Weight and Water C	Content per Ra	diator (LST Super)
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	Height (mm)											
	550			650			850			950		
Length (mm)	Weight (kg)	Weight (lb)	Water Content (kg)									
600				11.02	24.29	1.20	15.32	33.77	1.80	17.22	37.96	2.04
800	12.10	26.68	1.28	14.90	32.85	1.60	20.90	46.08	2.40	23.53	51.87	2.72
1000	15.22	33.55	1.60	18.80	41.45	2.00	26.50	58.42	3.00	29.88	65.87	3.40
1200	18.45	40.67	1.92	22.69	50.02	2.40	32.09	70.75	3.60	36.21	79.83	4.08
1400				26.62	58.69	2.80	37.73	83.18	4.20	42.57	93.85	4.76
1600	24.80	54.67	2.56	30.56	67.37	3.20	43.37	95.61	4.80	48.94	107.89	5.44
1800				34.53	76.12	3.60	49.04	108.11	5.40	55.34	122.00	6.12
2000	31.07	68.50	3.20	38.40	84.66	4.00	54.62	120.42	6.00			

# Weight and Water Content per Radiator (LST Super Plus)

	neight (mm)											
	550			650			850			950		
Length (mm)	Weight (kg)	Weight (lb)	Water Content (kg)									
600				16.28	35.89	2.46	23.04	50.79	3.54	26.07	57.47	4.14
800	17.92	39.51	2.56	22.36	49.29	3.28	31.88	70.28	4.72	36.18	79.76	5.52
1000	22.70	50.04	3.20	28.44	62.70	4.10	40.72	89.77	5.90	46.32	102.12	6.90
1200	27.50	60.63	3.84	34.52	76.10	4.92	49.59	109.33	7.08	56.45	124.45	8.28
1400				40.61	89.53	5.74	58.44	128.84	8.26	66.57	146.76	9.66
1600	37.12	81.83	5.12	46.74	103.04	6.56	67.33	148.44	9.44	76.73	169.16	11.04
1800				52.88	116.58	7.38	76.24	168.08	10.62	86.91	191.60	12.42
2000	46.74	103.04	6.40	58.94	129.94	8.20	85.06	187.52	11.80			

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# **Bracket Positions and Dimensions**



Important: It is advisable to leave a further 5mm clearance above any final floor covering to allow for easy fitting and removal.

# **General Specifications**

#### **Approval and Certification**



All **MYSON LST** (low surface temperature) radiators are manufactured and tested to BS EN 442. Every radiator carries the BS Kitemark which certifies independent approval of heat output and verifies production under a quality system to BS EN ISO 9001.



All **MYSON LST** radiators carry a ten year guarantee from date of manufacture against defects caused by faulty materials or manufacture.

# Description

**MYSON LST** radiators are ideal where a low surface temperature is required for safety reasons. They comply with NHS Estates Health Guidance Notes 1998 (less than 43°C with inlet water at 82°C) and are widely used in hospitals, retirement homes, schools, sports halls and private housing. They consist of an efficient internal heat emitter in an attractive and robust 1.2mm steel enclosure that gives heat protection and conceals pipework and valves. There are Super and Super Plus models, available in 56 sizes, with heights of 550mm, 650mm, 850mm and 950mm, and up to eight lengths from 600mm to 2000mm.

#### Packaging

Each **LST** radiator is individually packed in a single protective cardboard carton which carries the unique model identification code.

#### Fixings

For the correct installation of radiators it is essential that the fixing of the radiator is carried out in such a way that it is suitable for intended use AND predictable misuse. A number of elements need to be taken into consideration including the fixing method used to secure the radiator to the wall, the type and condition of the wall itself, and any additional potential forces or weights that may happen to be applied to the radiator, prior to finalising installation.

#### **Surface Temperatures**

Surface temperatures are below 43°C with water inlet temperature up to 82°C. Compliance with this requirement of NHS Estates Health Guidance Notes 1998 has been verified by independent tests carried out by BSRIA.

# Application

**MYSON LST** radiators are for use on indirect systems only, with a maximum working temperature of 82°C. The system should be designed to follow the recommendations of BS 5449 or BS 6880, as appropriate, with particular care taken to avoid air entry or water discharge through an open vent.

We do not recommend the use of single feed indirect cylinders, as the possibility of aeration due to water interchange may lead to corrosion.

The installation work must be carried out in accordance with recognised good practice, and precautions taken to avoid

contamination which could lead to corrosion. If a corrosion inhibitor or other water treatment is to be used, the Manufacturer's Instructions must be strictly followed.

The recommendations of BS 7593, Code of Practice for treatment of water in domestic hot water central heating systems, should be followed where appropriate.

#### Accessories

Concealed wall brackets, air vent key and plug are supplied packed with every radiator. A fitting instruction leaflet and installation template is also included.

Theft and vandal resistant ring and collar are available for **MYSON** TRV's, providing protection against interference and theft of TRV's.

# **Cleaning and Maintenance**

**MYSON LST** radiators have been designed and constructed to enable cleaning and maintenance to be carried out easily without disturbance to plumbing.

The **LST** casing can be removed easily by simply taking out the two security screws, lifting the enclosure out of the wall bracket slots and pulling forward.

# **Safety Precautions**

Radiators are hot when in use, and as such, present a risk of burns to users on prolonged contact. The temperature of a radiator is dependent on the temperature of the system water, as set by the system installer or user. Installers and users should ensure that those who may come into close proximity to hot radiators are aware of the risk of burns. Installers and users should take all necessary steps to minimise the risks of burns. If the risk is significant, consideration should be given to installing low surface temperature radiators, or to placing guards in front of the radiators.

# Heat Output

The heat outputs shown in the table below are based on a mean water to air temperature difference of  $50^{\circ}$ C. When the difference is not  $50^{\circ}$ C, the output should be multiplied by the appropriate factor from within the table:

Centigrade	Factor	Fahrenheit
20°C	0.30	36°F
25°C	0.41	45°F
30°C	0.51	54°F
35°C	0.63	63°F
40°C	0.75	72°F
45°C	0.87	81°F
50°C	1.00	90°F
55°C	1.13	99°F
60°C	1.27	108°F
65°C	1.41	117°F
70°C	1.55	126°F

For an example of how to calculate this, please see page 4.

# Heat Outputs

		LST Super			LST Super Plus			
	Outer Casing Dimensions	[	Depth 107 m	m / 4.21 in	Depth 157 mm / 6.18 in			
Nominal	Length (mm - inches)	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code	
Height*	800 - 31	277	946	5 LS 080	545	1861	5 LSP 080	
550 mm	1000 - 39	370	1261	5 LS 100	727	2481	5 LSP 100	
22 in	1200 - 47	462	1576	5 LS 120	909	3102	5 LSP 120	
	1600 - 63	647	2207	5 LS 160	1273	4342	5 LSP 160	
	2000 - 79	832	2837	5 LS 200	1636	5583	5 LSP 200	
	Outer Casing Dimensions	Depth 107 mm / 4.21 in			C	Depth 157 mi	m / 6.18 in	
	Length (mm - inches)	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code	
Nominal	600 - 24	243	830	6 LS 060	468	1597	6 LSP 060	
Height*	800 - 31	365	1245	6 LS 080	702	2395	6 LSP 080	
650 mm	1000 - 39	486	1660	6 LS 100	936	3194	6 LSP 100	
25 in	1200 - 47	608	2074	6 LS 120	1170	3992	6 LSP 120	
	1400 - 55	730	2489	6 LS 140	1404	4790	6 LSP 140	
	1600 - 63	851	2904	6 LS 160	1638	5589	6 LSP 160	
	1800 - 71	973	3319	6 LS 180	1872	6387	6 LSP 180	
	2000 - 79	1094	3734	6 LS 200	2106	7186	6 LSP 200	
	Outer Casing Dimensions	Depth 107 mm / 4.21 in			Depth 157 mm / 6.18 in			
_	Length (mm - inches)	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code	
Nominal	600 - 24	353	1205	8 LS 060	659	2249	8 LSP 060	
Height*	800 - 31	530	1808	8 LS 080	989	3374	8 LSP 080	
850 mm	1000 - 39	706	2410	8 LS 100	1318	4498	8 LSP 100	
33 in	1200 - 47	883	3013	8 LS 120	1648	5623	8 LSP 120	
55 m	1400 - 55	1060	3615	8 LS 140	1978	6748	8 LSP 140	
	1600 - 63	1236	4218	8 LS 160	2307	7872	8 LSP 160	
	1800 - 71	1413	4820	8 LS 180	2637	8997	8 LSP 180	
	2000 - 79	1589	5423	8 LS 200	2966	10121	8 LSP 200	
	Outer Casing Dimensions	Depth 107 mm / 4.21 in			Depth 157 mm / 6.18 in			
Nominal	Length (mm - inches)	Output (watts)	Output (Btu/h)	Order Code	Output (watts)	Output (Btu/h)	Order Code	
Height*	600 - 24	405	1383	9 LS 060	747	2548	9 LSP 060	
050	800 - 31	608	2074	9 LS 080	1120	3822	9 LSP 080	
950 mm	1000 - 39	810	2765	9 LS 100	1494	5096	9 LSP 100	
37 in	1200 - 47	1013	3456	9 LS 120	1867	6370	9 LSP 120	
	1400 - 55	1216	4148	9 LS 140	2240	7644	9 LSP 140	
	1600 - 63	1418	4839	9 LS 160	2614	8918	9 LSP 160	
	1800 - 71	1621	5530	9 LS 180	2987	10192	9 LSP 180	

# \*Please ensure you add an extra 22mm to the height of the radiator to account for the curvature of the top grille.

Connections

All MYSON LST radiators are fitted with 4 -  $1\!/\!2$  inch BSP connections.

N.B. The tabulated heat outputs are quoted at a mean water to air temperature difference of 50°C. The standard heat outputs are based on length of the internal heat emitter, not the outer casing.

# **Operating Pressures**

Every **MYSON LST** radiator is tested to a pressure of 10.5 bar (152.5 psi) and is suitable for a working pressure of up to 8.0 bar (117.1 psi).

# LST Thermostatic Control Valves

When thermostatic control is required, MYSON offers a flexible and comprehensive range of thermostatic radiator valves. Thermostatic valves allow the temperature of each room to be automatically and precisely controlled. Each valve has an adjustable temperature setting enabling the pre-selection of the chosen temperature for that room.

With the use of two locking pins (which are supplied in the valve head) the **MYSON** thermostatic radiator valve can be locked at one setting or limited to a specific range of maximum and minimum temperatures (this facility is not available with the Remote Adjuster kit).

The four options illustrated are available for use with the MYSON LST range of radiators. The Close Coupled TRV kit includes a MYSON FullFlow lockshield valve. The Remote Sensor and Remote Adjuster kits require a standard MYSON thermostatic radiator valve (standard head to be removed and replaced by head supplied with the kit) and a lockshield valve. However, when thermostatic control is not required, the use of **MYSON** FullFlow radiator valves is recommended.

# (i) Close Coupled TRV Kit (UK Patent No 2259758)

Suitable for TBOE or BOE connections.

This arrangement offers a choice of positions for both the valve body and sensor head.

The kit allows the thermal sensing head of a MYSON Thermostatic Radiator Valve to be mounted directly on the top left/right hand side of the LST enclosure. The point of fitting has been half-sheared and requires only to be knocked out to facilitate easy installation, becoming an integral part of the appliance.

The valve body is fitted to the heat emitter and is coupled to the sensing head by a flexible capillary extension lead.



# **Close Coupled TRV Kit Specification**

Maximum Operating Pressure	10 bar
Maximum Water Temperature	120°C
Hysteresis	<0.5 k
Setting Range	8°to 28°
Normal Setting	Ca 20°C
Frost Setting	8°C
Limiting and Locking	Ca 1°C
Maximum Operating Differential Pressure	0.6 bar



# **Close Coupled TRV Kit comprises:**

- 1 TRV head
- $1 \frac{1}{2}$  inch/15mm angle body
- 1 Close coupling unit
- 1 <sup>1</sup>/<sub>2</sub> inch/15mm **MYSON** Fullflow lockshield valve

Order Code: CCKTC (available with 15mm or 22mm connections)

# (ii) Direct Fit TRV Kit

Suitable for TBOE connection only.

This kit allows a **MYSON** TRV body to be directly fitted to the radiator, with the thermostatic head projecting beyond the enclosure.



- 1 Reverse angle TRV body
- 1 TRV head
- 1 Extension adaptor
- 1 Panel bush
- 1 Matchmaster lockshield valve

Order Code: DIRECTFIT

#### (iii) Remote Sensor

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This allows the TRV head to be fitted inside the LST casing. The TRV valve body must be fitted on bottom opposite end of the radiator. It is NOT suitable for top end connection. The sensor may be positioned up to 5 metres from the casing.

Order Code: 2TRVRSHEAD5 (5 METRE) 2TRVRSHEAD2 (2 METRE)

#### (iv) Remote Adjuster



Suitable for TBOE or BOE connections.

The TRV head/sensor is mounted directly onto a wall plate and may be fitted up to 5 metres from the emitter.

Order Code: 2TRVADJHEAD5 (5 METRE) 2TRVADJHEAD2 (2 METRE)

#### Direct Fit TRV Kit comprises: