

41° to 66°: Regional Responses to Sustainable Architecture in Canada

October 4 – December 21, 2008

To many people, the phrase “sustainable architecture” means caulking their windows and installing a solar panel or two. But in fact, sustainable architecture is about much more than smart technology and energy-saving devices.

Today, a growing number of Canadian architects see sustainable architecture in the context of a broader contemporary sensibility that revisits the roots of 20th century Modernism, while also drawing inspiration from regional material culture and building design traditions, many of which were developed in direct relation to local climatic and geographic conditions.

This emergence of regionalism as a theme in contemporary Canadian architecture can be seen to parallel the development of an interest in sustainable design, because the two phenomena often overlap. As architect Niklaus Kohler notes: “Because of the shortage of resources, traditional vernacular building practices have tended intuitively, through trial and error, towards economically and environmentally optimal solutions.” In addition to their technologically appropriate responses to geography and environment, regional architectures typically embody the essence of local cultural identity, be it the embodied wisdom of rural vernacular building practices or the environmental attunement and animistic cosmology of indigenous cultural traditions. This offers a potentially rich alternative to the conventional perception of sustainable architecture as driven by technology and energy performance. Instead, it lends itself to the pursuit of an architecture whose responsiveness to local conditions leads not only to greater energy and material efficiencies, but that also addresses local cultural and tectonic traditions, leading to greener and also more meaningful architecture.

41° to 66° is national in its scope, with recent examples of sustainable architecture in Canada from coast to coast to coast. It is laid out in six regions (Arctic, West Coast, Mountain, Prairie, Continental, Atlantic) with photo and text wall panels, and six beautiful models.



Co-curator John McMinn leads a tour of the exhibition on October 4. Photograph by Sharon Doucette.

Exhibition Curators

John McMinn, Associate Professor, School of Architecture, University of Waterloo

Marco Polo, Assistant Professor, Department of Architectural Science, Ryerson University

A catalogue is available for this exhibition.

Project Credits

Arctic

Project: Tr'ondek Hwech'in Cultural Centre
Location: Dawson City, Yukon
Client: Tr'ondek Hwech'in First Nation
Architect: Maurer Kobayashi Architects
Structural: Wood & Associates Structural Engineers
Mechanical: Northern Climate Engineering
Electrical: Dorward Engineering Services
Photography: Chris Chie
Completion: 1999

Project: Mayo Replacement School
Location: Mayo, Yukon
Client: Yukon Territory Government & Department of Education
Architect: Kobayashi + Zedda Architects Ltd.
Structural: Fast & Epp Partners
Mechanical: Northern Climate Engineering
Energy Engineer: G.F. Shymko & Associates
Electrical: Dorward Engineering Services Ltd.
Landscape: Inukshuk Planning and Development
Photography: Kobayashi + Zedda Architects Ltd.
Completion: 2003

Project: Kugluktuk Recreation Complex
Location: Kugluktuk, Northwest Territories
Client: Hamlet of Kugluktuk
Architect: Pin/Matthews Architects
Structural: FSC Group
Mechanical: FSC Group
Electrical: FSC Group
Photography: Pin/Matthews
Completion: 1998

Project: Kiilnik High School
Location: Cambridge Bay, Nunavut
Client: Government of Nunavut
Architect: Pin/Taylor Architects
Structural: Armstrong and Nelson, Engineers and Land Surveyors
Mechanical: Thorn Engineering
Electrical: FSC Group
Photography: Pin/Taylor Architects
Completion: 2002

Atlantic

Project: Murdena Marshall Meeting Hall
Location: Eskasoni First Nation, Nova Scotia
Client: Murdena Marshall
Designer: Richard Kroeker
Structural: Buro Happold (Michael Dickson, Chris Williams)
Electrical: Albert Marshall
Landscape: Albert Marshall
Photography: Richard Kroeker
Completion: 2004

Project: Danielson Cottage
Location: Smelt Brook, Cape Breton Island, Nova Scotia
Client: Esther and Bill Danielson
Architect: MacKay-Lyons Sweetapple Architects Ltd.
Structural: Campbell Comeau Engineering Ltd.
Photography: Undine Prohl, Brian MacKay-Lyons
Completion: 1998

Project: Messenger House II
Location: Upper Kingsburg, Nova Scotia
Client: Mary and John Messenger
Architect: MacKay-Lyons Sweetapple Architects Ltd.
Structural: Campbell Comeau Engineering Ltd.
Photography: James Steeves
Completion: 2003

Project: Howard House
Location: West Pennant, Nova Scotia
Client: Vivian and David Howard
Architect: MacKay-Lyons Sweetapple Architects Ltd.
Structural: Campbell Comeau Engineering Ltd.
Photography: Undine Prohl, James Steeves
Completion: 1999

Project: Centre d'Interpretation de Bourg de Pabos
Location: Pabos, Quebec
Client: La corporation du Bourg de Pabos
Architect: Atelier Big City
Structural: Kumar Malde
Mechanical: Plante et Associés
Electrical: Plante et Associés
Landscape: Le Groupe Lestage (Claude Cormier)
Photography: Michel Laverdière
Completion: 1994

Project Credits

Continental

Project: Computer Science Building, York University
Location: Toronto, Ontario
Client: York University
Architect: Architects Alliance in joint venture with Busby + Associates Architects
Structural: Yolles Partnership Inc.
Mechanical: Keen Engineering
Electrical: Carinci Burt Rogers
Landscape: Robert Packham Design Inc.
Sustainability: Berkebile Nelson Immenschuh McDowell
Photography: Steven Evans
Completion: 2001

Project: Jackson-Triggs Estate Winery
Location: Niagara-on-the-Lake, Ontario
Client: Vincor International Inc.
Architect: Kuwabara Payne McKenna Blumberg Architects
Structural: Blackwell Engineering
Mechanical: Keen Engineering
Electrical: Carinci Burt Rogers
Civil: Kerry T. Howe Engineering
Landscape: Janet Rosenberg & Associates
Photography: Robert Burley/Design Archive, Eduard Heuber/Arch Photo Inc., Peter Sellar/Klik
Completion: 2001

Project: Moorelands Camp Dining Hall
Location: Lake Kawagama, Dorset, Ontario
Client: Downtown Churchworkers Association
Architect: Shim-Sutcliffe Architects
Structural: Blackwell Engineering
Mechanical: Toews Systems Design
Electrical: Carinci Burt Rogers
Photography: Michael Awad, James Dow
Completion: 2001

Project: Thunder Bay Regional Health Centre
Location: Thunder Bay, Ontario
Client: Thunder Bay Regional Hospital; Cancer Care Ontario; Northwestern Ontario Regional Cancer Centre
Architect: Salter Farrow Pilon Architects (restructured as Farrow Partnership Architects Inc. and Salter Pilon Architects Inc.)
Structural: Mikelson/Cook joint venture
Mechanical: H.H. Angus & Associates Ltd.
Electrical: H.H. Angus & Associates Ltd.
Landscape: Schollen & Company with KSGM Architects and Engineers
Photography: Farrow Partnership Architects
Completion: 2004

Project: Bahen Centre for Information Technology, University of Toronto
Location: Toronto, Ontario
Client: University of Toronto, Faculty of Applied Science and Engineering, Faculty of Arts and Science
Architect: Diamond and Schmitt Architects Inc.
Structural: Read Jones Christoffersen
Mechanical: Keen Engineering
Electrical: Crossey Engineering Ltd.
Landscape: Ian Gray & Associates/Diamond and Schmitt Architects Inc.
Photography: Steven Evans
Completion: 2002

Project: Integrated Learning Centre at Beamish-Munro Hall, Queen's University
Location: Kingston, Ontario
Client: Queen's University
Architect: Bregman + Hamann Architects
Structural: Halsall Associates Limited
Mechanical: Smith & Anderson Consulting Engineers
Electrical: Crossey Engineering
Environmental: Allen Kani & Associates
Landscape: Janet Rosenberg & Associates
Photography: Richard Johnson of Interior Images
Completion: 2004

Project: Angus Technopole
Location: Montreal, Quebec
Client: Société de Développement Angus
Architect: Ædifica Architecture + Design + Engineering
Structural: Dessau Soprin, SNC-Lavalin inc.
Mechanical: Dessau Soprin, Pellemon inc.
Electrical: Dessau Soprin, Pellemon inc.
Environmental: SNC-Lavalin environnement inc.
Photography: Michel Tremblay
Completion: 1999

Project: Mountain Equipment Co-op Store
Location: Ottawa, Ontario
Client: Mountain Equipment Co-op
Architect: Linda Chapman Architect & Christopher Simmonds Architect
Structural: Cleland Jardine Engineering Limited
Mechanical: Leslie Jones & Associates
Electrical: Leslie Jones & Associates
Waste Management: by dEsign
Landscape: Jim Lennox
Photography: Ewald Richter Photography Ltd.
Completion: 2000

Project Credits

Prairie

Project: Alloway Reception Centre, Fort Whyte Centre
Location: Winnipeg, Manitoba
Client: Fort Whyte Centre
Architect: Syverson Monteyne Architecture with Carl Nelson Jr.
Structural: John Glanville, Russell Brandt
Mechanical: SMS Engineering
Electrical: SMS Engineering
Landscape: Syverson Monteyne Architecture with Carl Nelson Jr. and Lee Caldwell of Fort Whyte Centre
Photography: Henry Kalen, Andrew Sikorsky
Completion: 2000

Project: SC3 Workplace
Location: Winnipeg, Manitoba
Client: Smith Carter Architects and Engineers
Architect: Smith Carter Architects and Engineers
Structural: Smith Carter Architects and Engineers
Mechanical: Smith Carter Architects and Engineers
Electrical: Smith Carter Architects and Engineers
Landscape: Smith Carter Architects and Engineers
Photography: Gerry Kopelow
Completion: 2004

Project: Hinton Government Centre
Location: Hinton, Alberta
Client: Town of Hinton
Architect: Manasc Isaac Architects
Structural: Duthie Newbie Weber
Mechanical: Keen Engineering
Civil: ISL Butler Krebes
Electrical: Reid Crowther
Landscape: Gibbs & Brown
Photography: James Dow
Completion: 2001

Project: St. John's Ambulance
Location: Edmonton, Alberta
Client: St. John Council for Alberta
Architect: Manasc Isaac Architects
Structural: Earth Tech
Mechanical: Keen Engineering
Electrical: Keen Engineering
Civil: GPEC
Landscape: Carlyle & Associates
Photography: Manasc Isaac Architects and James Dow
Completion: 2004

Project: Athabasca Health Centre
Location: Stony Rapids, Saskatchewan
Client: Athabasca Health Authority
Architect: Manasc Isaac Architects
Structural: Cochrane Engineering
Mechanical: Hukalo Oberg Engineering
Electrical: Reid Crowther / Keen Engineering
Civil: Cochrane Engineering
Landscape: KLA Group c/o Browning Design Inc.
Photography: Manasc Isaac Architects
Completion: 2004

Mountain

Project: Nicola Valley Institute of Technology
Location: Merritt, British Columbia
Client: Nicola Valley Institute of Technology/
University College of the Caribou
Architect: Busby Perkins+Will (formerly Busby + Associates Architects)
Structural: Equilibrium Consulting
Mechanical: Keen Engineering
Electrical: Earth Tech Canada
Civil: True Engineering
Landscape: True Engineering
Photography: Nic Lehoux
Completion: 2001

Project: Canmore Civic Centre
Location: Canmore, Alberta
Client: Town of Canmore
Architect: Marshall Tittlemore Architects
Structural: Cascade Engineering Group Ltd.
Mechanical: Keen Engineering Ltd.
Electrical: Keen Engineering Ltd.
Landscape: Landplan Associates Ltd.
Photography: Sean Dennie/photoganda.ca
Completion: 2004

Project: Bragg Creek House
Location: Bragg Creek, Alberta
Client: Mary Anne Moser and Tim Westbury
Architect: Marc Boutin Architect
Structural: Adept Engineering Ltd.
Photography: Marc Boutin Architects and Ron Choe
Completion: 2003

Project Credits

West Coast

Project: Gleneagles Community Centre
Location: West Vancouver, British Columbia
Client: District of West Vancouver
Architect: Patkau Architects
Structural: Fast & Epp
Mechanical: Earth Tech Canada
Electrical: Earth Tech Canada
Civil: Webster Engineering
Landscape: Vaughan Landscape Planning & Design
Photography: James Dow
Completion: 2003

Project: Richmond City Hall
Location: Richmond, British Columbia
Client: City of Richmond
Architect: Hotson Bakker / Kuwabara Payne McKenna Blumberg Associated Architects
Structural: Bush Bohlman & Partners
Mechanical: Stantec Consulting Ltd.
Electrical: R.A. Duff & Associates Inc.
Landscape: Phillips Farevaag Smallenberg Inc.
Photography: Martin Tessler/Joyce Drohan
Completion: 2000

Project: Revenue Canada Building
Location: Surrey, British Columbia
Client: Public Works and Government Services Canada
Architect: Busby Perkins+Will (formerly Busby + Associates Architects)
Structural: Jones Kwong Kishi
Mechanical: Keen Engineering
Electrical: Reid Crowther
Landscape: Site Design Solutions
Photography: Martin Tessler
Completion: 1998

Project: Liu Centre for the Study of Global Issues
Location: Vancouver, British Columbia
Client: University of British Columbia
Architect: Stantec Architecture Ltd. (formerly Architectura Planning Architecture Interiors Inc.) in collaboration with Arthur Erickson
Structural: Bush Bohlman & Partners
Mechanical: Keen Engineering Co. Ltd.
Electrical: Robert Freundlich & Associates
Landscape: Cornelia Hahn Oberlander
Photography: Gerry Kopelow
Completion: 2000

Project: White Rock Operations Building
Location: White Rock, British Columbia
Client: City of White Rock
Architect: Busby Perkins+Will
Structural: Fast + Epp
Mechanical: Keen Engineering
Electrical: Flagel Lewandowski
Landscape: Wendy Grandin
Photography: Colin Jewall + Enrico Dagostini
Completion: 2003

Project: Materials Testing Facility
Location: Vancouver, British Columbia
Client: City of Vancouver Engineering Services
Architect: Busby Perkins+Will
Structural: Fast + Epp
Mechanical: Keen Engineering
Electrical: Reid Crowther & Partners
Photography: Martin Tessler
Completion: 1999

Project: West Vancouver Aquatic Centre
Location: West Vancouver, British Columbia
Client: District of West Vancouver
Architect: Hughes Condon Marler : Architects
Structural: Fast + Epp
Mechanical: Keen Engineering Co. Ltd.
Electrical: Robert Freundlich & Associates Ltd.
Landscape: Phillips Farevaag Smallenberg
Photography: Martin Tessler, Nic Lehoux, Gary Otte
Completion: 2004