



# MAGNUM HEATING

Comfort | Safety | Control



MAGNUM HeatBoard (E)  
Installation Manual

# MAGNUM HeatBoard (E)

Dear client,

Congratulations on the purchase of this MAGNUM product. This MAGNUM Heating product is manufactured from high quality, durable materials. To guarantee that your product functions optimally there are a few points of attention which are described in the Installation Instructions. We can only offer you the full guarantee if the system is correctly installed in accordance with these Installation Instructions.

Carefully read the instructions prior to installation, do not forget the yellow centre page when doing so, and ensure that you have the correct tools and materials. The electrical installation must be carried out by a qualified electrician in accordance with IEE Regulations.

Please visit [www.magnumheating.com](http://www.magnumheating.com) to find your local supplier if you have any questions, require more information or support.

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## 1. Check

Check the contents of the box before starting:

- MAGNUM HeatBoard Cable
- Flexible sensor tube
- Rol Alu-Tape
- Installation manual



Other requirements for a complete system (available separately):

- MAGNUM HeatBoard (E) system boards 12 or 31 mm per 5m<sup>2</sup> supplied with safety gloves and 5m<sup>2</sup> covering felt.



- MAGNUM MXC digital clockthermostat with floorsensor.



# MAGNUM HeatBoard (E)

## 2. Points of attention

Check before hand if the purchased HeatBoard Cable and system boards are the right size for the floor area to be heated and that there is sufficient electrical capacity (Amps.) available.

### MAGNUM HeatBoard Cable

Be careful with sharp objects that can damage the heating cable during installation.

You should check the cable between and after each work step (see point 7) and enter the measured values on the yellow card (middle page). Keep this card in your meter cupboard, it is part of your warranty.

### Measurements

#### Heatboard Cable 6 Watt (60 Watt/m<sup>2</sup>)

Type	Length	m <sup>2</sup>	Ohm	Amps
180 Watt	30 m.	3 m <sup>2</sup>	294	0,8
300 Watt	50 m.	5 m <sup>2</sup>	176	1,3
480 Watt	80 m.	8 m <sup>2</sup>	110	2,1
720 Watt	120 m.	12 m <sup>2</sup>	73	3,1
900 Watt	150 m.	15 m <sup>2</sup>	59	3,9
1140 Watt	190 m.	19 m <sup>2</sup>	46	5,0

#### Heatboard Cable 10 Watt (100 Watt/m<sup>2</sup>)

Type	Length	m <sup>2</sup>	Ohm	Amp
300 Watt	30 m.	3 m <sup>2</sup>	176	1,3s
500 Watt	50 m.	5 m <sup>2</sup>	106	2,2
800 Watt	80 m.	8 m <sup>2</sup>	66	3,5
1200 Watt	120 m.	12 m <sup>2</sup>	44	5,2
1500 Watt	150 m.	15 m <sup>2</sup>	35	6,5
1900 Watt	190 m.	19 m <sup>2</sup>	28	8,3

The connection cable can be extended or shortened, there should always be at least 0.5 meters of connection wire left. The heating cable is 6.2 mm thin and should never be shortened. The invisible transition from the resistance cable (heat part of the cable) to the supply cable (cold connection part of the cable) is indicated by a mark.

The MAGNUM HeatBoard Cable must never be installed under fixed objects such as wall units, kitchen blocks and must be able to emit its heat freely, must not be laid on top of each other and must never cross each other! Also, the heating cable must not be laid over expansion joints.

### Sensor

The sensorable can be extended or shortened. The sensor must be installed in the middle of a cable loop for optimal temperature registration. Ensure that the sensor is installed well clear (min. 50 cm) of (hidden) radiator and water pipes, drains and electrical wiring. The sensor must always remain IN the sensor tube. Fit cap to end of the sensor tube. If the sensor ever needs to be replaced it can then easily be removed.

### Thermostaat

The floor temperature is regulated via a MAGNUM MXC thermostat, which limits the floor temperature to a maximum temperature of 28°C through the floor sensor.

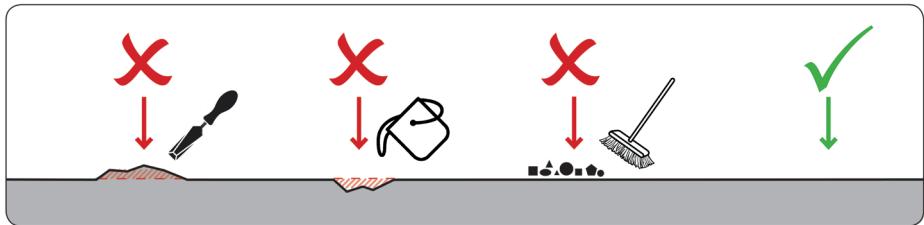
Installation needs to be done by a qualified electrician in accordance with all current wiring and building regulations. Before installation or re-installation of the thermostat always isolate the power to the thermostat.

Connection must be made via an earth leakage circuit breaker in accordance with local installation standards. If several cables are installed in a room, a socket can be placed in front of the power point so that only one supply cable runs to the thermostat. The maximum connection capacity of the thermostat is 16 Amps. With a higher connection capacity to 1 thermostat, a relay circuit must be installed.

# MAGNUM HeatBoard (E)

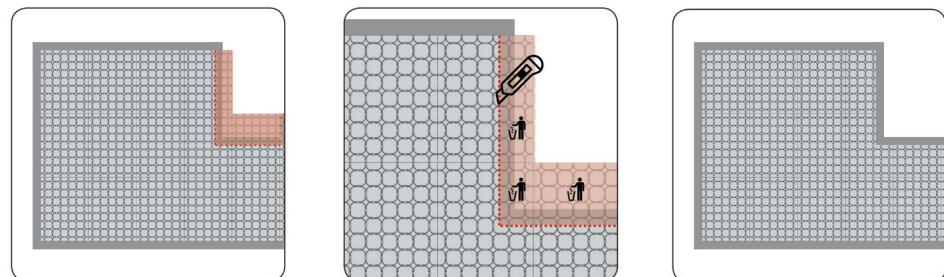
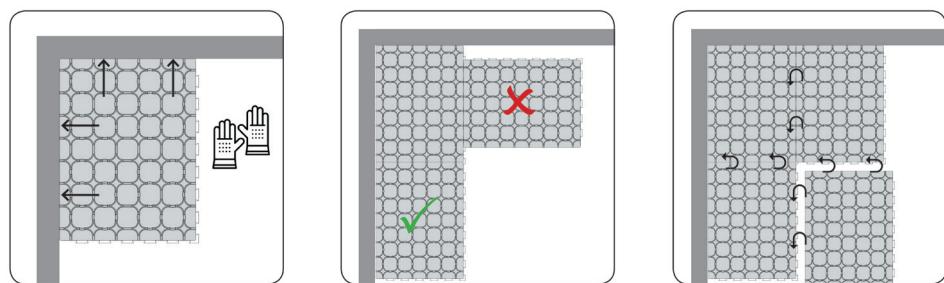
## 3. Preparations

Make sure that the surface where the system is installed is smooth, clean, dust- and grease free. Remove any unevenness in the floor and fill in any holes.



## 4. Laying the HeatBoard system boards

Start laying the boards from a corner. Use the safety gloves provided to prevent any cuts through the aluminium. The plates can easily be put together because of the puzzle shape. The whole space needs to be covered, any remaining material can be easily cut away.



# LEES GOED DOOR A.U.B.:

# PLEASE READ CAREFULLY:

# BITTE SORGFÄLTIG LESEN:

## BELANGRIJKE AANDACHTSPUNTEN UIT DE ALGEMENE INSTALLATIEVOORSCHRIFTEN

## IMPORTANT POINTS OF ATTENTION FROM THE GENERAL INSTALLATION INSTRUCTIONS

## WICHTIGE PUNKTE IN DEN ALLGEMEINEN INSTALLATIONSVORSCHRIFTEN

### VOORKOM BESCHADIGING

Neem voorzorgsmaatregelen om te voorkomen dat tijdens en na installatie de verwarmingssystemen worden beschadigd door bv. het laten valen van scherpe objecten, het betreden van de kabels, het onvoorzichtig aanbrengen van dekvlloer en overige werkzaamheden na het aanbrengen van de dekvlloer.

### VERWERK HET SYSTEEM VOLLEDIG

Zorg ervoor dat de verwarmingssnelkabel of vloerverwarmingssmat volledig wordt verwerkt. In het geval van het MAGNUM Mat/Cable systeem mag grootte nooit groter zijn dan het te beleggen oppervlakte.

### AARDLEKSCHAKELAAR VERPLICHT

Het systeem dient achter een aardlekschakelaar van maximaal 30mA te worden geplaatst

### KNIP DE VERWARMINGSKABEL NOOT DOOR EN KORT DE KABEL/MAT NOOT IN!!

Indien de verwarmingssnelkabel abusievelijk toch beschadigd of doorgeknipt is, raadpleeg dan direct de support line: tel.0900-9110911

### LET OP BIJ HET PLAATSEN VAN DE VLOERSENSOR!

Plaats de sensor in een afgesloten buis. Installeer deze op ruime afstand (min. 50 cm) van CV of waterleidingen. Installeer de sensor exact tussen 2 kabels (lus) van het verwarmingssysteem. Voorkom dat de warmtekabels direct contact maken met de buis waarin de vloersensor wordt gemonteerd. Laat de sensorbuis linear aan de richting van de verwarmingskabel lopen.

### PREVENT DAMAGING

Ensure that the surface where the heating cable is worked on is flat, clean, and free of dust and grease. Prevent the use of sharp tools, walking over the heating cables and always ensure to work carefully.

### ENSURE THE MAT IS COMPLETELY INSTALLED

The MAGNUM Mat/Cable may never be installed under fixed objects like wall units, kitchen units, baths, or showers and must be able to give off its warmth unimpeded. The MAGNUM Mat/Cable may only be incorporated into the free floor areas.

### MCB OR RCCD REQUIRED

All installations must be wired through a suitably rated MCB or RCCD when applicable.

### NEVER CUT THE HEATING CABLE! AND NEVER SHORTEN THE HEATING CABLE/MAT!

The heating cable CANNOT be cut. Please check your local supplier via magnumheating.com if the cable is damaged.

### FLOOR SENSOR:

Ensure that the sensor is installed well clear (min. 50 cm) of central heating pipes, water pipes, drains and electrical wiring. Install the sensor as closely as possible in the middle of 2 loops. Ensure that the heating cables do not make direct contact with the conduit in which the floor sensor is mounted.

### AUXILIARY OR PRIMARY HEATING

### VERMEIDEN SIE BESCHÄDIGUNGEN

Treffen Sie Vorsorgemaßnahmen, um zu vermeiden, dass die Heizkabel während und nach der Installation beschädigt werden, z.B. durch das fallen lassen spitzer Gegenstände auf die Kabel treten, unsachgemäßes Anbringen des Bodenbelags und anderer Tätigkeiten nach dem Anbringen des Bodenbelags.

### VERARBEITEN SIE DAS SYSTEM VOLLSTÄNDIG

Sorgen Sie dafür, dass die Heizkabel bzw. die Bodenheizungsplatte vollständig verarbeitet werden. Für das MAGNUM Mat/Cable System darf die Größe der Matte niemals die zu bedeckende Oberfläche überschreiten.

### FI-SCHUTZSCHALTER OBLIGATORISCH

Die Systeme müssen hinter einem FI-Schutzschalter von höchstens 30 mA positioniert werden.

### DAS HEIZKABEL NIEMALS DURCHSCHNEIDEN UND DIE KABEL/MATTE NIEMALS KÜRZEN!

Sollte das Heizkabel versehentlich doch beschädigt oder durchgeschnitten werden, bitten wir Sie, Ihren MAGNUM Händler vor Ort via magnumheating.com zu kontaktieren.

### VORSICHT BEIM POSITIONIEREN DES BODENFÜHLERS!

Stecken Sie den Fühler in ein verschlossenes Rohr und installieren Sie dieses in angemessenem Abstand (min. 50 cm) zur ZH bzw. Wasserleitungen. Installieren Sie den Fühler exakt zwischen zwei Kabeln (Schlaufe) des Heizsystems. Vermeiden Sie,

## LET OP!

ONDER DE VLOER IS EEN 230 VOLT VLOERVERWARMINGSSYSTEEM GEINSTALLEERD! NOoit BOREN OF SCHROEVEN IN DE VLOER! ZIE TEKENING/FOTO VOOR DE POSITIE VAN DE VLOERVERWARMING.

## ATTENTION!

UNDERNEATH THE FLOORING A 230 VOLT HEATING SYSTEM IS INSTALLED! NEVER DRILL OR SCREW INTO THE FLOOR! SEE SCHEDULE/PICTURE FOR THE POSITION OF THE HEATING SYSTEM.

## ACHTUNG!

UNTER DEM BODEN WURDE EIN 230VOLT BODENHEIZUNGSSYSTEM ANGEBRACHT! NIEMALS IN DEN BODEN BOHREN ODER SCHRAUBEN! SIEHE ZEICHNUNG/FOTO FÜR DIE POSITION DER BODENHEIZUNG.

Vloerverwarming geïnstalleerd in  
Floor Heating installed in  
Bodenheizung installiert in

### Seriennummer van de verwarmingskabel

(Vermeld op het label van de aansluitkabel)

Serial number of the heating cable

(As stated on the label of the connection cable)

Seriennummer des Heizkabels

(wie auf dem Anschlussetikett angegeben)

### Tussen beide weerstandsdraden

(10% marge)

Between centre core wires

(within 10% margin!)

Zwischen beiden Wider-

standsdrähten (10% Marge)

### Controlemetingen

Resistance readings

Kontrollemessungen

### Uit verpakking

Initial reading  
Aus der Verpackung

Ohm

Ohm

### Tussen weerstandsdrad #1 en

aarde (Dit moet "oneindig" zijn)

Between centre core wire #1 and

the earth (Should read "infinite")

Zwischen Widerstandsdräht #1 und

Erde (Wert muss "unendlich" betragen)

### Tussen weerstandsdrad #2 en

aarde (Dit moet "oneindig" zijn)

Between centre core wire #2 and

the earth (Should read "infinite")

Zwischen Widerstandsdräht #2 und

Erde (Wert muss "unendlich" betragen)

Ohm

Ohm

### Na inpassen op vloer

Mat/Cable Laid on floor  
Nach Einpassen auf dem Boden

Ohm

Ohm

**2**



## **BIJVERWARMING / HOOFDVERWARMING?**

Doorgaans worden de systemen geïnstalleerd als bijverwarming. D.w.z. dat de systemen te allen tijde correct kunnen functioneren in combinatie met een verwarmingsbron met voldoende capaciteit welke de ruimte temperatuur reguleert. MAGNUM Mat/Cable kunnen ook worden gebruikt als enige verwarmingsbron ofwel hoofdverwarming.

Hier voor dient afhankelijk van diverse situatie factoren de capaciteit van het verwarmingssysteem toerekend te zijn. Voor advies verwijzen wij u hiervoor naar onze supportline: tel. 0900-9110911.

## **INKORTEN/VERLENGEN AANSLUITKABEL**

De aansluitkabel kan worden verlengd of worden worden ingekort, er dient altijd minimaal 0,5 meter aansluitdraad over te blijven. De warmtekabel mag niet worden ingekort en de eindslas mag nooit worden verbroken.

## **POSTIE THERMOSTAAT**

Plaatsing thermostaat dient overeen te komen met de geldende installatienormen (NEN). Voor installatie in natte ruimtes zoals badkamers geld dat deze in zone 2 dient te worden geplaatst.

## **GEBRUIK THERMOSTAAT**

Voor het gebruik en programmeren van de thermostaat verwijzen wij u naar de instructies zoals bijgevoegd bij de thermostaat.

## **LAAT DE VLOER VOLDOENDE UITHARDEN!**

Volg eerst de instructies van de lijmfabrikant voor specificaties. Hierna kunt u kiezen voor de langzaam opstartfunctie in de thermostaat. Voor cement dekvloeren geldt over het algemeen een droogtijd van 1 week per aangebrachte cm, met een minimum van 3 weken.

## **AUXILIARY OR PRIMARY HEATING**

The MAGNUM Mat/Cable is designed to function as an auxiliary heating source; however, by installing more capacity than it is no longer necessary to install a separate radiator and the MAGNUM Mat/Cable can serve as the main source of heating. This allows more space for fixtures or furniture. The capacity must match the heating requirements / calculations for the space in question. Please check your local supplier via magnumheating.com for advice.

## **SHORTENING/EXTENDING THE CONNECTING CABLE:**

The connector cable can be extended or shortened, there must always be at least 0,5 meter of connecting wire left. The heating cable cannot be shortened! The end seal cannot be broken.

## **THERMOSTAT POSITION:**

The position of the thermostat is determined in accordance with current local regulations

## **USE OF THE THERMOSTAT**

Check the thermostats manual for correct programming.

## **ALLOW THE FLOOR SUFFICIENT DRYING TIME:**

Consult the supplier/manufacturer regarding the applicable drying time for the product. For sand/cement screed floors a drying time of 1 week per applied cm with a minimum of 30 days is generally observed. Consult the supplier/manufacturer regarding the applicable drying time for your situation.

## **dass die Heizkabel direkt mit dem Rohr in Kontakt kommen, in dem der Bodenfühler montiert wird. Lassen Sie das Fühlerrohr parallel zum Heizkabel verlaufen.**

## **ZUSÄTTLICHE HEIZUNG ODER HAUPTHEIZUNG?**

Die Systeme werden in den meisten Fällen als zusätzliche Heizung installiert. Das bedeutet, dass die Systeme jederzeit korrekt funktionieren in Kombination mit einer Heizquelle mit ausreichender Kapazität, die die Raumtemperatur regulieren. MAGNUM Mat/Cable kann auch als alleinige Heizquelle bzw. Hauptheizung verwendet werden. Dazu muss abgesehen von diversen Situationsfaktoren, auch die Kapazität des Heizungssystems auseinandend sein. Für weitere Beratung verweisen wir Sie gerne an unseren MAGNUM Händler vor Ort, via magnumheating.com.

## **KÜRZEN/VERLÄNGERN DES ANSCHLUSSKABELS**

Das Anschlusskabel können verlängert oder gekürzt werden, es muss immer mindestens 0,5 Meter Anschlussdräht überbleiben.

## **POSITION DES THERMOSTATS**

Die Position des Thermostats muss mit den vor Ort geltenden Installationsnormen übereinstimmen.

## **ANWENDUNG DES THERMOSTATS**

Für die Inbetriebnahme und Programmierung des Thermostats verweisen wir Sie auf die dem Thermostat beigelegten Instruktionen.

## **LASSEN SIE DEN BODEN AUSREICHEND AUSHÄRten!**

Befolgen Sie zunächst die Instruktionen des Kleberherstellers hinsichtlich der Spezifikationen. Danach können Sie die verlangsame Startfunktion des Thermostats wählen. Für Zementdeckböden gilt im Allgemeinen eine Trockenzeit von 1 Woche pro cm, mit einer Minimumdauer von 3 Wochen.

# MAGNUM HeatBoard (E)

English

## 5. Position and installation of the thermostat

Determine the location of the thermostat and install a standard electrical flush-mounting box with a minimum depth of 50 mm. Preferably at a height of 1.40 m for ease of use. Cut out the necessary slots and install the flush-mounting box, electric tube and the floor sensor tube.

**NOTE:** The connecting cable of the heating cable can be extended or shortened but there should always be at least 50cm of connecting wire left.

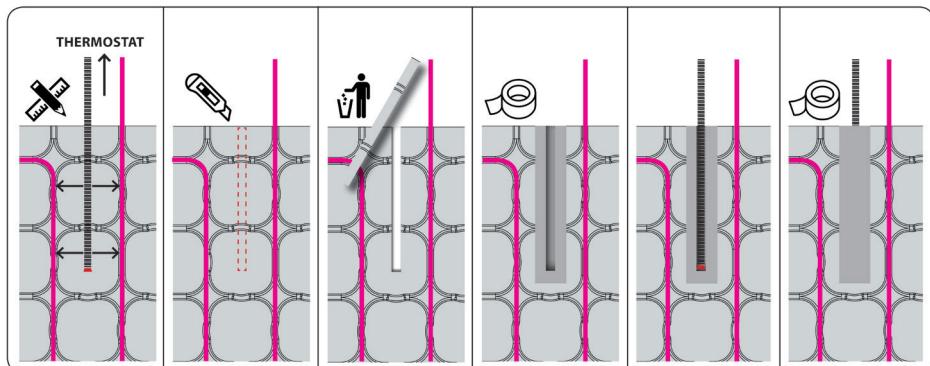


## 6. Installation of the floor sensor

**CAUTION:** Never place the sensor near a (concealed) radiator pipe and never install it transversely underneath the heating cable!

From the wall, cut a slot of approximately 1 cm wide and 50 cm long between 2 cable guides from the HeatBoard system plate for placement of the floor sensor tube. Remove the remaining material and stick a strip of the supplied aluminium tape into the remaining slot.

Cut the sensor tube to size and enter the sensor. Cover it with the supplied cap. Place the sensor tube in the slot that has just been cut out and tape it with aluminium tape for optimal temperature registration.



# MAGNUM HeatBoard (E)

English

## 7. Installation of the HeatBoard Cable

Be careful with sharp objects that can damage the heating cable during installation. The connecting cable can be extended or shortened, there should always be at least 0.5 meters of connecting wire left.

You should check the cable between and after each operation and fill in the measured values on the yellow card (middle page). Keep this card in your meter cupboard, it is part of your warranty.

Start from the thermostat and make sure that the invisible transition (indicated by the marking) is in the floor.

Then you can push the heating cable into the preformed cable guides. The cable must be fully installed in the floor and must never be shortened!



## 8. Application of felt layer and finishing floor

Once the heating cable has been fully processed, the felt layer supplied can be applied. Make sure that it covers the entire system.

After this, the selected finishing floor can be laid. Be careful with sharp objects that can damage the heating cable during processing and other work.

# MAGNUM HeatBoard (E)

## 9. Connecting the thermostaat

Installation needs to be done by a qualified electrician in accordance with all current wiring and building regulations. Before installation or re-installation of the thermostat always isolate the power to the thermostat.

Check if the power is off. Remove the display frame by pushing a non sharp instrument (for example the point of a ballpoint pen) carefully in the square hole underneath the thermostat. The display frame and the cover frame can be removed.

PILOT	Pilot Wire (Domotica)
HEATING (N)*	Heating Cable connection (N)
N	Power connection (Neutral)
L	Power connection (Live)
HEATING (L)*	Heating Cable connection (L)
FLOOR SENSOR	Floor sensor connections
EXT. SENSOR	External sensor connections

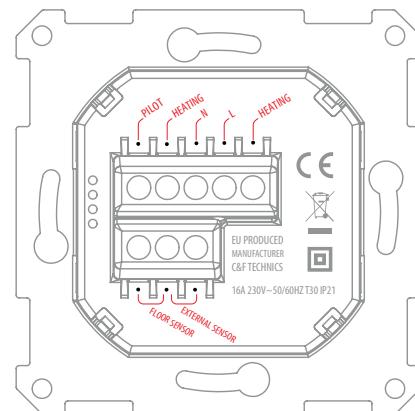
*\* When connecting the power supply cable of the Mat, the sequence N or L is not important.*

Position the thermostat and install onto the back box (not supplied). Place the display frame back into position by pushing it softly.

To install and set up the thermostat, please use the manual that is included with the thermostat.

## 10. Using the system for the first time

First follow the floor manufacturer's instructions for specifications. After this, you can choose the slow start-up function in the thermostat.





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