### **USE OF LOW CARBON & RENEWABLE MATERIALS** in LEED Projects

# CASE STUDY

# Photo: Hendalus: Por curs Architects: Programmer and Winter

### Overview

TELUS Garden Office is part of the TELUS Garden complex located at 510 West Georgia in Vancouver. Completed in 2015, this project was the first Canadian project to be awarded LEED Platinum under the LEED Canada 2009 Core and Shell rating system. The project is the headquarters of TELUS and boasts many sustainability features including sky gardens, the use of low emitting materials and on-site renewable energy through photovoltaic panels.

### How low carbon materials were used in the project

TELUS Garden was one of the first projects to be built in Vancouver using Portland-limestone cement (PLC), a cement product that has 10% less embodied carbon than regular Portland cement. PLC is branded in Canada under the name Contempra® and is manufactured in the Metro Vancouver

region. PLC is created by adding 6-15% limestone with cement clinker.

The use of wood was also incorporated into the building with a 67 metre steel-glulam span creating an arched canopy, which is an integral architectural feature of the project.

## **TELUS Garden Office**

Vancouver, B.C.

### LEVEL OF LEED OBTAINED:

LEED® Canada CS 2009 Platinum

# WOOD RELATED LEED CREDITS ACHIEVED:

MRc5 - Regional Materials MRc6- Certified Wood IEQc4.4 - Low-Emitting Materials: Composite Wood & Agrifiber Products

### CLIENT

Westbank Projects Corp.

### ARCHITECT

Henriquez Partners Architect

### STRUCTURAL ENGINEER

Glotman Simpson

### LEED CONSULTANT

Icon/Light House Sustainable Building Centre

### CONTRACTOR

Icon Construction

### OCCUPANTS:

Over 1900 for retail and office

### **NUMBER OF STOREYS**

22

### **GROSS FLOOR AREA**

47.000m<sup>2</sup>

### **CASE STUDY: TELUS Garden Office**





# Leadership in Energy and Environmental Design (LEED°)

The project was certified to LEED Canada Core and Shell Platinum. Just under 60% of all wood based materials were from Forest Stewardship Council (FSC®) sources, resulting in the achievement of Materials and Resources credit 6 (MRc6) - Certified Wood.

The project also achieved full points MRc4 - Recycled Content (30%) and for MRc5 - Regional Materials (37%).

### **Awards**

2016 Architizer A+ Award

### References

Canada Green Building Council (CaGBC). www.cagbc.org

http://henriquezpartners.com/work/telus-garden/

http://www.glotmansimpson.com/project/telus-garden-vancouver/

http://westbankcorp.com/press/telus-garden-wins-architizers-top-awards#.WLicNW\_yu01

http://www.vancitybuzz.com/2015/09/telus-garden-office-tower-vancouver/