



**Architect:** CEI Architecture  
**Location:** Penticton, BC  
**Building:** Okanagan College Campus  
**Product Choice:** Dinoflex Custom Evolution



## The Centre of Excellence in Sustainable Building Technologies and Renewable Energy Conservation

Dinoflex recycled rubber flooring can be found in one of Canada's most environmentally responsible and sustainable facilities. The Centre of Excellence in Sustainable Building Technologies and Renewable Energy Conservation, located at the Penticton campus of Okanagan College, was designed and built to target the strict guidelines of the Living Building Challenge, considered a step up from a LEED Platinum designation. Living Building Challenge is a philosophy, advocacy tool, and certification program that addresses development at all scales. It is currently comprised of seven performance areas (called Petals): Site, Water, Energy, Health, Materials, Equity, and Beauty. These are subdivided into a total of twenty Imperatives, each of which focuses on a specific sphere of influence.

Under the direction of CEI Architecture, the design team targeted the tough goals of the Living Building Challenge, but not without some difficulties, especially when choosing appropriate flooring. One of the most important goals was to use materials that are deemed sustainable. For flooring, the most significant criterion is that it does not contain PVC. Another challenge was to incorporate the most efficient means of heating the building. By using a combination of polished concrete flooring, epoxy and Dinoflex products, this challenge was met head on.

Most of the surfacing throughout the building incorporates in-floor radiant heating to maximize heating efficiency. However, the concrete was considered too hard for teachers to stand on all day, and didn't have the desired acoustic results for the classrooms. Instead, CEI created a custom color mix to be installed in select classrooms and offices and a thicker tile for use in the Human Kinetics suite. The custom color allowed them to stay within the requirements of red list materials, and recycled content.

The flooring, which was used for approximately 20,000 sq ft, is made with high quality, post consumer recycled rubber, with colored EPDM to add brightness limited to only 25% in accordance with parameters set by the Living Building Challenge. This project is a highlight for the CEI team as it is to be used as a teaching institute to educate upcoming builders and trades professionals on the most advanced sustainable products and processes available. The installation of the product, the maintenance of the tiles and the tough, durable aspects of the Dinoflex floor, make it easy for CEI's Project manager, Robert Parlane, to recommend Dinoflex again. "The use of Dinoflex flooring was a great fit for the Centre of Excellence project: a product manufactured locally with high recycled content and no red list materials in accordance with the tough goals of the Living Building Challenge, and a product that meets the needs of faculty and students to provide a durable, resilient finish without compromising the performance of the radiant flooring system."