

Before.



After.

# KICKSPACE<sup>®</sup> The space saving solution.

Clever by design, the **KICKSPACE®** unit fits neatly within a unit plinth or floor cavity providing a fresh thinking, innovative heating solution. Where traditional radiators take up precious wall space and restrict design possibilities, the **KICKSPACE®** heater allows freedom to tailor your home around your lifestyle. Central heating, electric and duo models available. **All units are now supplied complete with a white grille.**  The **KICKSPACE®** can also be used alongside the **MYSON INNOKO** towel rail to provide the perfect drying and heating solution for any kitchen. For information on the **MYSON** range of towel warmers please contact Customer Services.



# Effective climate control.

**KICKSPACE®** works by drawing room air over the heated fins of the unit heat exchanger and projecting warm air back into the room. Controls are situated on the front grille, with the unit having a choice of heating fan speeds (winter setting) as well as a fan-only (summer setting) operation. Alternatively, a remote control wall switch can be fitted to central heating and duo models for extra control and convenience.







KICKSPACE® Floor model.

# KICKSPACE<sup>®</sup> Applications.

The kitchen is often where space is most at a premium and the **KICKSPACE**<sup>®</sup> can deliver the most benefits but equally, the bathroom or hallway can offer alternative applications. All versions, except the floor model, are designed to be installed horizontally into recessed locations. They require an adequate supply of inlet air and the axis of the motor must remain horizontal.



Grilles.

# Accessories.

The unit grille and remote wall switch can be customised to suit any room décor with a variety of metallic and colour finish options. The remote room thermostat is supplied white as standard and is suitable for the 500, 600 & 800 hydronic models.



Remote wall switch.



Remote room thermostat.

## Model details

| Central Heating | Electric | Duo<br>(Central Heating/Electric) |
|-----------------|----------|-----------------------------------|
| 500             | 500E     | 500 Duo                           |
| 600             | 600E     |                                   |
| 800             |          |                                   |
| Floor           |          |                                   |
| 600-12V         |          |                                   |



For technical information please refer to pages 17-21.

#### System Design for Fan Convectors

Fan convectors are intended to be connected to central heating systems in the same way as radiators, and offer advantages and benefits not available from traditional emitters. To ensure optimum fan convector performance, great care must be taken to ensure that the choice of unit and the heating system design are considered. The following factors must be taken into consideration:

- Fan convectors should only be used on closed circulation, two pipe, pump assisted central heating systems.
- Fan convectors should be correctly sized to match the heat loss requirement of the room with the unit operating at its lowest fan speed.
- The heating system must be capable of providing sufficient hot water through the heat exchanger. This means that:
  - The minimum pipe size should be 15mm.
  - Fan convectors are not suitable for use on microbore pipe-work.
  - Fan convectors are not suitable for one-pipe systems.
  - Where the unit is fitted onto a system with other emitters, a separate circuit for the fan convector should be considered to ensure an adequate water flow through it.

- The heating system water temperature must be greater than 43°C in heating mode for the unit to operate (lower temperatures possible for heat pump applications on wall mounted units).
- Optimum performance of the fan convector will require effective balancing of the whole system.
- Fan convectors should not be used to replace radiators in existing systems unless pipe-work sizing, system design and system balancing can guarantee an adequate flow of water through the fan convector.
- The maximum working pressure through the heat exchanger is 10 bar (150 lb/in<sup>2</sup>). The maximum allowable water temperature through the heat exchanger is 90°C.
- Wall mounted units should be mounted on a flat wall, and stud or partition walls should be avoided to minimise the possibility of noise transmission.

## KICKSPACE<sup>®</sup> Product Range

## Hydronic Product Range

| Model                        | Flexible Hoses* | Isolating Valves<br>(15mm) | Electric Cable             | Transformer | Fan Only Option |
|------------------------------|-----------------|----------------------------|----------------------------|-------------|-----------------|
| KICKSPACE <sup>®</sup> 500   | Supplied        | Supplied                   | 2 metres<br>(mains fitted) | N/A         | Yes             |
| KICKSPACE® 600               | Supplied        | Supplied                   | 2 metres<br>(mains fitted) | N/A         | Yes             |
| KICKSPACE® 800               | Supplied        | Supplied                   | 2 metres<br>(mains fitted) | N/A         | Yes             |
| KICKSPACE <sup>®</sup> Floor | Supplied        | Supplied                   | 2 metres<br>(mains fitted) | N/A         | Yes             |

#### Low Voltage Hydronic Product Range

| Model                             | Flexible Hoses* | Isolating Valves<br>(15mm) | Electric Cable   | Transformer                         | Fan Only Option |
|-----------------------------------|-----------------|----------------------------|--|-------------------------------------|-----------------|
| KICKSPACE <sup>®</sup><br>600-12V | Supplied        | Supplied                   | 1 metre<br>(low voltage fitted)<br>1 metre<br>(mains fitted) | Supplied<br>(external from product) | Yes             |

#### Duo (Hydronic-Electric) Product Range

| Model              | Flexible Hoses* | Isolating Valves<br>(15mm) | Electric Cable             | Transformer | Fan Only Option |
|--------------------|-----------------|----------------------------|----------------------------|-------------|-----------------|
| KICKSPACE® 500 Duo | Supplied        | Supplied                   | 2 metres<br>(mains fitted) | N/A         | Yes             |

# **Electric Product Range**

| Model                       | Flexible Hoses* | Isolating Valves<br>(15mm) | Electric Cable                             | Transformer | Fan Only Option |
|-----------------------------|-----------------|----------------------------|--|-------------|-----------------|
| KICKSPACE <sup>®</sup> 500E | N/A             | N/A                        | 2 metres<br>(mains fitted)                 | N/A         | Yes             |
| KICKSPACE® 600E             | N/A             | N/A                        | 2 <sup>1</sup> /2 metres<br>(mains fitted) | N/A         | Yes             |

\*750mm x 10mm bore, EPDM hoses, sheathed in AISI 304 stainless steel braid. Please note that KICKSPACE® 600E grilles are an integral part of the product and can not be changed.

# KICKSPACE<sup>®</sup> Controls

# Hydronic (KICKSPACE® 500, 600, 800, 600-12V)

Fan Speed - Normal/off/boost. Summer/Winter - Fan only/heating option.

### Hydronic Electric (KICKSPACE® 500 Duo)

Summer/Off/Winter - Fan only/off/heating options. System Selector - Central heating/electric heating. Fan Speed - Normal/boost.

#### Electric (KICKSPACE® 500E)

Summer/Off/Winter - Fan only/off/heating option. Power Selector - 1kW or 2kW. Fan Speed - Normal/boost.

#### Electric (KICKSPACE® 600E)

Summer/Winter/Output.

# KICKSPACE<sup>®</sup> Performance Data

#### **Hydronic Models**

It is preferable to select the model with an output capable of maintaining the calculated heat losses of the room when operating at normal speed. This will enable the boost fan speed and the higher temperature differences to be used to greater advantage for rapid warming of the room from cold in excessive conditions. When establishing the temperature difference, i.e. mean water to room temperature, allowance should be made for temperature drop in the system. It is the water temperature at the convector which dictates the output.

#### Hydronic Heating Performance Data

|       | Fan    | Temperature Difference (°C) |      |           |        |      |      |      |           |        |      |
|-------|--------|-----------------------------|------|-----------|--------|------|------|------|-----------|--------|------|
| Model | Speed  |                             | Heat | Output (\ | watts) |      |      | Heat | Output (B | Btu/h) |      |
|       | opeed  | 40°                         | 45°  | 50°       | 55°    | 60°  | 40°  | 45°  | 50°       | 55°    | 60°  |
| 500   | Normal | 733                         | 815  | 896       | 976    | 1056 | 2501 | 2781 | 3057      | 3331   | 3603 |
| 500   | Boost  | 923                         | 1044 | 1166      | 1289   | 1412 | 3150 | 3564 | 3980      | 4397   | 4817 |
| 600   | Normal | 890                         | 1048 | 1213      | 1384   | 1562 | 3036 | 3575 | 4138      | 4723   | 5329 |
| 000   | Boost  | 1279                        | 1451 | 1625      | 1800   | 1977 | 4363 | 4952 | 5545      | 6143   | 6744 |
| 800   | Normal | 1396                        | 1552 | 1707      | 1860   | 2012 | 4763 | 5296 | 5824      | 6346   | 6864 |
| 800   | Boost  | 1738                        | 1964 | 2192      | 2420   | 2649 | 5930 | 6702 | 7478      | 8257   | 9039 |
|       | Normal | 622                         | 711  | 802       | 894    | 987  | 2122 | 2427 | 2736      | 3049   | 3366 |
| Floor | Boost  | 1035                        | 1178 | 1322      | 1468   | 1615 | 3531 | 4018 | 4510      | 5008   | 5510 |

Heat outputs tested in accordance with BS 4856 Part 1.

#### Low Voltage Hydronic Heating Performance Data

| Model     | Fan<br>Speed | Temperature Difference (°C) |      |      |      |      |                     |      |      |      |      |
|-----------|--------------|-----------------------------|------|------|------|------|---------------------|------|------|------|------|
|           |              | Heat Output (watts)         |      |      |      |      | Heat Output (Btu/h) |      |      |      |      |
|           |              | 40°                         | 45°  | 50°  | 55°  | 60°  | 40°                 | 45°  | 50°  | 55°  | 60°  |
| 400 121/  | Normal       | 890                         | 1048 | 1213 | 1384 | 1562 | 3036                | 3575 | 4138 | 4723 | 5329 |
| 600 - 12V | Boost        | 1279                        | 1451 | 1625 | 1800 | 1977 | 4363                | 4952 | 5545 | 6143 | 6744 |

Heat outputs tested in accordance with BS 4856 Part 1.

#### Duo (Hydronic/Electric) Heating Performance Data - Electric Mode

The unit will operate on either fan speed to provide 1kW of heating.

#### Duo (Hydronic/Electric) Heating Performance Data - Hydronic Mode

|         |        | Fan                 | Temperature Difference (°C) |      |      |      |                     |      |      |      |      |  |
|---------|--------|---------------------|-----------------------------|------|------|------|---------------------|------|------|------|------|--|
| Model   | Speed  | Heat Output (watts) |                             |      |      |      | Heat Output (Btu/h) |      |      |      |      |  |
|         |        | 40°                 | 45°                         | 50°  | 55°  | 60°  | 40°                 | 45°  | 50°  | 55°  | 60°  |  |
| 500 Duo | Normal | 636                 | 734                         | 835  | 938  | 1043 | 2169                | 2505 | 2849 | 3201 | 3560 |  |
|         | Boost  | 835                 | 958                         | 1083 | 1210 | 1340 | 2849                | 3268 | 3696 | 4130 | 4571 |  |

Heat outputs tested in accordance with BS 4856 Part 1. Flow Rate: 340 ltr/h (75 gal/h).

#### Flow Rate Correction Factors:

455 ltr/h (100 gal/h) multiply output by 1.03. 227 ltr/h (50 gal/h) multiply output by 0.96. 113 ltr/h (25 gal/h) multiply output by 0.85.

### Approximate Hydraulic Resistance

| h/h   |     | mm wg |     |       |         |         |     | kPa  |     |       |         |         |  |
|-------|-----|-------|-----|-------|---------|---------|-----|------|-----|-------|---------|---------|--|
| ltr/h | 500 | 600   | 800 | Floor | 600-12V | 500 Duo | 500 | 600  | 800 | Floor | 600-12V | 500 Duo |  |
| 455   | 788 | 1046  | 911 | 448   | 1046    | 652     | 7.7 | 10.3 | 8.9 | 4.4   | 10.3    | 6.4     |  |
| 340   | 488 | 625   | 544 | 258   | 625     | 380     | 4.8 | 6.1  | 5.3 | 2.5   | 6.1     | 3.7     |  |
| 227   | 231 | 326   | 258 | 136   | 326     | 204     | 2.3 | 3.2  | 2.5 | 1.3   | 3.2     | 2.0     |  |
| 113   | 82  | 95    | 82  | 54    | 95      | 68      | 0.8 | 0.9  | 0.8 | 0.5   | 0.9     | 0.7     |  |

#### KICKSPACE<sup>®</sup> Performance Data (continued)

#### Air Flow

| Model   | Air Flov | v (m³/h) | Air Flow (ft³/h) |       |  |
|---------|----------|----------|------------------|-------|--|
| Widder  | Normal   | Boost    | Normal           | Boost |  |
| 500     | 70       | 90       | 2471             | 3177  |  |
| 600     | 106      | 138      | 3742             | 4872  |  |
| 800     | 139      | 210      | 4908             | 7415  |  |
| Floor   | 76       | 169      | 2684             | 5968  |  |
| 600-12V | 106      | 138      | 3742             | 4872  |  |
| 500 Duo | 70       | 90       | 2471             | 3117  |  |

#### **Noise Levels**

| Model   | Sound Pressures at 2.5m (dBA) |       |  |  |  |  |
|---------|-------------------------------|-------|--|--|--|--|
| Widdei  | Normal                        | Boost |  |  |  |  |
| 500     | 25.7                          | 38.1  |  |  |  |  |
| 600     | 26.4                          | 37.2  |  |  |  |  |
| 800     | 28.5                          | 49.8  |  |  |  |  |
| Floor   | 27.4                          | 56.1  |  |  |  |  |
| 600-12V | 29.4                          | 39.0  |  |  |  |  |
| 500 Duo | 25.7                          | 38.1  |  |  |  |  |

# Weight, Water Content and Motor Power

| Model   | Motor<br>Power (W) | Water<br>Content (I) | Unit Weight<br>(kg) |
|---------|--------------------|----------------------|---------------------|
| 500     | 25                 | 0.26                 | 4.3                 |
| 600     | 40                 | 0.30                 | 5.0                 |
| 800     | 40                 | 0.34                 | 5.5                 |
| Floor   | 28                 | 0.15                 | 5.5                 |
| 600-12V | 40                 | 0.30                 | 7.9*                |
| 500 Duo | 25                 | 0.26                 | 4.5                 |

\* Includes transformer

Noise levels tested in accordance with EN 23741.

# **Electric Models**

#### **Electric Heating Performance Data**

| Model | Heat Output (watts) |        |      |  |
|-------|---------------------|--------|------|--|
|       | Low                 | Medium | High |  |
| 500E  | 1000                | N/A    | 2000 |  |
| 600E  | 1000                | 2000   | 3000 |  |

#### Air Flow

| Model | Air Flow (m³/h) |      | Air Flow (ft³/h) |      |
|-------|-----------------|------|------------------|------|
|       | Low             | High | Low              | High |
| 500E  | 70              | 90   | 2471             | 3177 |
| 600E  | 210             | N/A  | 7560             | N/A  |

#### KICKSPACE<sup>®</sup> Remote Wall Switch (optional)

Available Finishes: White, Chrome, Brass, Brushed Stainless.

All remote wall switches are supplied with 3 metres of cable. All models are equipped to facilitate direct wiring.

Suitable for uses with standard single gang surface or recessed mounting box (not supplied). The switch must only be used to operate a single KICKSPACE<sup>®</sup> unit.

# For use on Hydronic and Hydronic-Electric (Duo) models only. Not suitable for Electric only models.

 $\rm N.B:$  When a remote wall switch is fitted, the fan speed control switch on the KICKSPACE  $^{\otimes}$  facia grille becomes inoperable and must be disconnected.

#### Weight

| Model | Unit Weight<br>(kg) |
|-------|---------------------|
| 500E  | 3.0                 |
| 600E  | 3.5                 |

#### **Noise Levels**

| Model | Sound Pressures at 2.5m (dBA) |      |  |
|-------|-------------------------------|------|--|
| woder | Low                           | High |  |
| 500E  | 27.2                          | 40.2 |  |
| 600E  | 38.0                          | N/A  |  |

Noise levels tested in accordance with EN 23741.

#### KICKSPACE<sup>®</sup> Remote Thermostat

The remote room thermostat is supplied white as standard and is suitable for 500, 600 & 800  ${\rm Hydronic}$  models.

#### KICKSPACE<sup>®</sup> Grille Colour Options

KICKSPACE<sup>®</sup> models 500, 600, 800, 600-12V, 500 Duo and 500E are supplied with a White (RAL 9003) grille. All these models are also available in Brown (RAL 8017), Black (RAL 9011), Chrome, Brushed Stainless Steel and Aluminium. The 600E facia grille is an integral part of the product and can not be removed and is supplied with either a White or Brown grille. The floor unit model is only available with a Beige grille.

#### KICKSPACE<sup>®</sup> Electrical Data

All KICKSPACE<sup>®</sup> models require an electrical supply of 220-240V-50Hz. All models can be used in conjunction with a room thermostat, however it is essential that the thermostat used is capable of carrying the electrical load.

#### Hydronic (KICKSPACE® 500, 600 & 800)

Supplied with 2 metres of cable (0.75mm<sup>2</sup>). Requires a supply fused at 3A.

#### Low Voltage Hydronic (KICKSPACE® 600-12V)

Supplied with 2 metres of cable (0.75mm<sup>2</sup>). Requires a supply fused at 3A. **N.B:** Low voltage models comply with BS 7671 section 601 (IEE Safety Extra Low Voltage wiring regulations for bathrooms). The transformer complies with BS 3535. Where a remote switch or thermostat is used, the line voltage to both is 12 volts maximum.

#### Hydronic Electric (KICKSPACE® 500 Duo)

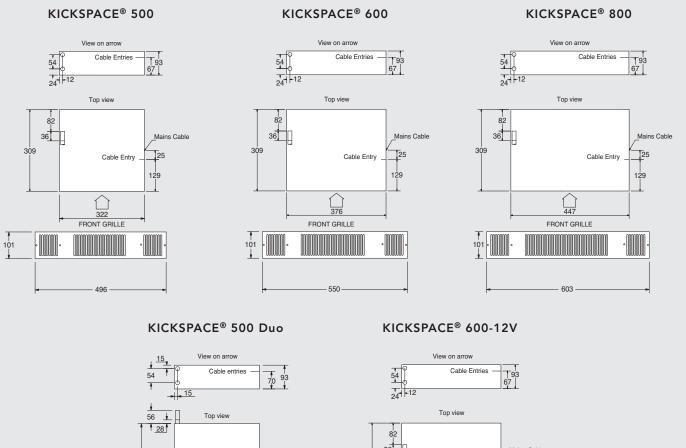
Supplied with 2 metres of cable (0.75mm<sup>2</sup>). Requires a supply fused at 5A.

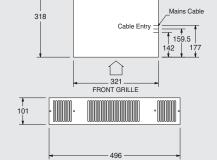
#### Electric (KICKSPACE® 500E & 600E)

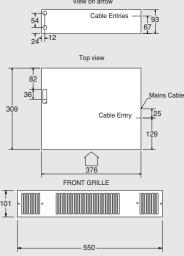
500E supplied with 2 metres of cable (1.0mm<sup>2</sup>). Requires a supply fused at 10A.

600E supplied with 2½ metres of cable (1.0mm<sup>2</sup>). Requires a supply fused at 13A.

#### **KICKSPACE®** Dimensions







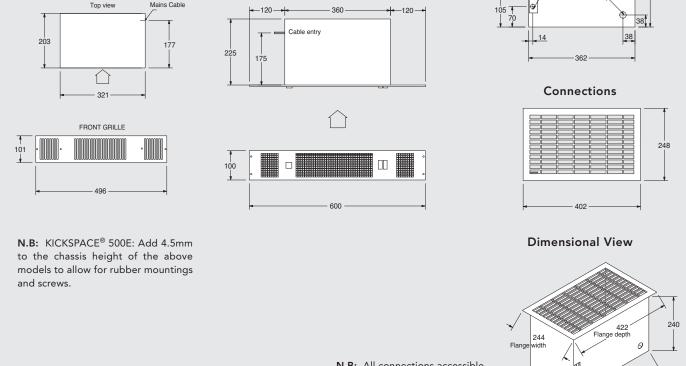
N.B: Add 4.5mm to the chassis height of the above models to allow for rubber mountings and screws.

**KICKSPACE®** Floor

Flow and Return connections

Cable entry

240



**KICKSPACE® 600E** 

View on arrow

360 -

-120-

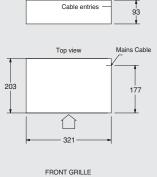
1 88

-120-

# KICKSPACE<sup>®</sup> Dimensions (continued)

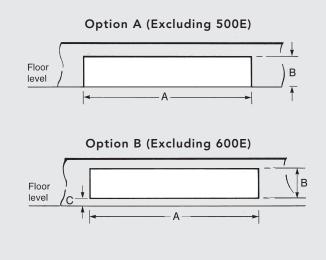
# **KICKSPACE® 500E**

View on arrow



N.B: All connections accessible from the top of unit.

#### **KICKSPACE® Kickboard Dimensions**



Dimensions of opening to be cut in Kickboard -KICKSPACE<sup>®</sup> 500, 600, 600-12V, 800, 500 Duo, 500E, 600E

210

| Model              | Dimensions (mm) |    |     |
|--------------------|-----------------|----|-----|
| woder              | А               | В  | С   |
| 500, 500 Duo, 500E | 466             | 99 | 17  |
| 600, 600-12V       | 520             | 99 | 17  |
| 800                | 573             | 99 | 17  |
| 600E               | 540             | 95 | N/A |