



This project is registered under the LEED® green building program.

# INVESTING NOW IN SUSTAINABLE DEVELOPMENT IS INVESTING IN THE FUTURE

GLOBAL  
PROJECT  
**\$43 M**

OVER  
**\$125,000**  
IN ANNUAL  
SAVINGS  
in natural gas

**\$1.2M**

invested to  
increase energy  
efficiency and air  
cleaning



**653 T**  
OF GHG/YEAR

=

**121**



**UNUSED VEHICLES**  
per year

## SOPREMA: POLYISOCYANURATE PLANT

Year of construction: 2015

Area: 243,000 ft<sup>2</sup>

Type of production: Polyisocyanurate boards



**SOPREMA®**

# SUSTAINABLE BUILDING

Materials Used – Wise Choices for the Environment:



## R-42 HIGH-QUALITY INSULATION:

Reduced energy loss and increased comfort



## OF HEAT ISLANDS

on the roof with SOPREMA SOPRASTAR GR waterproofing membrane, which has a reflective surface coated in ultra-white flakes



## OF HEAT ISLANDS

in the loading area – light-coloured compressed concrete in the loading area



A section of the roof is supported by certified wood, which allowed sequestration of

62 METRIC TONS OF  
**CO<sub>2</sub>**

Validation of the theoretical performance of architectural systems through a

## THERMOGRAPHY AND INFILTROMETRY

study

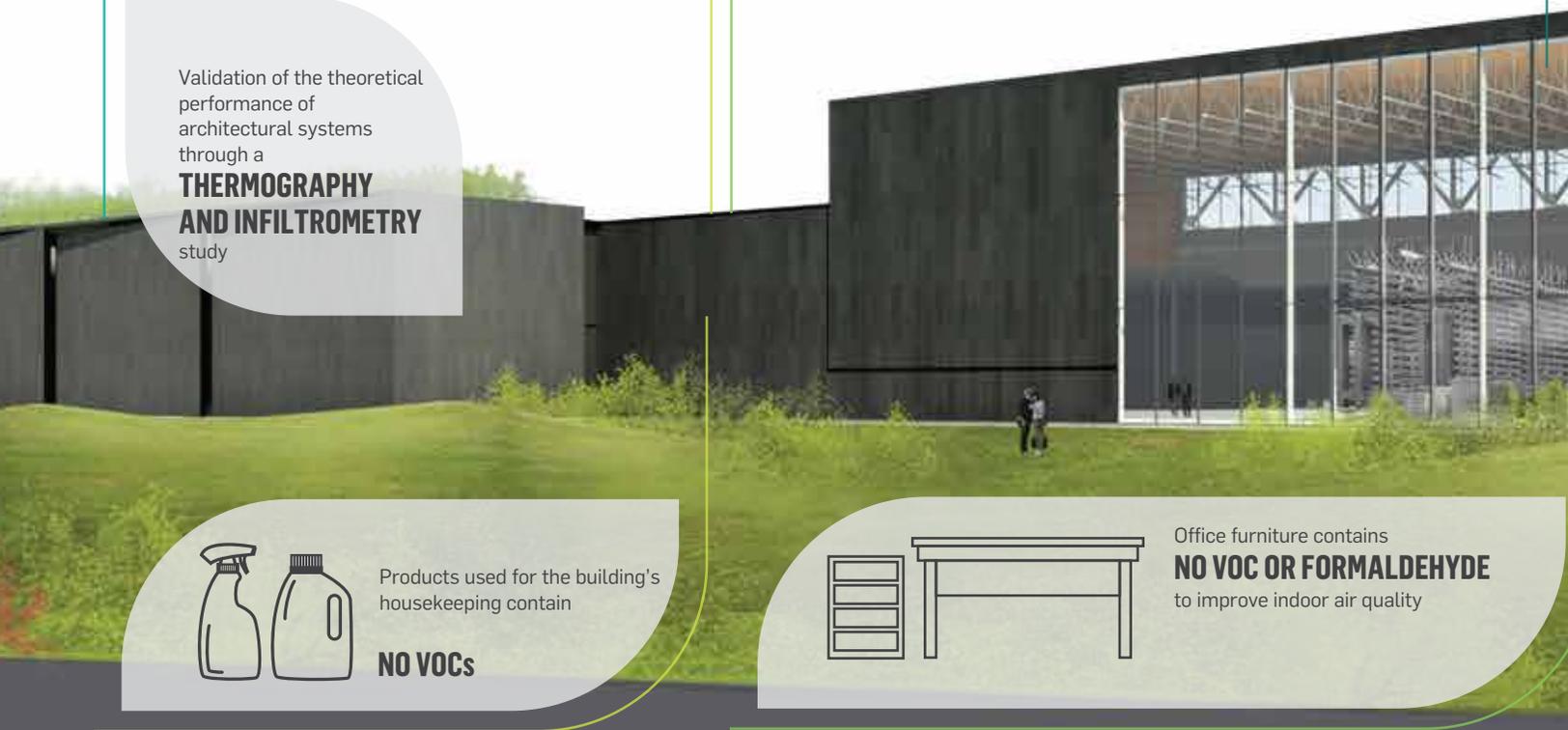


Products used for the building's housekeeping contain

**NO VOCs**



Office furniture contains  
**NO VOC OR FORMALDEHYDE**  
to improve indoor air quality



## HEAT RECOVERY SYSTEM

### Clean Air Regulation

According to the Clean Air Regulation of the Government of Québec, a plant with industrial production that emits beyond 100 kg of VOC-contaminated air must treat the excess.

### Air Incineration and Heat Recovery System

VOC-contaminated air generated by manufacturing operations is captured and carried to a regenerative thermal oxidizer (RTO). The RTO has a sealed core that incinerates the contaminated air sent in. This incineration process eliminates more than 95% of the VOCs. The decontaminated hot air is then directed to the heat recovery system.

To optimize the energy efficiency of the building, a separate duct routes fresh air from the outside to a heat recovery system connected to the RTO. Using the energy emitted by the incinerator core, the system heats the outside air up to 40 °C and conveys it towards the inside of the plant to meet its heating needs.



**99%** OF THE HEAT EMITTED BY THE INCINERATOR CORE IS REUSED

A set temperature of 21 °C can then be maintained inside the plant, even if the outside temperature is -20 °C.



### SOLAR WALL

A wall of 4,000 ft<sup>2</sup> coated with perforated solar collectors made of 2% tinted polycarbonate was installed on the south facade of the building. The energy generated by the solar collectors heats the air from the outside up to 20 °C and routes it through the building's heating system.



Inside and outside:  
**LED BULBS**

## INNOVATION SINCE 1908

SOPREMA's success developed around the idea that the quality, durability and reliability of materials must match the builder's ambitions and expectations. For more than 100 years, SOPREMA has been using its expertise to develop a variety of high-end products that meet or exceed all the requirements of the construction field.

### What Is LEED®?

Leadership in Energy and Environmental Design (LEED) is a rating system that is recognized as the international hallmark of excellence for green building in over 130 countries. Since 2002, the Canada Green Building Council (CaGBC) and LEED Canada have been redefining buildings and communities.

The LEED system works because it recognizes that sustainability should be at the heart of all buildings—in their design, construction, and operation. Since 2004, the CaGBC has LEED certified over 4,350 buildings in Canada and registered over 8,000—with the second highest number of LEED projects anywhere in the world<sup>2</sup>.

<sup>2</sup>CANADA GREEN BUILDING COUNCIL – QUÉBEC:  
<http://batimentdurable.ca/construction-developpement-durable/leed> (Page read on February 8, 2017)

<b>ROOFS</b>	<b>WALLS</b>	<b>FOUNDATIONS</b>	<b>PARKING DECKS AND FLOORS</b>	<b>CIVIL ENGINEERING STRUCTURES</b>	<b>ADDITIONAL EXPERTISE</b>
					
WATERPROOFING	INSULATION	VEGETATIVE SOLUTIONS	SOUNDPROOFING	ACCESSORY PRODUCTS	

SOPREMA is an international manufacturer specializing in the production of waterproofing and insulation products, as well as vegetative and soundproofing solutions, for the building and civil engineering sectors.

**SOPREMA.CA**

**1.877.MAMMOUTH**

ROLLAND ENVIROTM DIGITAL paper meets the following certifications:



Garant  
des forêts  
intactes™

