



KENT BUILDING SUPPLIES DISTRIBUTION CENTER

Radiant Heating
Project Profile



RAUMAT Radiant Heating Mat System From REHAU Is the Ideal Solution for Retailer's New Distribution Center

When a construction project is pressed for time and pushing the budget boundaries, any element that provides both time and cost savings while maintaining a high standard of performance is a welcomed part of the process.

Developers of a 383,000 ft² (35,580 m²) distribution center for Kent Building Supplies, a Canada-based home improvement retailer, selected the RAUMAT radiant heating mat system from REHAU for those very reasons. One of the largest buildings in New Brunswick, located in Moncton off the Trans-Canada Highway, the warehouse required 400,000 ft (123,295 m) of RAUPEX O₂ Barrier pipe. The radiant slab was completed in just under two months.

"It was a race to keep ahead of the concrete. We were apprehensive at first, but once we got the first few 1,000 ft in, we knew we had what we wanted. I was amazed by how quickly the pipe went down," said Gilbert Arseneau, the project's mechanical consultant and a senior design engineer at MCW Maricor. Arseneau estimates that the use of the RAUMAT system cut weeks off the standard installation time and used a significantly smaller installation crew than a typical radiant heating system in a building of that size.

The construction plans initially called for using a competitive brand of radiant heating, but when the project went out to bid, REHAU introduced project coordinators to its new radiant mat system, earning the job.

The RAUMAT system is customized to each project, resulting in exact mat and tail configurations. For the Kent Building Supplies project, 228 rolls of RAUMAT, each with 250 ft (76 m) lengths of 5/8 in. RAUPEX pipe in four circuits, were delivered in sequence.

The PEXa pipe in RAUMAT withstands many jobsite abuses. It is flexible and resists kinking, even at temperatures well below freezing.

Arseneau said radiant heating was ideal for the expansive 36 ft (11 m) tall warehouse because of the need to stack inventory as high as possible. Storage shelves were built within 45 in (114 cm) of the warehouse ceiling without needing to be concerned about air ducts or ventilation systems.



Project: Kent Building Supplies, Moncton, New Brunswick

Type of Construction: Distribution Center, opened in 2014

Scope of Project: 383,000 ft² (35, 580 m²) building, 400,000 ft (123,295 m) of RAUPEX pipe

Mechanical Contractor: Moncton Plumbing and Supply

General Contractor: Maxim Construction Inc.

Mechanical Engineer: MCW Maricor

REHAU Systems Used: Radiant heating and snow and ice melting (RAUMAT™, RAUPEX® pipe, compression-sleeve fitting system, PRO-BALANCE® manifolds)

The heating system was activated in early January 2014, and has provided a comfortable and cost-effective working environment since then.

"It's an ideal system for so many different kinds of projects," Arseneau said. "We have already recommended RAUMAT to other commercial clients."