

## PEDESTAL MOUNTED PAVER HEATING



This design guide provides the information necessary to help our engineering professionals design your nVent RAYCHEM Pedestal Mounted Paver Heating (PMPH) System. For other applications or for design assistance, contact your nVent representative or call (800) 545-6258. Also, visit our web site at nVent.com.

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### INTRODUCTION

The PMPH System is a complete snow melting solution designed to be installed under the pedestal mounted pavers. The system utilizes high wattage self-regulating cable installed in an engineered aluminum tray assembly, offering efficient, high performance snow melting that keeps your pedestal mounted pavers free of snow and ice.

## How to Use this Guide

Our nVent engineering professionals work with Customers—architects, contractors, or building owners—to understand the design requirements for a project.

This design guide presents the key design and performance data that we need to collect in order to design your system.

For questions, please contact your nVent representative, or call 888.313.5666, or email: [RIMCustomerCare@nVent.com](mailto:RIMCustomerCare@nVent.com).

## Warranty

nVent's standard limited warranty applies to nVent RAYCHEM Snow Melting Systems.



An extension of the limited warranty period to ten (10) years from the date of installation is available, except for the control and distribution systems, if a properly completed online warranty form is submitted within thirty (30) days from the date of installation. You can access the complete warranty on our web site at [nVent.com](http://nVent.com).

## **PMPH SYSTEM OVERVIEW**

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The PMPH Systems are designed to melt snow on pavers installed on pedestals. They are mounted on pedestals under the pavers to provide efficient, uniform heat transfer to the pavers.

The PMPH System consists of high wattage nVent RAYCHEM QTVR electric heating cable [A], aluminum tray and conduits [B] designed to fit the cable, and closed cell foam insulation [C]. The PMPH System is designed for efficient and uniform heat transfer across the top surface. The insulation at the bottom minimizes the heat loss from the bottom surface. The PMPH System uses 5 linear runs of 20QTVR-CT cable with power output necessary for heavy snow load areas.

### **PMPH Systems provide:**

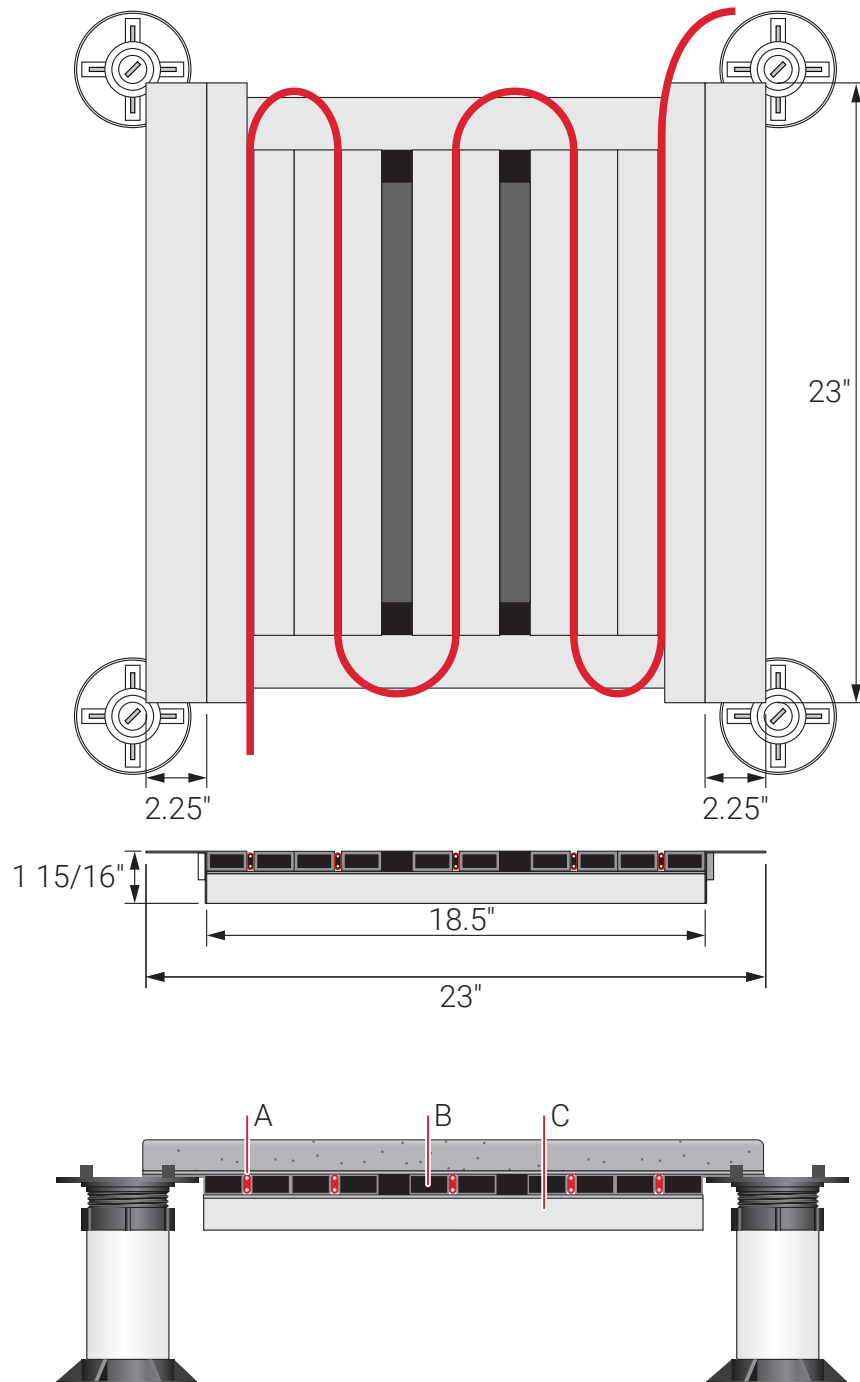
- Long term snow melting solution by mechanically protecting the heating cable
- Efficient and uniformed heat transfer across the heated surface
- High performance and reliable solution for heavy snow load areas

## Typical PMPH System

**PMPH** System embeds multiple runs of high wattage QTVR self-regulating heating cable offering the highest performing heating system with the most efficient heat transfer and cable protection.

A typical PMPH System includes the following:

- PMPH System panels and connection kits
- Snow Control system and sensor
- Power distribution



**Fig. 1 Typical PMPH System**

### Design Step by Step

These simple steps depict how Customers work with nVent engineering professionals to incorporate the PMPH System into a project.

#### Step 1 Customer Provides Preliminary Design Inputs

**For new construction or retrofits, provide the following to our nVent engineering professionals:**

- Site plan locating area(s) to be heated
- Power distribution
- Paver size
- Complete the Estimate Form that will determine the basis for the design

#### Step 2 nVent Prepares a Budgetary System Proposal

- Prepare the design with recommended scope, PMPH materials layout and power requirements.

#### Step 3 Customer Reviews PMPH System Budgetary Proposal

- Review the proposal and either confirm the scope or specify changes to the proposal as needed for the PMPH system installation you desire.

#### Step 4 nVent Finalizes the PMPH System Proposal

- Implement the requested changes and make any final recommendations that are appropriate, such as a control and monitoring solution or any relevant Field Support / Engineering Services that are best suited for the project.

#### Step 5 Customer Approves Final System Design

- Approve the final system design and Field Support / Engineering Services, as applicable.

### **Step 6 nVent Provides the Materials for the Project**

- Supply the PMPH materials to the customer, including:
  - PMPH panels
  - Safe, self-regulating heating cable
  - Accessory components as required
  - Appropriate control system, as applicable.
- Provide the following details to the project's Engineer and/or Contractor:
  - Engineering designs and installation instructions
  - Junction box locations (per design recommendations)
  - Control panel loads and location, circuit breaker sizing
  - Material layout plans with circuit design loads and circuit breaker sizing
  - Control panel layout and system testing procedures

### **Step 7 Field Support Services Provide Project Support, as applicable**

- Perform the electrical evaluation/ testing procedure
- Train the installer to install the PMPH System
- Commissioning, supervision and troubleshooting

### **Step 8 Installer Installs and Tests the PMPH System**

- Install the PMPH System per the installation instructions as per design layouts
- Conduct control panel layout and system testing procedures
- Perform commissioning tests and complete warranty documentation

Email completed form to your nVent Sales Rep for a complete Bill of Materials and quote!

# PMPH & SMH SYSTEM ESTIMATE FORM

Need Quote For: ☐ PMPH ☐ SMH

|  |  |   |   |   |
|--|--|---|---|---|
| 1. Building Type & Conditions:<br>(check all that apply) | <input type="checkbox"/> House   | <input type="checkbox"/> Small shop / strip mall  | <input type="checkbox"/> High-rise residential / multi-use bldg.                          | <input type="checkbox"/> Commercial building  |
|  | <input type="checkbox"/> New Construction <input type="checkbox"/> Retrofit                                  |   |   |   |
|  | Annual Snow Fall <input type="checkbox"/> less than 100 inches <input type="checkbox"/> more than 100 inches |   |   |   |
| 2. Area Name:  |  |   |   |   |
| 3. Pavers:   | Length: _____ Inches   | Length: _____ Inches  | Length: _____ Inches  | Length: _____ Inches  |
|  | Width: _____ Inches  | Width: _____ Inches   | Width: _____ Inches   | Width: _____ Inches   |
|  | Height: _____ Inches   | Height: _____ Inches  | Height: _____ Inches  | Height: _____ Inches  |
| 4. Paved Area:   | <input type="checkbox"/> Dimensioned sketch of heated area or Estimated Width: _____ ft                      | <input type="checkbox"/> Dimensioned sketch of heated area or Estimated Width: _____ ft | <input type="checkbox"/> Dimensioned sketch of heated area or Estimated Width: _____ ft   | <input type="checkbox"/> Dimensioned sketch of heated area or Estimated Width: _____ ft |
|  | Length: _____ ft   | Length: _____ ft  | Length: _____ ft  | Length: _____ ft  |
|  |  |   |   |   |
| 5. Stairs or Platforms:                                  | Number of stairs _____   | Number of stairs _____  | Number of stairs _____  | Number of stairs _____  |
|  | Width: _____ ft  | Width: _____ ft   | Width: _____ ft   | Width: _____ ft   |
|  | Length: _____ ft   | Length: _____ ft  | Length: _____ ft  | Length: _____ ft  |
| 6. Voltage:  | <input type="checkbox"/> 120 V <input type="checkbox"/> 208 V  | <input type="checkbox"/> 120 V <input type="checkbox"/> 208 V                           | <input type="checkbox"/> 120 V <input type="checkbox"/> 208 V                             | <input type="checkbox"/> 120 V <input type="checkbox"/> 208 V                           |
|  | <input type="checkbox"/> 240 V <input type="checkbox"/> 277 V  | <input type="checkbox"/> 240 V <input type="checkbox"/> 277 V                           | <input type="checkbox"/> 240 V <input type="checkbox"/> 277 V                             | <input type="checkbox"/> 240 V <input type="checkbox"/> 277 V                           |
| 7. Circuit Breaker Size:                                 | <input type="checkbox"/> 15 A <input type="checkbox"/> 20 A  | <input type="checkbox"/> 15 A <input type="checkbox"/> 20 A                             | <input type="checkbox"/> 15 A <input type="checkbox"/> 20 A <input type="checkbox"/> 30 A | <input type="checkbox"/> 15 A <input type="checkbox"/> 20 A                             |
|  | <input type="checkbox"/> 30 A  | <input type="checkbox"/> 30 A   |   | <input type="checkbox"/> 30 A   |
| 8. Controllers:  | <input type="checkbox"/> Ambient Temperature Only  | <input type="checkbox"/> Ambient Temperature Only                                       | <input type="checkbox"/> Ambient Temperature Only   | <input type="checkbox"/> Ambient Temperature Only                                       |
|  | <input type="checkbox"/> Snow and ice melting controller   | <input type="checkbox"/> Snow and ice melting controller                                | <input type="checkbox"/> Snow and ice melting controller                                  | <input type="checkbox"/> Snow and ice melting controller                                |
|  | <input type="checkbox"/> Snow Sensor   | <input type="checkbox"/> Snow Sensor  | <input type="checkbox"/> Snow Sensor  | <input type="checkbox"/> Snow Sensor  |
| 9. Notes:  |  |   |   |   |
| 10. Customer name:                                       |  | <b>BUSINESS CARD</b>  |   |   |
| Company:   |  |   |   |   |
| Phone:   |  |   |   |   |
| Email:   |  |   |   |   |
| Project name:  |  |   |   |   |
| Project location:  |  |   |   |   |

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[nVent.com](https://www.nVent.com)

Our powerful portfolio of brands:

**CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER**

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