# WINTERGARD-MAT



## **CONNECT AND PROTECT**

# Pre-terminated extreme high quality heating mat for snow- and deicing of surfaces

#### **PRODUCT OVERVIEW**



#### **Description**

The nVent RAYCHEM WINTERGARD-MAT is a constant output heating mat for simple, fast and effective ramp and accessway heating to prevent snow and ice formation. The roll-out mat configuration allows fast installation whilst ensuring the required power output is installed.

The pre-terminated WINTERGARD-MAT comes complete with a 5 m cold lead, removing the need for on-site termination activities. Simply install the heater over the required area and connect the cold lead to the power junction box and control unit. The WINTERGARD-MAT is particularly suited to track heating of ramps, and driveways, but also emergency escape routes and pedestrian walkways.

#### **PRODUCT SPECIFICATIONS**

#### **Design phase**

- · Simple design
- Pre-defined power output
- · Variety of sizes available to meet project requirements

#### Installation phase

- · EASY: Pre-terminated heating mat requires no on-site cold lead or end seal connections
- FAST: Heating mat can simply be rolled out over the required surface prior to the cement pour
- ROBUST: No need to measure cable spacing to ensure a consistent heat output per m² the mat has a pre-determined fixed heat output of 300 W/m²

#### The applications

- Perfect for tyre track heating 600 mm wide heated track
- · Pedestrian walkways Pavement heating to reduce personally injury liability around commercial buildings, hospitals etc.
- Emergency exits Keeping escape routes clear and safe
- · Top surface: Cement screed, pavers stone and smaller asphalt areas

#### **Technical details**

Voltage	230 Vac		
Nominal power	300 W/m <sup>2</sup>		
Maximum exposure temperature	65°C (in operation)	105°C rated temperature (non-operation)	
Short-term temperature resistance	240°C	For max. 15 Min	
Minimum install temperature	-5°C		
Dimensions	Mat width Mat length	600 mm  Dependent upon mat size ordered	
Circuit breaker required	Type C RCD: 30 mA		
Cable construction	Twin core, constant power output heating cable		
Material	Insulation:	High temperature Cross linkable Polymer insulation	
	Outer jacket:	Special Cross-linked Polyolefin	
Color	Outer jacket: Black		
TWIN heating conductors	Solid wires		
Shielding	Copper drain wire with 100% aluminum tape		
Cold lead	Length: 5 m	Wires: 3 x 1,5 mm <sup>2</sup> or 3 x 2,5 mm <sup>2</sup>	
Cable diameter	7 mm		
Deformation resistance	>1500 N		
Tensile strength	>300 N		
Bending radius	50 mm		
Cable spacing	100 mm		
IP class	IP X7		
Certification	CE, UKCA, EAC	IEC 60800:2021	

#### **APPROVALS**

For use in non-hazardous areas

CE: compatible IEC 60800: 2021

**Product certification** 

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### ORDERING INFORMATION

Product name	Reference number	Mat size	Surface	Power output @230 V	Cable resistance (Ω) Min/Max	EAN code
WINTERGARD-MAT-230V-2M	1244-022751	2 m x 0,6 m	1,2 m²	360 W	139.6/161.6	5414506024074
WINTERGARD-MAT-230V-3M	1244-022752	3 m x 0,6 m	1,8 m²	540 W	93.1/107.8	5414506024081
WINTERGARD-MAT-230V-4M	1244-022753	4 m x 0,6 m	2,4 m²	720 W	69.8/80.8	5414506024098
WINTERGARD-MAT-230V-5M	1244-022754	5 m x 0,6 m	3,0 m²	900 W	55.8/64.7	5414506024104
WINTERGARD-MAT-230V-7M	1244-022755	7 m x 0,6 m	4,2 m <sup>2</sup>	1260 W	39.9/46.2	5414506024111
WINTERGARD-MAT-230V-10M	1244-022756	10 m x 0,6 m	6,0 m <sup>2</sup>	1800 W	27.9/32.3	5414506024128
WINTERGARD-MAT-230V-13M	1244-022757	13 m x 0,6 m	7,8 m²	2340 W	21.5/24.9	5414506024135
WINTERGARD-MAT-230V-16M	1244-022758	16 m x 0,6 m	9,6 m <sup>2</sup>	2880 W	17.4/20.2	5414506024142
WINTERGARD-MAT-230V-21M	1244-022759	21 m x 0,6 m	12,6 m²	3780 W	13.3/15.4	5414506024159

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#### **RELATED PRODUCTS**

nVent RAYCHEM Programmable ramp heating control with ambient temperature, ground temperature, and moisture sensors including nVent RAYCHEM panels should be used, in order to get full nVent RAYCHEM extended system warranty.

Product name	Reference number	Description
RAYSTAT-M2*	1244-016962	DIN rail mounted control for surface snow melting and roof/gutter de-icing
VIA-DU-20*	599514-000	VIA-DU-20 electronic temperature and moisture sensing controller
EM2-SPACER-PL	1244-005177	Spacer rail, plastic, 5 m length, grid 25 mm
VIA-SPACER-10 M	198398-000	Spacer rail, metal, 10 m length, for asphalt
VIA-SPACER-25 M	893869-000	Spacer rail, metal, 25 m length, for asphalt

<sup>\*</sup>Controller will be mounted in nVent RAYCHEM panels. Please contact nVent Thermal technical service for further information.

#### PRE-INSTALLATION GROUND PREPARATION

The heating mat should be installed on a stable subsurface. In suspended structures the substratum may consist of finished slabs, pre-stressed concrete or a suspended structure with poured concrete. The heating mat can be laid on all sub surfaces. In the case of poured concrete, it should be ensured that the surface is smooth and all sharp objects are removed. Ramps on a solid substratum do not require any additional thermal insulation. Appropriate preparations should be made for installing the temperature and moisture sensor.

Recommended split/gravel sizes for sand bed or cement concrete:

Round grain gravel: Ø 8-16 mm Grit/Broken grain: Ø 4-8 mm

#### INSTALLATION INSTRUCTION

Complete installation instructions are supplied with the product and are available electronically from nVent. Please request installation instruction reference: RAYCHEM-IM-EU2080-WinterGardMat-ML.

#### **SPECIFICATION GUIDELINE**

A product specification guideline is available upon request from nVent. It is also available online at nVent.com/RAYCHEM

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