

Installation Manual HeatShield System







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CAUTION!

It is important that this equipment is installed only by qualified electricians who are familiar with the proper sizing, installation, construction and operation of floor warming system and the hazards involved. The heating cable is designed for under floor heating purposes only.

Note!

The installation shall be in accordance with the manufacturer's instructions and national and local codes. The installation shall be in accordance with Part 424-J, American National Standard Institute / National Fire Protection Association (ANSI/NFPA70), National Electrical Code (NEC) and Canadian Electrical Code (CEC), Part 1. Danfoss recommends GFCI for heating cable in normally wet areas (i.e. bathrooms, showers, kitchens).

HeatShield Specifications

Construction:	Expanded polystyrene with aluminum
Size:	19.75" x 39.50" (501mm x 1003mm)
Height:	0.5" (12.7mm)
Insulation:	EPS (expanded polystyrene)
Deformation strength:	734 lbs/sq.ft.
R-value:	1.5
Spacing:	4" c to c

General

Read the instructions carefully before commencing the installation. These instructions must be used together with the installation instructions must be together with the installation instructions for the heating cable.

The heating cable must at all times be in contact with the aluminum plate or aluminum tape.

Heat Shield must only be fitted with Warmzone cable. Do not use sharp or pointed objects while laying the cable. Observe national regulations and standards for the area.

Note:

Do not install the cable outside the plates except where covered aluminum tape. Connection of the heating cable must be done by an authorized electrician. The cables must not be cross or touch each other.

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Calculating the required number of plates:

Measure the room and calculate the number of square feet. One plate is approximately five (5) sq.ft. The entire room can be covered by HeatShield.

Subfloor:

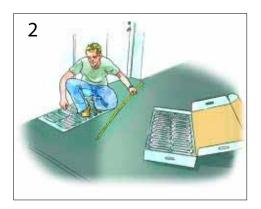
The plates are laid out as a floating floor structure and can be laid on all types of sub floors. The subfloor must be clean, level, firm, and stable.



1. Preparation

Clean the subfloor thoroughly. Install a moisture barrier if one is not already present.

HeatShield should be installed to cover the entire floor. Ensure the plates are laid in the same direction, and install them closely together with the grooves aligned to each other.



2. Layout Plates

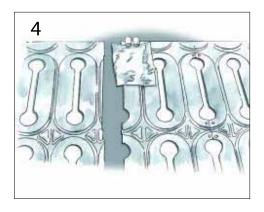
The plates are easily cut to suit any room size, e.g. by use of a jigsaw with an aluminum blade. Sharp edges should be smoothed and rounded.



3. Lock Plates

Use the enclosed locks to lock the plates together.

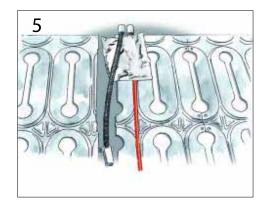




4. Thermostat

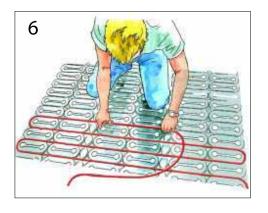
The thermostat can be placed anywhere in the room. Where the cable enters the wall, use a jigsaw to make room in the plate for the cold tail cable terminations and the floor sensor. Smooth and round any sharp edges, and pay particular attention to places where the cable is resting on a cut edge. Apply a piece of aluminum tape to the subfloor and the edges of the plate where the heating cable splice will be laid.

It is strongly recommended to use a Warmzone thermostat with a floor sensor to control the floor heating system. The cable must not be connected without thermostat control. Set the thermostat to ensure the wooden floor surface does not exceed 82°F-84°F (28°C-29°C)



5. Install Conduit

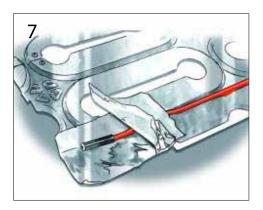
Install the cable and the sensor conduit in the wall. The connection of the cable and the thermostat must be carried out by an authorized electrician.



6. Install Cable

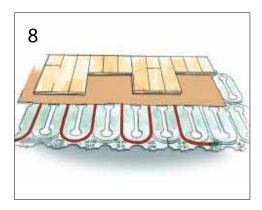
Now install the cable out over the entire floor. Do not install the cable outside the plates. Press the cable into the grooves. Do not try to hammer or beat the cable into place, it might cause damage to the cable.





7. Install Cable End

When the entire cable has been installed, a hole is cut in the plate to make room for the cable end. Saw the plate with e.g. jigsaw with an aluminum blade. Smooth and round any sharp edges. Subsequently, place the cable end between two pieces of aluminum tape.



8. Install Flooring

When the cable has been installed and tested then install the timer underlay and flooring.

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EXTENDED WARRANTY

HeatShield / Reflect

For a period of two (2) years from the date of purchase Danfoss warrants that the Reflect is free from defects in material, design and workmanship. The warranty is only valid if the warranty certificate is correctly filled out and the installation is in accordance with the installation instructions.

The warranty certificate shall be presented to Danfoss in the case a claim is made. The defective Reflect has to be inspected by or submitted to Danfoss or an authorized Reflect dealer. Failure to comply with the before mentioned conditions will void this warranty. Danfoss will, when the customer has documented that a defect in the Reflect was present at the date of delivery, repair or supply a new Reflect at Danfoss' option. All claims shall be made within the warranty period. Danfoss shall not be liable for any claims made later than two (2) years from date of purchase. Danfoss shall not be liable for any consequential and secondary costs or damages linked to the defect or replacement of the Reflect.

THE FOREGOING WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, ON THE PART OF DANFOSS. DANFOSS DISCLAIMS ANY WARRANTY, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. DANFOSS NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON, FIRM OR CORPORATION TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH SALE OR PRODUCT. DANFOSS SHALL NOT BE HELD RESPONSIBLE FOR DAMAGE TO PERSON OR PROPERTY, CONSEQUENTIAL LOSS, LOSS OF PROFIT, LOSSES ON GOODS IN STORE, OR THE LIKE WHICH MIGHT ARISE OUT OF THE FAILURE OF THE EQUIPMENT DELIVERED, IRRESPECTIVE OF THE CAUSE (INCLUDING FAULTY MANUFACTURE).

How to claim this warranty

Contact the company's Customer Service department and provide the following information:

- 1) Nature of the manufacturing defect
- 2) Date of purchase and, if already installed, date of installation
- 3) If installed, name of electrician and flooring installer
- 4) Resistance readings taken by insta**ll**er
- 5) Proof of purchase and serial number from product label

Our Customer Service department will provide you with an authorization number and advise you on the next steps to complete your warranty claim.

Disclaimer:

This warranty gives you specific legal rights and you may also have some legal rights which may vary from state to state or province to province. Danfoss hereby disclaims, and it is as a condition of the sale, that there are no implied warranties. Some states and provinces do not allow limitations on an implied warranty so the above limitation may not apply to you.

Manufacturer:

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