT GREEN® certification, and those materials in our catalogue are tied to specific checklist items.

Below, our featured Product Catalogue contributors are listed with their BUILT GREEN® approved products. If used in your BUILT GREEN® project, these products earn checklist points.

Tremco Barrier System

Earning points in Envelope & Energy Systems and Materials & Methods

 Watchdog Waterproofing is a cold applied, polymer modified, asphalt emulsion (water-based). It's spray applied by certified contractors to provide an elastomeric waterproofing membrane to the exterior of foundation walls. Watchdog can be successfully applied year round. (2.3.1)

Johns Manville

Earning checklist points in Envelope & Energy, Materials & Methods, Indoor Air Quality

- Johns Manville formaldehyde-free thermal and acoustical insulation for wood, engineered wood, and steel framing is made of long, resilient glass fi bres bonded with our biobased binder. A wide range of thermal resistance is available to provide thermal control for both vertical and horizontal applications. (2.25, 3.9)
- Johns Manville AP[™] Foil-Faced Foam Sheathing board consists of a uniform closed-cell polyisocyanurate foam core bonded on each side to a foil facer. One side has a reflective foil facer and the other side has a white non-reflective foil facer to suit your building needs. (1.1.2)

Watercycles Energy Recovery Inc.

Earning checklist points in Envelope and Energy

 The Watercycle is one of the single most cost effective ways to increase the energy efficiency of new homes under most building programs like Built Green Canada. The Watercycle reduces the cost of hot water heating and double the output of a hot water heater. (1.2.8)

K2 Stone

Earning points in Materials & Methods and Business Practices

 Ocean Pearl Natural Stone is a durable and natural product. It's quarried and processed locally in Port Renfrew and Nanaimo, respectively. Building products consist of thinstone veneer, full bed ledgestone, and capping. Landscape products consist of flagstone, cobbles, wallstone, and others. (2.2.11, 2.3.5, 2.3.9, 7.6)

Desert Spring Eco-Products

Earning points in Ventilation

 The Canadian-made Pulse Humidifier system is a true water-efficient, flow-through humidifier. Water consumption is carefully monitored and controlled by its patented pulse control unit, which senses the by-pass air temperature and meters water flow to avoid potential standing water issues or reduction in output. (4.6)

EPS Molders Inc.: Polycore Foundation Wall System

Earning points in Energy & Envelope, Materials & Methods, and Waste Management

 Invented and developed in Edmonton, the Polycore Building System is an insulated and structural component building product revolutionizing the building industry. Sections are made from two materials: EPS (expanded polystyrene) as the insulating wall core, and integrated galvanized steel construction studs for strength. Simple product series are easily adaptable to most commercial or residential building uses including walls, foundation walls, foundation floors, and roofs. The system has many advantages, significant cost savings, and its ease of installation makes the product less dependent on costly and hard-to-find skilled trade workers. (1.1.5, 1.1.9, 1.1.10, 2.1.2, 2.1.3, 2.1.13, 5.3)

Quick-Therm Multi-Purpose Insulation

Earning points in Energy & Envelope and Materials & Methods

- Quik-Therm Multi-Purpose Insulation is a rigid insulation with reflective plastic facers on either side, providing a vapour, radon, and radiant barrier. This insulation is impervious to moisture, and eliminates thermal bridging. (1.1.2, 1.1.8)
- Quik-Therm Connect is a rigid insulation board with builtin strapping members every 16" or 24". Ideal for exterior insulation, as it will line up with the framing members, then allow siding to be fastened directly to the Quik-Therm Connect. In many cases, sheathing is not required and 2x4" construction is feasible. (1.1.2)
- The Quik-Therm Concrete Insulation System is an all-in-one assembly designed for residential basements. It provides framing members, insulation, and vapour barrier in a system that installs in about half the time of conventional studs/batts/ poly. With no thermal bridging, it performs nearly twice as well as fiberglass and wood studs. It does not absorb water and will not promote mold. (1.1.3)

Supporting Members Can Help You

Supporting members are those working in the sustainable building sector, with similar goals: they could end up being collaborative partners, so be sure to check them out and make mutually beneficial connections! They are responsible for products and services for the residential building industry and are required to meet membership criteria.

www.builtgreencanada.ca/find-a-supporting-member