

atc Electric Under Floor Heating

"It's like walking on Sunshine"



Bathroom

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, Programme 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.



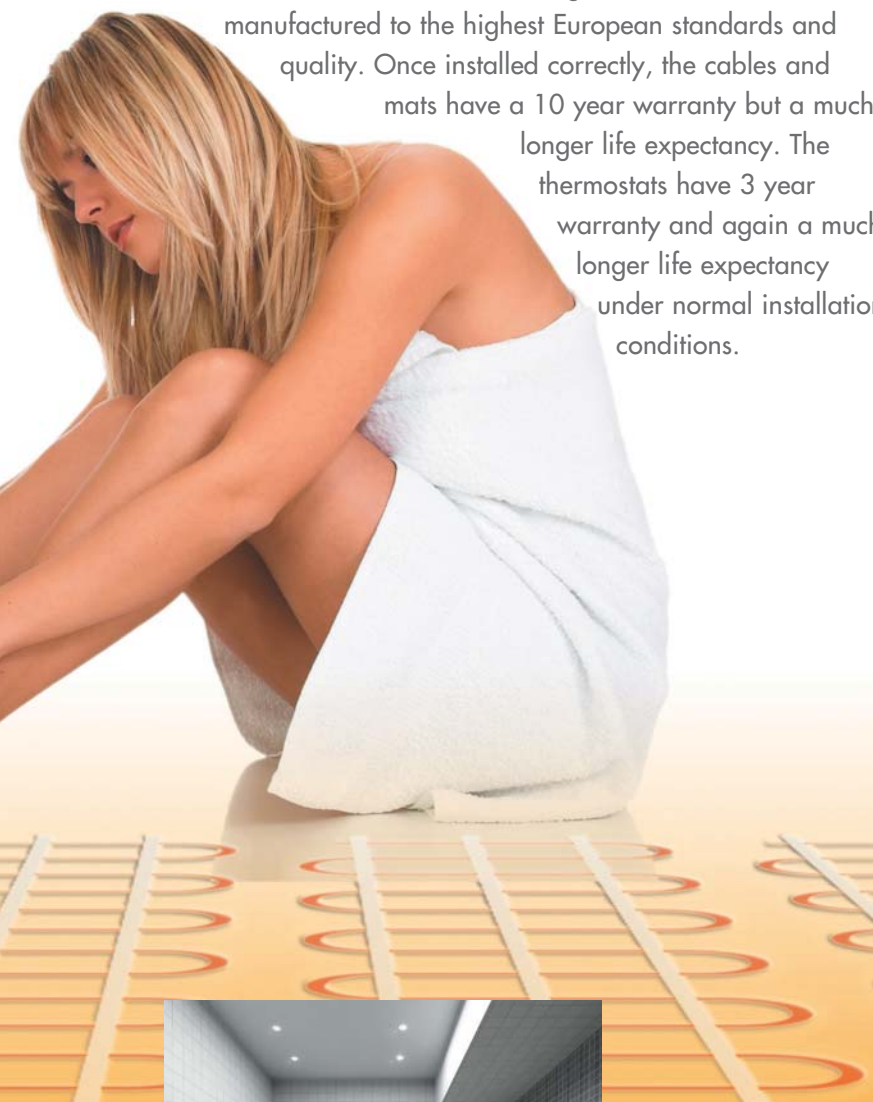
atc Electric Under Floor Heating

Maintenance Free

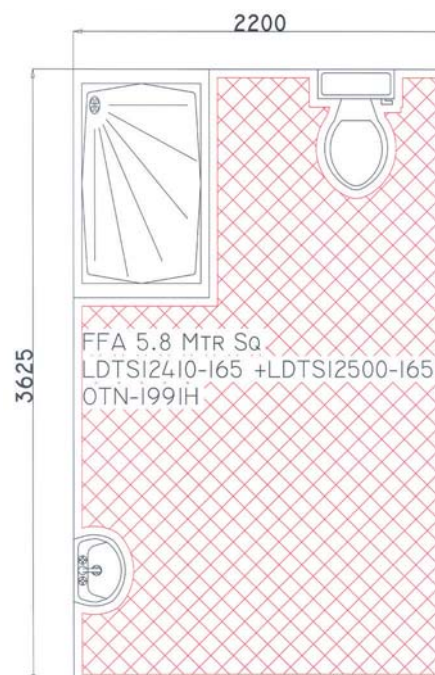
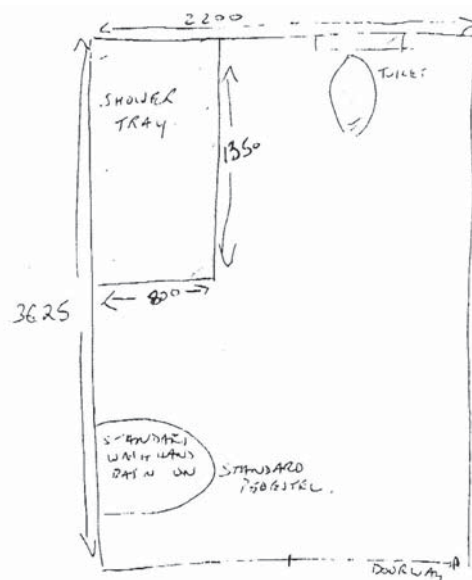
Once the **atc** electric underfloor heating is installed and tested as per the installation guidelines, the system is maintenance free.

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.



Sample Fax received from customer



CAD Drawing returned to customer



Design Facility

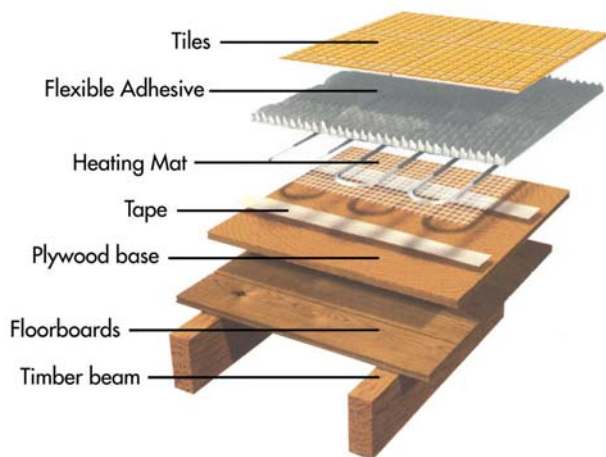
We are committed to providing comprehensive technical support for all under floor heating projects. We are now in a position to offer the most comprehensive design service yet. Simple sketches and dimensions can be converted into a professional drawing plan and quotation. All plans can be electronically sent and received for maximum efficiency e-mail: sales@atc.ie

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.

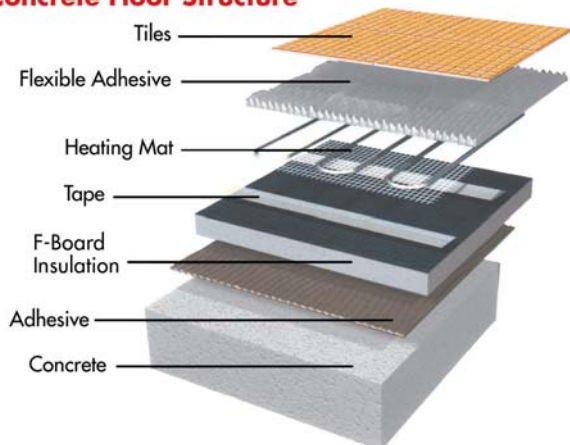
Timber Floor Structure (Suspended)



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 were 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
F-Board 6	1250mm x 600mm x 6mm	6	1.92kg
F-Board 10	1250mm x 600mm x 10mm	6	2.13kg

Adhesive Tape



CODE	ADHESIVE TAPE
VKC273	PVC DUCT SEALING TAPE 50mm x 33mm

atc Heating Mats

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.

TECHNICAL SPECIFICATIONS

- Heating load is 160w/m²
- 15 mat sizes to suit various applications
- Mat sizes from 0.5m² through to 16.25m²
- 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
- 10 year Warranty



TABLE OF HEATING MAT SIZES

CODE 160W/m ²	OUTPUT W	WIDTH m	SURFACE m ²
LDTS 160/ 0,5	80	0.5	0.5
LDTS 160/ 1	160	0.5	1.0
LDTS 160/ 1,5	240	0.5	1.5
LDTS 160/ 2	320	0.5	2.0
LDTS 160/ 2,5	400	0.5	2.5
LDTS 160/ 3	480	0.5	3.0
LDTS 160/ 3,5	560	0.5	3.5
LDTS 160/ 4	640	0.5	4.0
LDTS 160/ 5	800	0.5	5.0
LDTS 160/ 6	960	0.5	6.0
LDTS160/ 7	1120	0.5	7.0
LDTS160/ 8	1280	0.5	8.0
LDTS160/ 10	1600	0.5	10.0
LDTS160/ 11	1800	0.5	11.0
LDTS160/ 12	1800	0.5	12.0
LDTS160/ 13.3	2150	0.5	7.0
LDTS160/ 16.3	2600	0.5	7.0



atc Underfloor heating approved for use with **RAKO** ceramic and stone tiles



DON'T FORGET
Insulation Board on Page 66
Thermostats on pages 68 - 69

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Controls for Underfloor Heating

atc ELECTRONIC THERMOSTAT OTN – 1991H11

The OTN electronic thermostat provides on / off control up to 3600W, 16A. The OTN thermostat is an easy to use thermostat; temperature control is via a simple analogue dial controlling the floor sensor.

The compact, elegant European design is attractive and functional. This thermostat is very reliable and has been on the market for twenty years, making it one of the best selling thermostats due to its reliability and long life. The OTN thermostat has a 3 Year warranty. It is accurate to 0.4°C, ensuring precise control and a high comfort level of the floor surface or room temperature.

OTN Electronic Thermostat

CODE	OTN ELECTRONIC THERMOSTAT for Electrical Underfloor Heating Supplied with Floor Sensor. 3 Year Warranty	BOX QTY
OTN-1991H-OJA2	OTN Electronic Thermostat for Electrical Underfloor Heating c/w Floor Sensor	1



OTN

Spare Floor Sensor & Protective Tubing

CODE	SPARE FLOOR SENSOR	BOX QTY
ETF199	Universal Floor Sensor for Stats	1
2.5mtconduit16mm	16mm Protective Tubing 2.5mt	1



Floor Probe.



Controls for Underfloor Heating

atc DIGITAL THERMOSTATS

The ICD3 digital thermostat for electrical underfloor heating has a built-in 4 event timer, factory set for immediate operation after installation. It is an easy to use thermostat and the pre set programme can be changed to suit individual needs in seconds.

The thermostat can control a power load up to 3600W, 16A and the heating output is switched on and off with a differential of only 0.4°C. This clock thermostat has a built-in room sensor and floor limit sensor.

The new, modern design is attractive for all applications. It has a graphical backlit display for ease of use. This thermostat saves the installer time during installation and provides the end user ease of use, reliability and long life. The ICD3 thermostat has IP 20 protection and a 3 Year warranty.

ICD3 Digital Thermostat

CODE	ICD3 DIGITAL THERMOSTAT for Electrical Underfloor Heating with built-in Room Sensor and Floor Limit Sensor. 3 Year Warranty	BOX QTY
ICD3-1999	ICD3 Digital Thermostat for Electrical Underfloor Heating with built-in Room Sensor and Floor Limit Sensor	1
MCD5-1999	Digital Touchscreen Thermostat for Underfloor Heating with Built in room sensor 16A 3600W up to 22m ²	1



ICD3



MCD5-1999

