# atc Lifestyle Electric Thermal Radiator





Complies of 20 Eco-

ating Directive

(20)

Euro Edition Issue 1 August 2017

# Next Day Delivery

Order before 3.00pm and receive delivery next day

01 467 8301 sales@atc.ie

www.atc.ie



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# atc More than **26 Years' Experience**

As an ISO 9001:2008 Quality Approved Company since 1995 our core values of Quality, Service and Customer Care are primary to our day to day business activities.

It is our policy to provide our customers a consistently efficient service by operating as a Knowledgeable, Adaptable and Reliable Company.

Adaptable

Reliable







atc is established since 1991 and over the past 26 years we have evolved into a solution oriented company, innovating, developing and distributing energy efficient products to suit market needs.

Knowledge Through Personnel and Customer Training

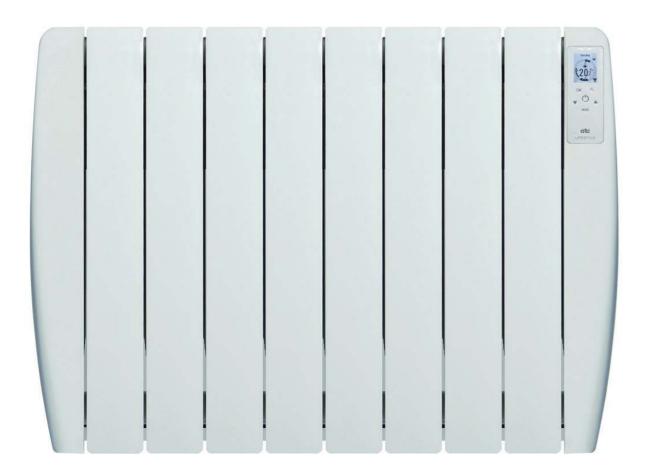
Meeting Customer Needs

Through Consistant Service





# atc Lifestyle **Electric Thermal** Radiator





**Experience the Difference** 



The Lifestyle Radiators are modern in design and aesthetically pleasing to the eye. Manufactured in Europe the Lifestyle is a unique electric radiator that is stylish, energy efficient, easy to operate and install.

# **Manufacturing Process**

The Lifestyle Radiators are manufactured at our factory in Europe. The process encompasses the manufacture of the radiator elements from raw aluminium through to the finished product. At the end of the process our Quality Control System ensures that every radiator is pressure tested and visually checked before being boxed for shipping.

# Innovation and Design

Our in-house team of experts developed the Lifestyle programme to provide unique and simple to use controls for both the installer and end user. All components used in the Lifestyle are designed and manufactured in Europe. The programme uniquely allows for Digital or Manual control options in the settings.

# Low Energy

The Lifestyle Radiators are designed to be the most energy efficient radiator available. There are various features and controls built into the radiator programme including PID Intelligent Control that ensures accurate temperature efficiency to 0.2C. This technology is far superior to other forms of heating such as traditional storage heaters and dry element radiators.

# **Real Comfort**

The Lifestyle Radiators provide comfortable and effective heat in the room. The air is naturally heated creating an unforced convection throughout the room with a high proportion of radiant heat giving ultimate user comfort for any lifestyle.

# **Ease and Cost of Installation**

The Lifestyle Radiators are easy and cost effective to install. Compared to other heating systems such as gas or water with high costs of installing pipe-work and expensive boilers the Lifestyle provides an efficient and cost efficient installation option for the end user and installer.







# Greener





#### Beyond comparison for energy efficiency. The Lifestyle incorporates advanced technology and controllability leading the way in sustainable living.

# **ENJOY MORE PRECISE TEMPERATURE**

PID Intelligent Control along with the Triac electronic thermostat maintains the set room temperature within 0.2C. Only the electricity required to maintain the programmed temperature is used, this gives you the most economical heater available.

#### **ADAPTIVE START CONTROL FUNCTION CUTS POWER CONSUMPTION**

When running in Program mode the Lifestyle measures the room temperature before the starting time and anticipates the need for heating. The Lifestyle knows how long it takes to heat up the room that it is installed in and gradually brings the room to temperature so it is warm when your time setting starts. Improving room comfort and energy efficiency.

#### INTELLIGENT OPEN WINDOW FUNCTION **CUTS POWER CONSUMPTION**

The Lifestyle can sense when there is a sudden fall in temperature caused by open windows and will after 20 minutes suspend the heating program to prevent expensive wastage of energy.

#### HEAT WHEN YOU WANT IT 24 / 7

The Radiator can be programmed to come on every day, in 30 minute intervals all year round.

#### **TWO PROGRAMME OPTIONS AND THREE OPERATING MODES**

Within the two programme options of digital or manual there are three operating modes, comfort, eco or frost protection. The Lifestyle has an operation mode that suits every routine.

#### MANUAL OVERRIDE WITH COUNT DOWN

Unexpected events happen, sometimes you need to change your heating without changing your program. With the manual mode if you're home early and want a boost to the heat, with manual mode you can easily bring your heating on without having to change your program. If you are going away you can set your heater to be off whilst you are on holidays and come back on the day you return.



### **TECHNICAL DETAILS**

Product Code	LS500	LS750	LS1000	LS1500	LS1800
Power W	500W	750W	1000W	1500W	1800W
Number of Fins (elements)	4	6	8	11	13
Dimensions ( $H \times W \times D$ ) mm	581x468x100	581x628x100	581x788x100	581x1028x100	581x1188x100
Voltage (AC)	230	230	230	230	230
Insulation Class	1	1	1	1	1
IP Protection	IP24	IP24	IP24	IP24	IP24
Approvals	CE	CE	CE	CE	CE
Weight	9kgs	12.6kgs	16kgs	21.4kgs	24.8kgs

# atc Lifestyle Electric **Thermal Radiator**

The Lifestyle Radiators are modern in design and aesthetically pleasing to the eye. Manufactured in Europe the Lifestyle is a unique electric radiators that is stylish, energy efficient, easy to operate and install.

#### **KEY FEATURES**

#### **TECHNICAL SPECIFICATIONS**

### APPROVALS









• Simple to Programme and operate • Large Easy to Read TFT LCD Display Operating Modes - Eco - Comfort - Anti Frost
10 Year Battery Backup for Programme and Time

• Triac Thermostat – Accurate to 0.2°C and Silent • PID Intelligent Control - improves Energy Efficiency • Open Window Technology - improves Energy Efficiency Adaptive Start feature in Programme mode – improves Energy Efficiency Univeral Wall Brackets for Quick Installation – Locks bottom of Radiator • Elements joined by Unique Patented Silicone Joints - Longer Life • Filled with High quality Thermal Emission Oil - Quick Heat Up Time

• Complies with Lot 20 Eco-design Heating Directive 2009/EC/EC. Effective January 2018 • Complies with EN 60 335-1; EN 60 335-2-30

# **Heating Design Service**

To ensure the most energy efficient and comfortable method of heating an area or space it is important that a number of criteria are taken into consideration. Such as, room dimensions, glazed areas, insulation levels and heat levels in adjacent areas.

Our dedicated Heating Design Team provides a full heating design and heat loss calculation to determine the correct solution for your building.

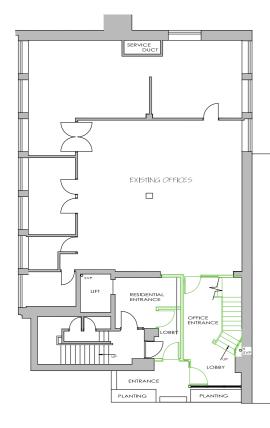
Ideally we would receive a CAD drawing similar to that below.

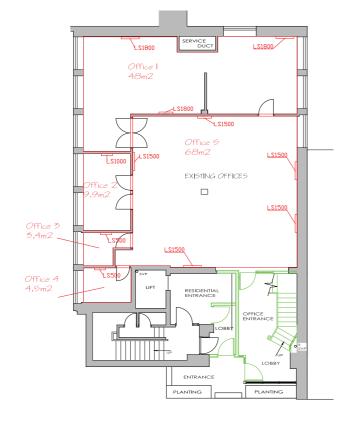
From this drawing we will;

- Use the measurements from each room to calculate the area and volume of each space.
- This information will determine the amount of energy required to heat the area.
- From this we can decide on the type and amount of heaters that should be installed.
- We can also provide a Heating Consumption Cost Analysis for the area based suggested times and geographical areas.



## Sample CAD drawing from customer and CAD drawing from atc showing radiator sizes and locations.





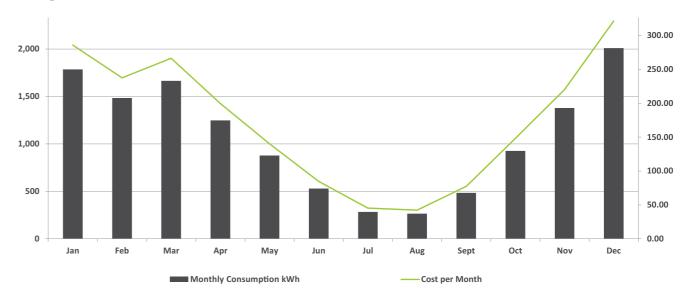
# atc Lifestyle Oil Filled Radiator Sizing Sheet

Room Name	W (m)	L (m)	H (m)	Area (m²)	Heat Input (W)	atc Lifestyle Product Code	Quantity Required
Office 1	48	1	2.7	48	5400	L\$1800	x 3
Office 2	9.9	1	2.7	9.9	1000	L\$1000	x 1
Office 3	3.4	1	2.7	3.4	500	L\$500	x 1
Office 4	4.5	1	2.7	4.5	500	L\$500	x 1
Office 5	68	1	2.7	68	7500	L\$1500	x 5
		-				Total Heat Input(W)	Total Radiators
						14900W	11

# Heating Consumption Guideline for Project Area (Dublin)

	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sept	Oct	Nov	Dec
		reb	IVICI	Apr	IVICIY	Juli	Jui	Aug	Sepi	OCI	INOV	Dec
Degree Days <15.5°C	320	266	298	223	157	95	51	47	87	166	247	360
	The Degree Days figures show the number of hours in a month where the heating system needs to b turned on, they are based on the historical recorded temperatures in the area.							ds to be				
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Monthly Consumption kWh	1,786	1,484	1,665	1,248	877	529	283	264	484	926	1,378	2,010
Electricity Price kWh						€0.16	c/kW					
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Cost per Month	285.78	237.51	266.41	199.66	140.36	84.63	45.30	42.32	77.48	148.11	220.52	321.54
	TOTAL Annual Cost €       €2,069.61       TOTAL Annual Consumption (kW/h)							12,93	5 kW			
	These costs are based on 6 hours usage, 6 days a week and room temperature 21°C											

# **Energy Consumption / Cost Estimate Graph**



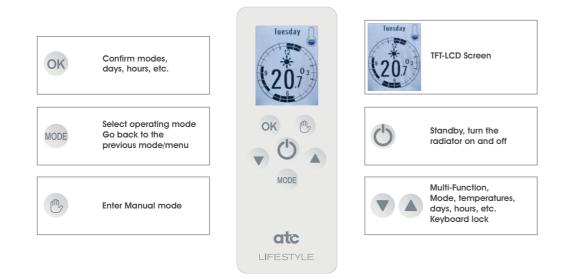




# **Easy to Programme and Control**

The Lifestyle Radiator designed with the installer and end user in mind.

The Lifestyle control panel is equipped with a large TFT LCD display with clear definition of each mode or function. There are 6 buttons for easy operation and control as listed below.



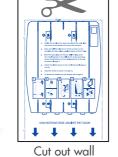
# **Simple Installation**

#### The Lifestyle Radiator designed with the installer and end user in mind.

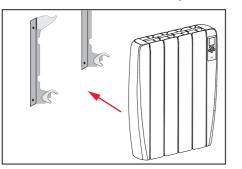
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The installation of the radiator is simple and quick. There are just 2 universal wall brackets to be attached to the wall

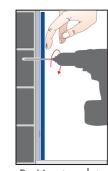




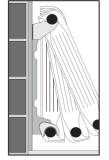
template



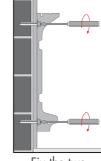
Mount radiator onto brackets



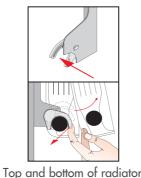
Position template and drill 4 holes



Position radiator onto brackets



Fix the two brackets to wall



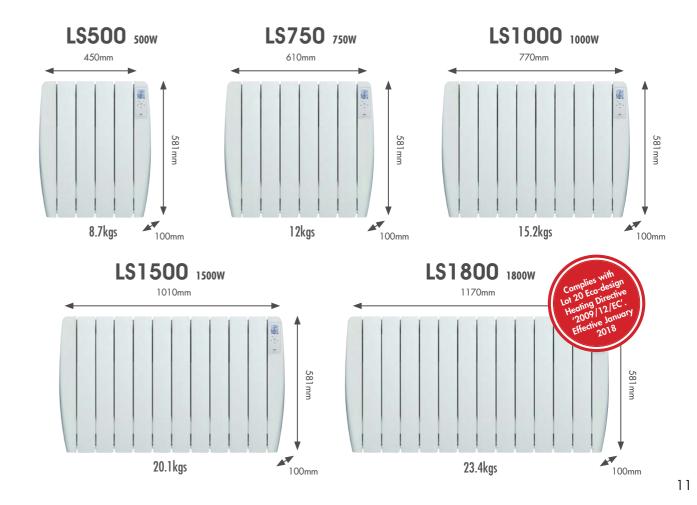
are secured to wall



This Sizing Table is a guide to assist you in selecting the correct LIFESTYLE Radiator for the room/area you need to heat. Calculate the floor area (m x m) of the room/area and the total length (m) of the outside wall. Using the floor area calculated (m2), select the nearest size from the left hand side of the table and match this with the length of the outside from the top of the table. This will tell you what size Radiator is required to heat the room/area. Please note this is a guideline only and for more accurate information please contact our Technical Department.

Floor Area in	Temperature		Total Length of External Wall in Meters										
m <sup>2</sup>	Required (°C)	1.5	2	3	4	5	6	7	8	9	10	11	12
Up to 3 $m^2$	21°C	500	500	750	750	750	1000						
Up to 6 m <sup>2</sup>	21°C	500	750	750	1000	1000	1000	1500	1500				
Up to 9 m <sup>2</sup>	21°C	750	750	1000	1000	1000	1500	1500	1500	1 <i>5</i> 00	1x 1800 or 2x 1000		
Up to 12 m <sup>2</sup>	21°C	750	1000	1000	1000	1500	1500	1500	1500	1x 1800 or 2x 1000			
Up to 15 m <sup>2</sup>	21°C	1000	1000	1500	1500	1500	1500	1500	1x 1800 or 2x 1000	1x1000 & 1x1500			
Up to 18 m <sup>2</sup>	21°C	1000	1500	1500	1500	1500	1500	1x 1800 or 2x 1000	1x1000 & 1x1500	1×1000 & 1×1500			
Up to 21 m <sup>2</sup>	21°C	1500	1 <i>5</i> 00	1500	1500	1500	1x 1800 or 2x 1000	1x1000 & 1x1500	1x1000 & 1x1500	1x1000 & 1x1500			
Up to 24 m <sup>2</sup>	21°C	1500	1 <i>5</i> 00	1500	1500	1x 1800 or 2x 1000	1x1000 & 1x1500	1x1000 & 1x1500	1x1000 & 1x1500	1×1000 & 1×1500			
Up to $27 \text{ m}^2$	21°C	1500	1 <i>5</i> 00	1x 1800 or 2x 1000	1x1000 & 1x1500	1x1000 & 1x1500	1x1000 & 1x1500	1x1000 & 1x1500	2x 1500				
Up to 30 m <sup>2</sup>	21°C	1500	1x 1800 or 2x 1000	1x 1800 or 2x 1000	1x 1800 or 2x 1000	1x 1800 or 2x 1000	1x1000 & 1x1500	1x1000 & 1x1500	1x1000 & 1x1500	1x1000 & 1x1500	2x 1500	2x 1 <i>5</i> 00	2x 1500

Important Information: In many cases the LS1800,1800watt radiator in our range can reduce the requirement for two radiators in some locations. Leading to reduced material and installation costs.







# Why use the atc Lifestyle Radiator instead of Storage heaters?

## Lot 20 Eco-design Heating Directive

From January 1st 2018 all space heaters manufactured for sale must comply with a New Heating Directive EED 2015/1188. This means that there are minimum levels of controllability required for both storage heating and all point of use heaters.

- In order to comply with the legislation, any newly installed Storage heating require additional built in controls and thermostats to improve their efficiency.
- atc Lifestyle radiators fully comply with the requirements of the legislation and include extra controllability such as PID Intelligent Control, Early Start and Open Window technology to enhance the energy efficiency of the heater.

### Controllability

- Storage heaters traditionally release the majority of the heat in the early part of the day. This can often be when the occupier is not present in the building and therefore the energy is wasted. It is not unusual for the occupiers to boost the heat in the evening with the fan assist which is usually 2kW's.
- atc Lifestyle radiators provide heat on demand. The radiator can be programmed to provide heat as required through the comfort, eco or frost protection modes. This ensures the temperature in the area is accurate to 0.2°C

### Installation

- Storage heaters are made up of bricks and elements and are generally not attractive in a room. They are heavy and difficult to install and require heavy duty fixings to attach to the wall.
- atc Lifestyle heaters are aesthetically pleasing to the eye and are designed with the installer and end user in mind. By using the two universal wall brackets the Lifestyle radiator can be installed in minutes with the largest model only weighing 24.8kg, saving the installer time and money.

### **Energy Saving**

- Storage heaters take up to 8 hours to reach their fully charged capacity using high levels of electricity. As this energy is released during the day when the occupier in not at home, this can result in wasted electrical consumption and a loss of energy.
- The atc Lifestyle is beyond comparison for energy efficiency compared to storage heaters. The Lifestyle radiator will only use the specific amount of power required to maintain the programmed temperature within the space. The Lifestyle incorporates advanced technology and controllability leading the way in sustainable living.

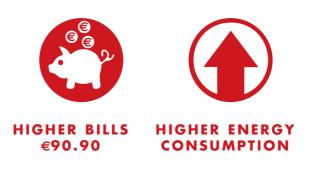
# **Energy Consumption Comparison**



EXAMPLE	Storage Heater
Area 18m <sup>2</sup>	4250w
Kw cost per hour <sup>1</sup>	€0.1018
Total consumption per day	€3.03
TOTAL COST PER MONTH	€90.90

The above figures are based on a 7 hour heating cycle using electricity on the night rate for the storage heater. The Thermal Radiator is used 6 hours per day, 2 in the morning and 4 in the Evening on the standard day rate. The Calculation does not take into account the additional requirement for boost heating in the evening for the storage type heaters. Heaters are sized based on standard Sun Ray sizing metrics.

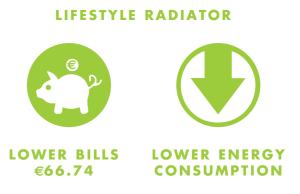
#### **STORAGE HEATERS**



1 Day (0.2060), Night rate(0.1018) on the ESB Standard Night saver Plan. Standing charge not included.







# **Sun Ray Wi-Fi Electric Radiators**

Sun Ray Wi-Fi electric radiators are high quality, energy efficient radiators with thermic emission oil, high quality aluminium elements and the latest in digital control technology. 7 day / 24 Hour programming gives you control of comfort, economy and frost protection settings (all fully adjustable).

In addition these electric radiators can be programmed and controlled from your smartphone, tablet or computer, wherever you are in the world, via the Sun Ray Wi-Fi Control Pack (sold separately).

#### **TECHNICAL SPECIFICATIONS**

- Digital Electronic thermostat with a choice of PID or Hysteresis control
- Built in TRIAC control of the element for added comfort and accurate temperature control
- Easy to programme on the radiator or via smartphone application
- Built in LCD digital display with backlight
- 7 day 24 hour programme with 3 settings; Comfort, Economy and Frost protection, all fully adjustable
- High Quality Aluminium Elements
- Thermic Emission Oil
- Approvals: CE, RoHs
- Compliancy: EN 60335-1, EN 60335-2-30
- 2 year warranty Electronics
- 10 year warranty Aluminium Finish
- Comes with 1.4mt connection cable
- Integrated On/Off Switch





Note: Wi-Fi operation requires the Sun Ray Wi-Fi Control Pack which is sold separately

#### **TECHNICAL DETAILS**

atc Sun Ray Wi-Fi Electri	c Radiators				
Product code	WF500	WF750	WF1000	WF1500	WF1800
Number of Fins	4	6	8	12	12
Power (w)	500	750	1000	1500	1800
Insulation Class	Class I	Class I	Class I	Class I	Class I
IP Protection	IP20	IP20	IP20	IP20	IP20
Colour	RAL 9016	RAL 9016	RAL 9016	RAL 9016	RAL 9016
Dimensions (mm) HxWxD	580x420x100	580x580x100	580x740x100	580x1060x100	580x1060x100
Approvals	CE, RoHs	CE, RoHs	CE, RoHs	CE, RoHs	CE, RoHs
Weight (kg)	8.8	12.5	16.4	23.9	23.9
Optional Wi-Fi Control Pag	:k				
Product Code	Product Descrip	otion			
WFEP	Wi-Fi Control P	ack (incl Gateway, I	Din Rail Power Mete	er & Clamp)	



atc Sun Ray Wi-Fi Control	Pack (Sun Ray Gateway)				
Product code	WFEP				
Power Supply	5V DC 500mA Micro USB				
Communication Frequency	868Mhz				
Connection	RJ45 Ethernet				
Dimensions (mm) HxWxD	22x80x80				
Mounting	Desktop or wall mounted				
Din Rail Meter (Included in V	WFEP)				
Description	Single DIN Rail module with 8 Communication to Gateway,				
Power Supply	200-260VAC ~ 50Hz				
Consumption	0.9w				
Max current measurement	0 to 80A <3% Error				
Measurement Clamp (Includ	ed in WFEP)				
Max Cable size	Ø9mm, Max Cross Section 70mm <sup>2</sup>				
Description	External Current Transformer (CT) with cable jack for connection to power meter.				







# **Sun Ray Neptune**

#### LOW LEVEL RADIATORS

Sun Ray Neptune radiators are high quality, low level aluminium radiators designed for heating areas with low level walls or areas where space is restricted. Simple to fit, easy to operate and programme, Sun Ray Neptune radiators are ideal for conservatories, apartments, and offices.

#### **TECHNICAL SPECIFICATIONS**

- Digital Electronic thermostat with built in TRIAC control of the element for added comfort and accurate temperature control
- Easy to programme
- Built in LCD digital display with backlight
- 7 day 24 hour programme with 3 settings; Comfort, Economy and Frost Protection, all fully adjustable. Also comes with 2hr Boost facility
- NOTE: Comfort and Economy settings are fully adjustable between 7° and 32°C. Frost Protection pre-set at 7°C • Comes with 1.4mt connection cable
- High Quality Aluminium Elements
- Thermic Emission Oil
- Approvals: CE, RoHs
- Compliancy: EN 60335-1, EN 60335-2-30
- 2 year warranty Electronics
- 10 year warranty Aluminium Finish
- OPTIONAL: Infra Red Remote Controller LR-REMOTE





Sun Ray Neptune Low Leve	l Radiators					
Product Code	LR950	LR1425				
Number of Fins	10	15				
Power (w)	950	1425				
Insulation Class	Class II	Class II				
IP Protection	IP44	IP44				
Colour	RAL 9016	RAL 9016				
Dimensions (mm) HxWxD	340x865x96	340x1265x9				
Approvals	CE, RoHs	CE, RoHs				
Weight (kg)	12.8	19.2				
<b>Optional Infra Red Remote</b>						
Product Code	Product Description					
LR-REMOTE Remote Control for Low level						

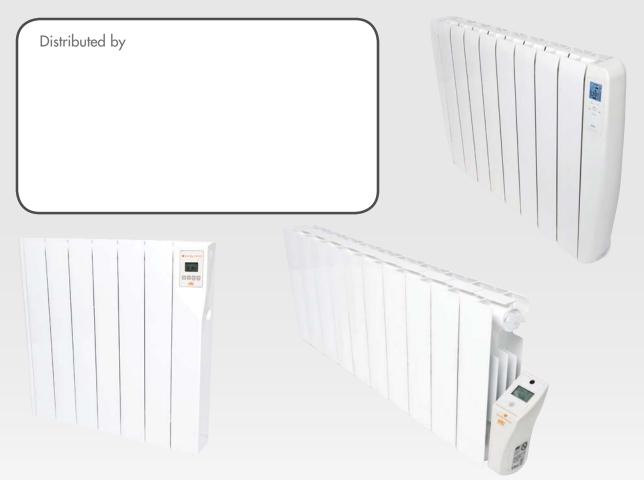


# atc Lifestyle Electric Thermal Radiator

# Contact Sales and Technical Support at 01 467 8301 Email: sales@atc.ie

Head Office & Energy Showrooms: atc House, Broomhill Drive, Tallaght, Dublin 24, Ireland. D24 EF99

## www.atc.ie



# atc Lifestyle Manufacturing Process



Raw aluminium being melted at the start of process



Cooling the fins in water after oven process



Unique silicone joint between fins



Radiators on way for pressure testing and quality control

ALL COMPONENTS USED IN THE MANUFACTURE OF THE LIFESTYLE ARE DESIGNED AND MANUFACTURED IN EUROPE