

# PCL celebrates!

A century of construction excellence and tradition has led to a year-long anniversary celebration across the PCL family of companies. A multi-faceted program was developed themed around 100 years of fascinating construction growth across North America.

PCL's 100th anniversary logo developed for the centennial year



## Centennial Learning Centre

To mark its 100th anniversary and as a tribute to the entire family of companies, PCL has built the \$13-million Centennial Learning Centre in Edmonton. It's the new training and development hub for the construction group, created to celebrate 100 years of construction excellence and is a tribute to past, present and future generations.

The 2,700-square-metre building in PCL Business Park connects PCL's headquarters and the Edmonton-based industrial and commercial construction operations building. It houses a reception area, various offices, and a new boardroom. There is a state-of-the-art training room, remote training rooms and meeting rooms, a large lunchroom and a spacious Grand Hall overlooking landscaped gardens.

The Centennial Learning Centre achieved Gold certification under the Leadership in Energy and Environmental Design (LEED) Green Building rating system: a voluntary, consensus-based national standard for developing high performance, sustainable buildings.

### Heating and cooling

The Grand Hall is encased by towering walls of concrete and glass. Special coatings within the window system allow the sun's warmth to pass through during the winter, while reflecting solar energy during the summer.

As the inside temperature increases, the warm air rises, and louvers open to allow hot air to escape and cool air from the garden to enter the building. This natural draft reduces the need for mechanical air conditioning – and lowers energy costs.

Four meters below you, the earth's temperature is constant year-round. Following the basic principles of heat transfer, frigid winter air will absorb heat from the earth, whereas hot summer air will release heat to the cooler ground. This simple technique reduces the use of electricity and natural gas, and lowers the demands placed on the mechanical system.

### Lighting

As another element of energy conservation, the building is "selectively illuminated." Rather than lighting all areas equally, the lighting levels of the Centennial Learning Centre vary significantly throughout the building, depending upon the use of each area.

Hallways are somewhat dimmed, while work areas are brighter. As well as conserving electricity, selective lighting is visually stimulating, and dramatically highlights the architectural features of this striking facility.

### Using nature's assets

Fundamental to the LEED principles is the efficient use of nature's assets whenever practical, and reducing the use of chemically modified products. As one example – to reduce the use of chlorinated city water – storm runoff from the garden is captured and then stored in an underground reservoir, later to be used for irrigation during periods of low rainfall.

