

# ATC **Electric** Under Floor Heating

## Comfort

ATC electric underfloor heating provides a very comfortable, efficient and economical addition or alternative to standard heating systems. Because it is installed under the floor, the walls in the room are now free and therefore it is much easier to furnish. ATC electric underfloor heating is especially suitable for refurbished floors and new floor projects. It adds a fabulous feel of comfort and warmth to bathrooms, kitchens, conservatories or any general living area where ceramic or stone tiles are laid.

### **Energy Efficient**

By using electric underfloor heating in conjunction with the ATC thermostats it should be possible to reduce the average room temperature by about 2°C and still retain the same level of comfort. Our thermostats are easy to Install, Program and Simple to control. They are accurate to 0.4°C and offer the best opportunity in reducing energy costs.

### **Healthy Option**

Electric underfloor heating creates a healthy and comfortable environment. There is no air movement and therefore no travelling dust particles. This greatly benefits those who suffer from asthma.

### **Maintenance Free**

Once the ATC electric underfloor heating is installed and tested as per the installation guidelines, the system is maintenance free.

### **Warranty**

The ATC electric underfloor heating and thermostats are manufactured to the highest European standards and quality. Once installed correctly, the cables and mats have a 10 year warranty but a much longer life expectancy. The thermostats have 3 year warranty and again a much longer life expectancy under normal installation conditions.



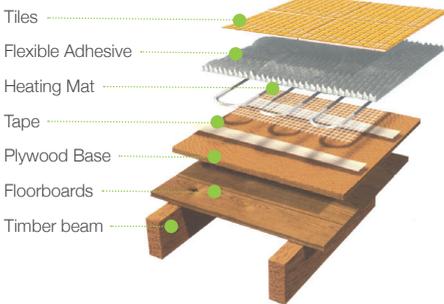


# ATC Floor Types & Thermal Insulation

## Timber Floors

Marine ply board must be laid over timber and chipboard floors and if possible Thermal Insulation Board (F-Board) before the heating mat is put in place. The heating mat is fixed to the F-Board and completely covered with a flexible tile adhesive before the tiles are laid.

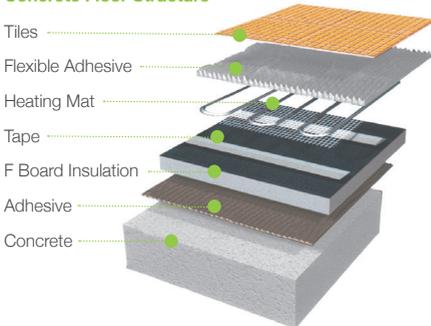
### Timber Floor Structure (Suspended)



## Concrete Floors

We suggest that a thermal insulation board (F-Board) is laid over and fitted on the concrete floor before the heating mat is put in place. This F-Board greatly reduces the heat-up time of the floor and insulates the floor from downward heat losses.

### Concrete Floor Structure



*Please note: ATC electric underfloor heating mats are not designed to be fitted under wood, carpet, cork, vinyl or laminate floors.*

## F-Board, Thermal Insulation Boards



We recommend that the F-Board is installed under the Heating Mats where possible.

### Advantages of using F-Board

- Can significantly reduce the operating costs of electric under floor heating
- Can greatly accelerate the initial heat-up so that a comfortable floor temperature is reached more quickly after switching on
- F-Boards are made from a thermal insulation material that can accept all water based (solvent free) flexible floor adhesives and will form a strong bond without the need for further priming.
- It is recommended to use an adhesive reinforcing tape for the spaces between the boards prior to laying the cable mat.
- Can be applied to a wide range of underlying sub floor materials such as concrete, wood-fiber boards, chipboards, plasterboards, cement-fiber boards, anhydrite materials, original tiles, fixed wooden foundation, and others.

Code	F-Board Thermal Insulation Board	Box Qty	Weight
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F-Board 6	1250mm x 600mm x 6mm	6	1.92kg
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F-Board 10	1250mm x 600mm x 10mm	6	2.13kg
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Code	Adhesive Tape
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VKC273	PVC DUCT Sealing Tape 50mm X 33m
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# ATC Heating Mats

## Timber Floors

The ATC range of electric under floor heating mats should be installed by an electrician or installer who has knowledge of underfloor heating installations. The heating mats can be laid on timber or concrete floors however it is recommended that the mat is laid on insulation board such as F-Board. This will speed up heating time and also ensure that 97% of the heat output is upwards. Heating mats are primarily used for direct heat installations.

## Product Features

- Heating load is 160w/m<sup>2</sup>
- 15 Mat sizes to suit various applications
- Mat sizes from 0.5M<sup>2</sup> through to 16.25M<sup>2</sup>
- Mats can be joined together at the thermostat
- Ideal for direct heating applications
- Easy to install single end connection
- Digital or electronic thermostats for simple and accurate control
- Minimises dust and air movement
- Frees up wall space
- Completely safe
- Maintenance free

## Warranty

- 10 year warranty

## Table of Heating Mat Sizes

Code 160W/M <sup>2</sup>	Output W	Width M	Surface M <sup>2</sup>
LDS 160/ 0,5	80	0.5	0.5
LDS 160/ 1	160	0.5	1.0
LDS 160/ 1,5	240	0.5	1.5
LDS 160/ 2	320	0.5	2.0
LDS 160/ 2,5	400	0.5	2.5
LDS 160/ 3	480	0.5	3.0
LDS 160/ 3,5	560	0.5	3.5
LDS 160/ 4	640	0.5	4.0
LDS 160/ 5	800	0.5	5.0
LDS 160/ 6	960	0.5	6.0
LDS160/ 7	1120	0.5	7.0
LDS160/ 8	1280	0.5	8.0
LDS160/ 10	1600	0.5	10.0
LDS160/ 11	1800	0.5	11.0
LDS160/ 12	1800	0.5	12.0
LDS160/ 13.3	2150	0.5	7.0
LDS160/ 16.3	2600	0.5	7.0



ATC Underfloor heating approved  
for use with RAKO ceramic and stone tiles

# Case Study **Ashford Castle**

## Under Floor Heating



### **Client**

Ashford Castle Hotel, Mayo, Ireland

### **Client Requirements**

Voted Travellers Choice in the 2017 Top Hotels in the World, Ashford Castle sits majestically in a splendid estate on the picturesque shores of Lough Corrib, and is one of Ireland's most impressive and romantic castle hotels.

The 83 luxurious rooms and suites of this 800 year old Castle were refurbished in 2016 and restored to their former glory.

In the refurbishment atc electric Under Floor Heating and Thermostats were installed in the bathrooms.

### **Product Criteria**

- Energy efficient heating suitable for a hotel environment
- Provide discrete and comfortable heating
- Digital controllable output, easy to operate by Staff and Guests
- Low Maintenance
- Long Term Guarantee

### **Product Evaluated and Chosen:**

The ATC Electric Under Floor Heating Mats were evaluated and chosen for the bathrooms in the 83 rooms as per the criteria set out by the project engineers. Along with the easy to use MCD 5 touchscreen thermostat, it has proved to be a very comfortable, efficient and economical alternative to standard heating in the bathrooms of the rooms and suites of the hotel.

**Year 2016**