

CI/SfB

(53.5) Xh

April 2005

# **ANDREWS**

## **Gas Storage Water Heaters**

**Conventional Flue  
Fan Flued**

**Balanced Flue**

**Direct Storage Tanks**

**Mini Plate**

**NATURAL GAS**

# **Specification Sheet**

**THE ENERGY MANAGEMENT  
OF WATER HEATING**

**CE** **WRAS**  
0063 APPROVED PRODUCT

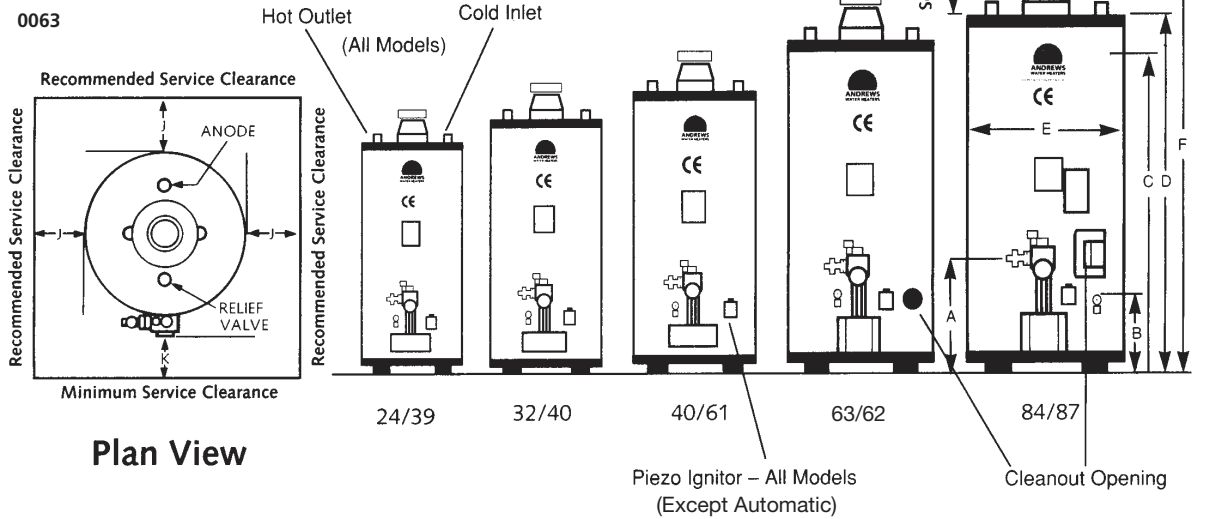
# Standard Range

Models 24/39, 32/40, 40/61, 63/62 and 84/87

NB. Service clearance G can be reduced to 300 mm if Correx Anodes are fitted.



0063



Plan View

| Andrews Model No.                  | 24/39     |           | 32/40     |           | 40/61     |           | 63/62     |           | 84/87     |           |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                                    | SI METRIC | IMPERIAL  | SI METRIC | IMPERIAL  | SI METRIC | IMPERIAL  | SI METRIC | IMPERIAL  | SI METRIC | IMPERIAL  |
| A Gas Connection                   | 350 mm    | 13 3/4 in | 350 mm    | 13 3/4 in | 350 mm    | 13 3/4 in | 409 mm    | 16 1/8 in | 401 mm    | 15 3/4 in |
| B Drain Cock                       | 227 mm    | 9 in      | 227 mm    | 9 in      | 227 mm    | 9 in      | 288 mm    | 11 3/8 in | 273 mm    | 10 3/4 in |
| C Relief Valve Port                | -         | -         | -         | -         | -         | -         | -         | -         | 1506 mm   | 59 1/2 in |
| D Height of Heater                 | 1149 mm   | 45 1/4 in | 1200 mm   | 47 1/4 in | 1446 mm   | 56 1/8 in | 1526 mm   | 60 in     | 1654 mm   | 65 in     |
| E Diameter                         | 457 mm    | 18 in     | 508 mm    | 20 in     | 508 mm    | 20 in     | 622 mm    | 24 1/2 in | 718 mm    | 28 1/4 in |
| F Height to Flue                   | 1276 mm   | 50 1/4 in | 1327 mm   | 52 1/4 in | 1589 mm   | 62 1/2 in | 1669 mm   | 65 3/4 in | 1788 mm   | 70 3/4 in |
| G Service Clearance (Top)          | 762 mm    | 30 in     | 762 mm    | 30 in     | 762 mm    | 30 in     | 1143 mm   | 45 in     | 1270 mm   | 50 in     |
| H Nominal Flue Diameter            | 100 mm    | 4 in      | 100 mm    | 4 in      | 100 mm    | 4 in      | 125 mm    | 5 in      | 125 mm    | 5 in      |
| I Connection Centres               | 203 mm    | 8 in      | 203 mm    | 8 in      | 203 mm    | 8 in      | 279 mm    | 11 in     | 406 mm    | 16 in     |
| J Service Clearance (Sides & Rear) | 305 mm    | 12 in     | 305 mm    | 12 in     | 305 mm    | 12 in     | 305 mm    | 12 in     | 305 mm    | 12 in     |
| K Service Clearance (Front)        | 610 mm    | 24 in     | 610 mm    | 24 in     | 610 mm    | 24 in     | 610 mm    | 24 in     | 610 mm    | 24 in     |

|                                       |                |                 |           |                 |           |                 |           |                 |           |                   |
|---------------------------------------|----------------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-----------------|-----------|-------------------|
| Storage Capacity                      | 109 lts        | 24 galls        | 145 lts   | 32 galls        | 182 lts   | 40 galls        | 286 lts   | 63 galls        | 382 lts   | 84 galls          |
| Recovery thru 44°C/80°F               | 178 l/hr       | 39 gph          | 182 l/hr* | 40 gph          | 278 l/hr  | 61 gph          | 281 l/hr  | 62 gph          | 397 l/hr  | 87 gph            |
| 56°C/100°F                            | 142 l/hr*      | 31 gph          | 146 l/hr  | 32 gph          | 220 l/hr  | 49 gph          | 227 l/hr  | 50 gph          | 316 l/hr  | 70 gph            |
| Heat Input                            | 12.0 kW        | 40,944 Btu/hr   | 12.5 kW   | 42,650 Btu/hr   | 19.0 kW   | 65,000 Btu/hr   | 19.0 kW   | 65,000 Btu/hr   | 26.0 kW   | 88,712 Btu/hr     |
| Gas Family                            | NATURAL        | CAT I: H        | NATURAL   | CAT I: H        | NATURAL   | CAT I: H        | NATURAL   | CAT I: H        | NATURAL   | CAT I: H          |
| Burner Gas Pressure                   | 10.0 mbar      | 4.0 ins wg.     | 10.0 mbar | 4.0 ins wg.     | 10.0 mbar | 4.0 ins wg.     | 10.0 mbar | 4.0 ins wg.     | 10.0 mbar | 4.0 ins wg.       |
| Max Gas Input Pressure                | 35.0 mbar      | 14.0 ins wg.    | 35.0 mbar | 14.0 ins wg.    | 35.0 mbar | 14.0 ins wg.    | 35.0 mbar | 14.0 ins wg.    | 35.0 mbar | 14.0 ins wg.      |
| Gas Flow Rate                         | 1.12 m³/h      | 39.54 ft³/h     | 1.16 m³/h | 41.22 ft³/h     | 1.78 m³/h | 62.86 ft³/h     | 1.78 m³/h | 62.86 ft³/h     | 2.43 m³/h | 85.71 ft³/h       |
| Gas Connection                        | Rc 1/2         | 1/2 in BSP/Int  | Rc 1/2    | 1/2 in BSP/Int  | Rc 1/2    | 1/2 in BSP/Int  | Rc 1/2    | 1/2 in BSP/Int  | Rc 1/2    | 1/2 in BSP/Int    |
| Flue Gas Temp.                        | 200°C          |                 | 205°C     |                 | 195°C     |                 | 160°C     |                 | 125°C     |                   |
| Flue Gas Volume                       | 17 m³/h        |                 | 18 m³/h   |                 | 26 m³/h   |                 | 31 m³/h   |                 | 37 m³/h   |                   |
| Gas Injector Orifice Diameter         | 2.95 mm        | 0.116 in        | 3.05 mm   | 0.120 in        | 3.86 mm   | 0.152 in        | 3.86 mm   | 0.152 in        | 4.22 mm   | 0.166 in          |
| Flue Size (Secondary)                 | 100 mm         | 4 in            | 100 mm    | 4 in            | 100 mm    | 4 in            | 125 mm    | 5 in            | 125 mm    | 5 in              |
| Cold Water Feed Connection            | R1             | 1 in BSPT/ExL   | R1        | 1 in BSPT/ExL   | R1        | 1 in BSPT/ExL   | R1        | 1 in BSPT/ExL   | R1 1/4    | 1 1/4 in BSPT/ExL |
| Hot Water Flow Connection             | R1             | 1 in BSPT/ExL   | R1        | 1 in BSPT/ExL   | R1        | 1 in BSPT/ExL   | R1        | 1 in BSPT/ExL   | R1 1/4    | 1 1/4 in BSPT/ExL |
| Return Connection                     | Rp 3/8         | 3/8 in BSP      | Rp 3/8    | 3/8 in BSP      | Rp 3/8    | 3/8 in BSP      | Rp 3/8    | 3/8 in BSP      | Rp 3/8    | 3/8 in BSP        |
| Drain Port Size                       | R 3/4          | 3/4 in BSPT/Ext | R 3/4     | 3/4 in BSPT/Ext | R 3/4     | 3/4 in BSPT/Ext | R 3/4     | 3/4 in BSPT/Ext | R 3/4     | 3/4 in BSPT/Ext   |
| Maximum Working Pressure              | 10.3 bar       | 150 p.s.i.      | 10.3 bar  | 150 p.s.i.      | 10.3 bar  | 150 p.s.i.      | 10.3 bar  | 150 p.s.i.      | 10.3 bar  | 150 p.s.i.        |
| Maximum Test Pressure                 | 20.6 bar       | 300 p.s.i.      | 20.6 bar  | 300 p.s.i.      | 20.6 bar  | 300 p.s.i.      | 20.6 bar  | 300 p.s.i.      | 20.6 bar  | 300 p.s.i.        |
| Weight Empty                          | 43 kg          | 94 lbs          | 57 kg     | 126 lbs         | 65 kg     | 144 lbs         | 110 kg    | 244 lbs         | 181 kg    | 400 lbs           |
| Weight Full                           | 151 kg         | 334 lbs         | 202 kg    | 446 lbs         | 247 kg    | 544 lbs         | 396 kg    | 874 lbs         | 562 kg    | 1240 lbs          |
| Shipping Weight                       | 44 kg          | 98 lbs          | 59 kg     | 131 lbs         | 68 kg     | 150 lbs         | 120 kg    | 264 lbs         | 194 kg    | 428 lbs           |
| Shipping Depth                        | 546 mm         | 21 1/2 in       | 587 mm    | 23 1/2 in       | 587 mm    | 23 1/2 in       | 692 mm    | 27 1/4 in       | 914 mm    | 36 in             |
| Dimensions Width                      | 486 mm         | 19 1/4 in       | 537 mm    | 21 1/4 in       | 537 mm    | 21 1/4 in       | 651 mm    | 25 3/4 in       | 762 mm    | 30 in             |
| Height                                | 1194 mm        | 47 in           | 1245 mm   | 49 in           | 1499 mm   | 59 in           | 1575 mm   | 62 in           | 1829 mm   | 72 in             |
| Mains Voltage (Automatic models only) | 220/240 - IP20 |                 |           |                 |           |                 |           |                 |           |                   |
| Frequency                             | 50 Hz          |                 |           |                 |           |                 |           |                 |           |                   |
| Power Consumption                     | 236W           |                 |           |                 |           |                 |           |                 |           |                   |
| Fuse                                  | 5 A            |                 |           |                 |           |                 |           |                 |           |                   |

# Hi-Flo Range

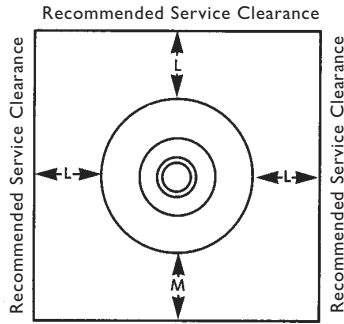
Permanent pilot with piezo ignition and auto-ignition models

Models **32/143**, **65/173**, **81/264**, **62/341** are available as permanent Pilot (**PP**) models with Piezo Ignitor, or as **Auto** Ignition models with option **(1)** Remote control, fault indication, and flue-fan facility, or option **(2)** as **(1)** with the addition of a flue damper. Model **54/418** is available as **PP** only. Model **54/440** is available as **Auto** only.

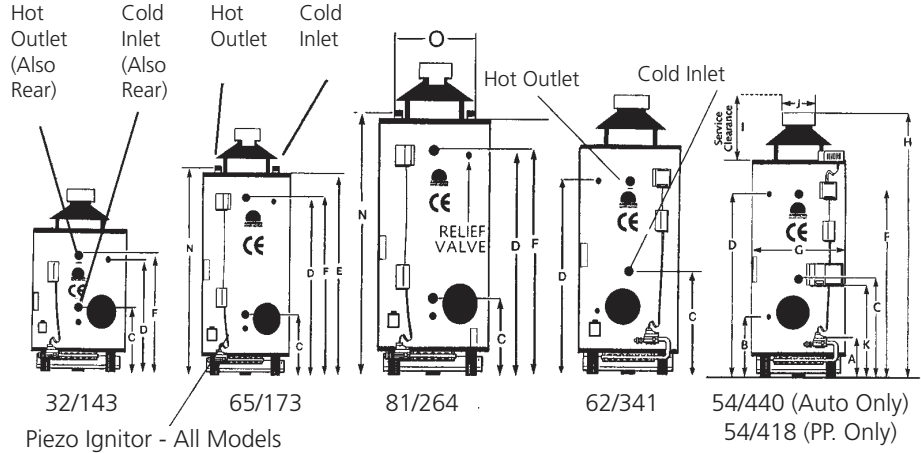
NB. Service clearance I can be reduced to 300 mm if Correx Anodes are fitted.



0063



Plan View



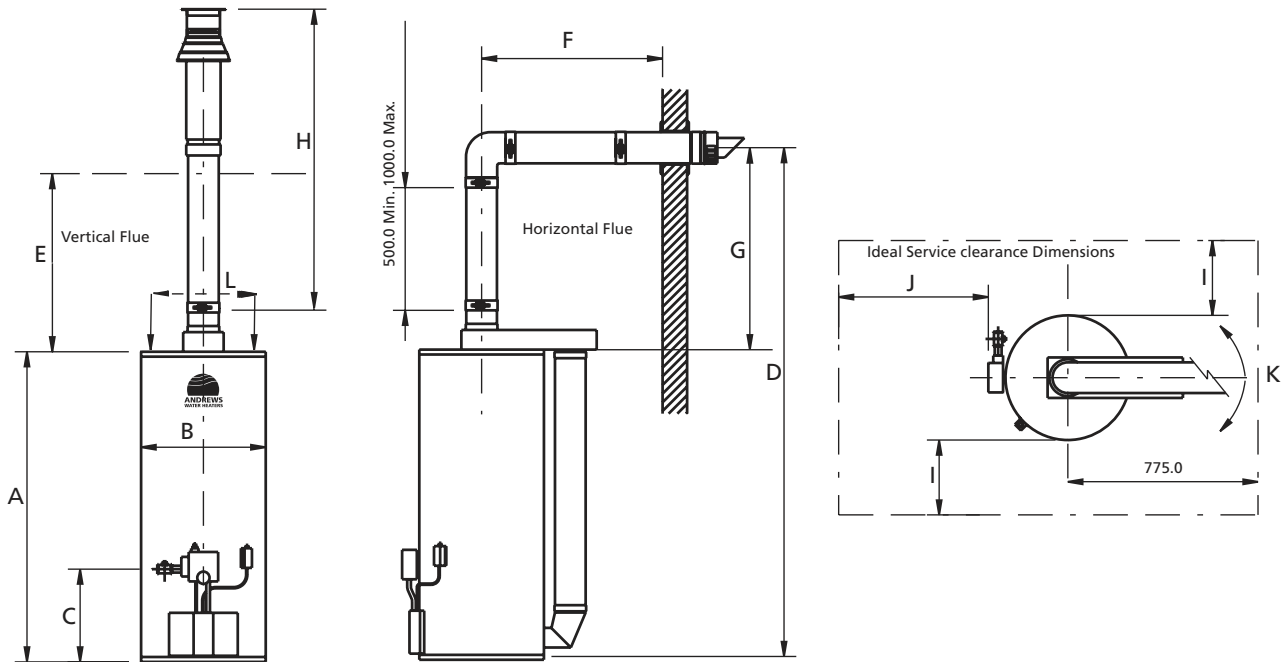
32/143 65/173 81/264 62/341 54/418 (Auto Only) 54/418 (PP. Only)  
Piezo Ignitor - All Models

| Andrews Model No.                     | 32/143                |                        | 65/173                 |                           | 81/264                 |                           | 62/341                 |                           | 54/418                  |                           | 54/440                  |                           |  |
|---------------------------------------|-----------------------|------------------------|------------------------|---------------------------|------------------------|---------------------------|------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|--|
|                                       | SI METRIC             | IMPERIAL               | SI METRIC              | IMPERIAL                  | SI METRIC              | IMPERIAL                  | SI METRIC              | IMPERIAL                  | SI METRIC               | IMPERIAL                  | SI METRIC               | IMPERIAL                  |  |
| A Gas Connection                      | 118 mm                | 4 3/4 in               | 118 mm                 | 4 3/4 in                  | 118 mm                 | 4 3/4 in                  | 264 mm                 | 10 3/8 in                 | 264 mm                  | 10 3/8 in                 | 264 mm                  | 10 3/8 in                 |  |
| B Drain Cock                          | 384 mm                | 15 1/2 in              | 384 mm                 | 15 1/2 in                 | 384 mm                 | 15 1/2 in                 | 406 mm                 | 16 in                     | 406 mm                  | 16 in                     | 406 mm                  | 16 in                     |  |
| C Cold Water                          | 492 mm                | 19 3/8 in              | 492 mm                 | 19 3/8 in                 | 492 mm                 | 19 3/8 in                 | 734 mm                 | 28 7/8 in                 | 744 mm                  | 29 1/4 in                 | 744 mm                  | 29 1/4 in                 |  |
| D Relief Valve Port                   | 864 mm                | 34 in                  | 1400 mm                | 55 1/2 in                 | 1680 mm                | 66 1/2 in                 | 1375 mm                | 54 1/2 in                 | 1379 mm                 | 54 1/4 in                 | 1379 mm                 | 54 1/4 in                 |  |
| E Ht. of Heater                       | 1096 mm               | 43 1/2 in              | 1632 mm                | 64 1/2 in                 | 1911 mm                | 75 1/4 in                 | 1676 mm                | 66 in                     | 1635 mm                 | 64 3/4 in                 | 1635 mm                 | 64 3/4 in                 |  |
| F Hot Water                           | 883 mm                | 34 3/4 in              | 1472 mm                | 58 in                     | 1702 mm                | 67 in                     | 1375 mm                | 54 1/2 in                 | 1379 mm                 | 54 1/4 in                 | 1379 mm                 | 54 1/4 in                 |  |
| G Diameter                            | 711 mm                | 28 in                  | 711 mm                 | 28 in                     | 711 mm                 | 28 in                     | 711 mm                 | 28 in                     | 711 mm                  | 28 in                     | 711 mm                  | 28 in                     |  |
| H Ht. of Flue                         | 1343 mm               | 53 in                  | 1937 mm                | 76 3/4 in                 | 2208 mm                | 87 in                     | 1968 mm                | 77 1/2 in                 | 1934 mm                 | 76 1/4 in                 | 1934 mm                 | 76 1/4 in                 |  |
| I Service Clearance                   | 597 mm                | 23 5/8 in              | 1143 mm                | 45 in                     | 1270 mm                | 50 in                     | 1143 mm                | 45 in                     | 1143 mm                 | 45 in                     | 1143 mm                 | 45 in                     |  |
| J Nominal Flue Diameter               | 150 mm                | 6 in                   | 150 mm                 | 6 in                      | 200 mm                 | 8 in                      | 200 mm                 | 8 in                      | 250 mm                  | 10 in                     | 250 mm                  | 10 in                     |  |
| K Elect. Entry                        | -                     | 381 mm                 | 15 in                  | AUTO ONLY                 |                        |                           |                        | 584 mm                    | 23 in                   | AUTO ONLY                 |                         |                           |  |
| L Service Clearance                   | 305 mm                | 12 ins                 | 305 mm                 | 12 ins                    | 305 mm                 | 12 ins                    | 305 mm                 | 12 ins                    | 305 mm                  | 12 ins                    | 305 mm                  | 12 ins                    |  |
| M Service Clearance                   | 800 mm                | 31 1/2 in              | 800 mm                 | 31 1/2 in                 | 800 mm                 | 31 1/2 in                 | 800 mm                 | 31 1/2 in                 | 800 mm                  | 31 1/2 in                 | 800 mm                  | 31 1/2 in                 |  |
| N Top Feed                            | -                     | -                      | 1715 mm                | 67 1/2 in                 | 1962 mm                | 77 3/4 in                 | -                      | -                         | -                       | -                         | -                       | -                         |  |
| O Top Feed Centers                    | -                     | -                      | 470 mm                 | 18 1/2 in                 | 470 mm                 | 18 1/2 in                 | -                      | -                         | -                       | -                         | -                       | -                         |  |
| Storage Capacity                      | 145 lts               | 32 galls               | 295 lts                | 65 galls                  | 368 lts                | 81 galls                  | 282 lts*               | 62 galls                  | 245 lts                 | 54 galls                  | 245 lts                 | 54 galls                  |  |
| Recovery thru 44°C/80°F               | 649 l/hr              | 143 g/hr               | 786 l/hr               | 173 g/hr                  | 1199 l/hr              | 264 g/hr                  | 1549 l/hr              | 341 g/hr                  | 1900 l/hr               | 418 g/hr                  | 1998 l/hr               | 440 g/hr                  |  |
| 56°C/100°F                            | 517 l/hr              | 114 g/hr               | 629 l/hr               | 138 g/hr                  | 959 l/hr               | 212 g/hr                  | 1239 l/hr*             | 273 g/hr                  | 1520 l/hr               | 334 g/hr                  | 1598 l/hr               | 352 g/hr                  |  |
| 72°C/130°F                            | 399 l/hr              | 88 g/hr                | 484 l/hr               | 106 g/hr                  | 730 l/hr               | 162 g/hr                  | 953 l/hr*              | 210 g/hr                  | 1169 l/hr               | 257 g/hr                  | 1223 l/hr               | 270 g/hr                  |  |
| Heat Input                            | 42.8 kW               | 146,034 Btu/hr         | 50.0 kW                | 170,600 Btu/hr            | 80 kW                  | 272,960 Btu/hr            | 102.0 kW               | 348,024 Btu/hr            | 128.0 kW                | 436,736 Btu/hr            | 139.0 kW                | 474,268 Btu/hr            |  |
| Gas Family                            | NATURAL CAT I:H       |                        | NATURAL CAT I:H        |                           | NATURAL CAT I:H        |                           | NATURAL CAT I:H        |                           | NATURAL CAT I:H         |                           | NATURAL CAT I:H         |                           |  |
| Burner Gas Pressure                   | 6.8 mbar              | 2.73 in wg.            | 6.8 mbar               | 2.73 in wg.               | 6.8 mbar               | 2.73 in wg.               | 6.8 mbar               | 2.73 in wg.               | 6.8 mbar                | 2.73 in wg.               | 6.8 mbar                | 2.73 in wg.               |  |
| Max Gas Input Pressure                | 35 mbar               | 14.0 in wg.            | 35 mbar                | 14.0 in wg.               | 35 mbar                | 14.0 in wg.               | 35 mbar                | 14.0 in wg.               | 35 mbar                 | 14.0 in wg.               | 35 mbar                 | 14.0 in wg.               |  |
| Gas Flow Rate                         | 4.0 m <sup>3</sup> /h | 141 ft <sup>3</sup> /h | 4.68 m <sup>3</sup> /h | 164.76 ft <sup>3</sup> /h | 7.44 m <sup>3</sup> /h | 263.58 ft <sup>3</sup> /h | 9.48 m <sup>3</sup> /h | 336.24 ft <sup>3</sup> /h | 11.94 m <sup>3</sup> /h | 421.98 ft <sup>3</sup> /h | 13.14 m <sup>3</sup> /h | 465.06 ft <sup>3</sup> /h |  |
| Gas Connection                        | Rp 3/4                | 3/4 in BSP/Int*        | Rp 3/4                 | 3/4 in BSP/Int*           | Rp 3/4                 | 3/4 in BSP/Int*           | Rp 3/4                 | 3/4 in BSP/Int*           | Rp 3/4                  | 3/4 in BSP/Int*           | Rp 3/4                  | 3/4 in BSP/Int*           |  |
| Flue Gas Temp.                        | 117°C                 |                        | 140°C                  |                           | 150°C                  |                           | 195°C                  |                           | 185°C                   |                           | 215°C                   |                           |  |
| Flue Gas Volume                       | 62m <sup>3</sup> /h   |                        | 73m <sup>3</sup> /h    |                           | 116m <sup>3</sup> /h   |                           | 149m <sup>3</sup> /h   |                           | 186m <sup>3</sup> /h    |                           | 202m <sup>3</sup> /h    |                           |  |
| Gas Injector Orifice Diameter         | 2.69 mm               | 0.106 in               | 2.87 mm                | 0.113 in                  | 3.66 mm                | 0.144 in                  | 3.45 mm                | 0.136 in                  | 3.50 mm                 | 0.138 in                  | 3.66 mm                 | 0.144 in                  |  |
| Flue Size (Secondary)                 | 150 mm                | 6 in                   | 150 mm                 | 6 in                      | 200 mm                 | 8 in                      | 200 mm                 | 8 in                      | 250 mm                  | 10 in                     | 250 mm                  | 10 in                     |  |
| Cold Water Feed Connection            | R 1 1/2               | 1 1/2 in BSPT/Ext      | R 1 1/2                | 1 1/2 in BSPT/Ext         | R 1 1/2                | 1 1/2 in BSPT/Ext         | R 1 1/2                | 1 1/2 in BSPT/Ext         | R 1 1/2                 | 1 1/2 in BSPT/Ext         | R 1 1/2                 | 1 1/2 in BSPT/Ext         |  |
| Hot Water Flow Connection             | R 1 1/2               | 1 1/2 in BSPT/Ext      | R 1 1/2                | 1 1/2 in BSPT/Ext         | R 1 1/2                | 1 1/2 in BSPT/Ext         | R 1 1/2                | 1 1/2 in BSPT/Ext         | R 1 1/2                 | 1 1/2 in BSPT/Ext         | R 1 1/2                 | 1 1/2 in BSPT/Ext         |  |
| Return Connection                     | Rp 3/4                | 3/4 in BSP             | Rp 3/4                 | 3/4 in BSP                | Rp 3/4                 | 3/4 in BSP                | Rp 3/4                 | 3/4 in BSP                | Rp 3/4                  | 3/4 in BSP                | Rp 3/4                  | 3/4 in BSP                |  |
| Drain Port Size                       | R 3/4                 | 3/4 in BSPT/Ext        | R 3/4                  | 3/4 in BSPT/Ext           | R 3/4                  | 3/4 in BSPT/Ext           | R 3/4                  | 3/4 in BSPT/Ext           | R 3/4                   | 3/4 in BSPT/Ext           | R 3/4                   | 3/4 in BSPT/Ext           |  |
| Max. Working Pressure                 | 10.3 bar              | 150 p.s.i.             | 10.3 bar               | 150 p.s.i.                | 10.3 bar               | 150 p.s.i.                | 10.3 bar               | 150 p.s.i.                | 10.3 bar                | 150 p.s.i.                | 10.3 bar                | 150 p.s.i.                |  |
| Max. Test Pressure                    | 20.6 bar              | 300 p.s.i.             | 20.6 bar               | 300 p.s.i.                | 20.6 bar               | 300 p.s.i.                | 20.6 bar               | 300 p.s.i.                | 20.6 bar                | 300 p.s.i.                | 20.6 bar                | 300 p.s.i.                |  |
| Weight Empty                          | 190 kg                | 419 lbs                | 200 kg                 | 441 lbs                   | 289 kg                 | 637 lbs                   | 257 kg                 | 566 lbs                   | 269 kg                  | 594 lbs                   | 269 kg                  | 594 lbs                   |  |
| Weight Full                           | 335 kg                | 738 lbs                | 495 kg                 | 1091 lbs                  | 656 kg                 | 1447 lbs                  | 538 kg                 | 1186 lbs                  | 514 kg                  | 1134 lbs                  | 514 kg                  | 1134 lbs                  |  |
| Shipping Weight                       | 199 kg                | 438 lbs                | 223 kg                 | 492 lbs                   | 316 kg                 | 697 lbs                   | 282 kg                 | 623 lbs                   | 293 kg                  | 645 lbs                   | 293 kg                  | 645 lbs                   |  |
| Shipping Depth                        | 902 mm                | 35 1/2 in              | 914 mm                 | 36 in                     | 914 mm                 | 36 in                     | 914 mm                 | 36 in                     | 914 mm                  | 36 in                     | 914 mm                  | 36 in                     |  |
| Dimensions Width                      | 768 mm                | 30 1/4 in              | 762 mm                 | 30 in                     | 762 mm                 | 30 in                     | 762 mm                 | 30 in                     | 762 mm                  | 30 in                     | 762 mm                  | 30 in                     |  |
| Height                                | 1270 mm               | 50 in                  | 1960 mm                | 77 in                     | 2083 mm                | 82 in                     | 1960 mm                | 77 in                     | 1960 mm                 | 77 in                     | 1960 mm                 | 77 in                     |  |
| Mains Voltage (Automatic models only) | 220/240 - IP20        |                        |                        |                           |                        |                           |                        |                           |                         |                           |                         |                           |  |
| Frequency                             | 50 Hz                 |                        |                        |                           |                        |                           |                        |                           |                         |                           |                         |                           |  |
| Power Consumption                     | 236W                  |                        |                        |                           |                        |                           |                        |                           |                         |                           |                         |                           |  |
| Fuse                                  | 5 A                   |                        |                        |                           |                        |                           |                        |                           |                         |                           |                         |                           |  |

# Room Sealed

## RSC150 & RSC190

\* NB. Service clearance E can be reduced to 300 mm if Correx Anodes are fitted.



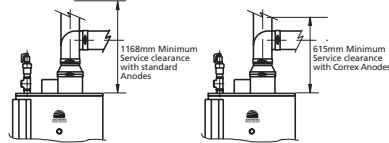
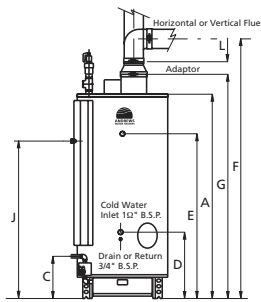
See installation manual for additional flue information.

| Andrews Model No.             | RSC 150   |                                   | RSC 190                  |                                   |
|-------------------------------|---|-----------------------------------|--------------------------|-----------------------------------|
|                               | SI METRIC   | IMPERIAL                          | SI METRIC                | IMPERIAL                          |
| A Height of Heater            | 1264 mm   | 49 <sup>3</sup> / <sub>4</sub> in | 1492 mm                  | 58 <sup>3</sup> / <sub>4</sub> in |
| B Diameter                    | 508 mm  | 20 in                             | 508 mm                   | 20 in                             |
| C Gas Connection              | 378 mm  | 14 <sup>7</sup> / <sub>8</sub> in | 378 mm                   | 14 <sup>7</sup> / <sub>8</sub> in |
| D Height to Centre of Flue    | 2170 mm   | 85 in                             | 2398 mm                  | 94 in                             |
| E Service Clearance*          | 1226 mm   | 48 in                             | 1226 mm                  | 48 in                             |
| F Horizontal Flue Length      | 775 mm Min. 1775 mm Max.  |                                   |                          |                                   |
| G Min. from Centre of Flue    | 900 mm  | 35 in                             | 900 mm                   | 35 in                             |
| H Vertical Flue Height        | 750 mm Min. 3000 mm Max.  |                                   |                          |                                   |
| I Service Clearance           | 305 mm  | 12 in                             | 305 mm                   | 12 in                             |
| J Service Clearance (Front)   | 610 mm  | 24 in                             | 610 mm                   | 24 in                             |
| K                             | We recommend that the flue outlet can be installed in any configuration through 360° as long as proper service clearances are observed. |                                   |                          |                                   |
| L Water Connection Centres    | 200 mm  | 7 <sup>7</sup> / <sub>8</sub> ins | 200 mm                   | 7 <sup>7</sup> / <sub>8</sub> ins |
| Storage Capacity              | 150 litres  | 33 gallons                        | 190 litres               | 42 gallons                        |
| Recovery through 44°C/80°F    | 159 l/hr  | 35 gph                            | 181 l/hr                 | 40 gph                            |
| Recovery through 56°C/100°F   | 127 l/hr  | 28 gph                            | 145 l/hr                 | 32 gph                            |
| Heat Input                    | 9.5 kW  | 32,414 Btu/hr                     | 10.5 kW                  | 35,826 Btu/hr                     |
| Heat Output                   | 8.2 kW  | 27,978 Btu/hr                     | 9.4 kW                   | 32,073 Btu/hr                     |
| Gas Family                    | I <sub>2</sub> H Natural  |                                   | I <sub>2</sub> H Natural |                                   |
| Burner Pressure               | 10.0 mbar   | 4.0 wg.                           | 10.0 mbar                | 4.0 wg.                           |
| Max. Gas Input Pressure       | 35.0 mbar   | 14.0 ins wg                       | 35.0 mbar                | 14.0 ins wg.                      |
| Gas Flow Rate                 | 0.88 m <sup>3</sup> /hr   | 31.32 ft <sup>3</sup> /hr         | 0.98 m <sup>3</sup> /hr  | 34.62 ft <sup>3</sup> /hr         |
| Gas Connection                | Rp 1/2  | 1/2 BSP                           | Rp 1/2                   | 1/2 BSP                           |
| Flue Gas Temperature (approx) | 180°C   |                                   | 180°                     |                                   |
| Flue Gas Volume               | 16 m <sup>3</sup> /h  |                                   | 16 m <sup>3</sup> /h     |                                   |
| Injector Diameter             | 2.87 mm   | 0.113 ins                         | 3.05 mm                  | 0.120 ins                         |
| Flue Connection Diameter      | 80/125 mm   |                                   | 80/125 mm                |                                   |
| Inlet & Flow Connections      | Rp 3/4  | 3/4 BSP                           | Rp 3/4                   | 3/4 BSP                           |
| Return Connections            | Rp 3/4  | 3/4 BSP                           | Rp 3/4                   | 3/4 BSP                           |
| Drain Port Size               | R 3/4   | 3/4 in BSPT/Ext                   | R 3/4                    | 3/4 in BSPT/Ext                   |
| Maximum Working Pressure      | 10 bar  | 150 p.s.i.                        | 10 bar                   | 150 p.s.i.                        |
| Maximum Test Pressure         | 20.6 bar  | 300 p.s.i.                        | 20.6 bar                 | 300 p.s.i.                        |
| Weight Empty                  | 66 kg   | 145 lbs                           | 74 kg                    | 163 lbs                           |
| Weight Full                   | 216 kg  | 475 lbs                           | 264 kg                   | 583 lbs                           |
| Shipping Weight               | 73 kg   | 162 lbs                           | 82 kg                    | 181 lbs                           |
| Shipping Dimensions Carton    | 1499 x 635 x 711 mm   | 59 x 25 x 28 in                   | 1727 x 635 x 711 mm      | 68 x 25 x 28 in                   |
| Mains Voltage                 | 220/240 V- IP 20  |                                   |                          |                                   |
| Frequency                     | 50 Hz   |                                   |                          |                                   |
| Fuse                          | 5 Amp   |                                   |                          |                                   |

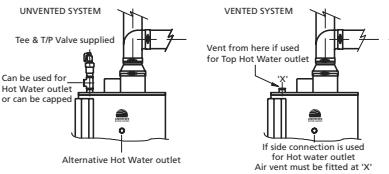
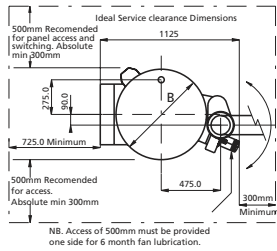
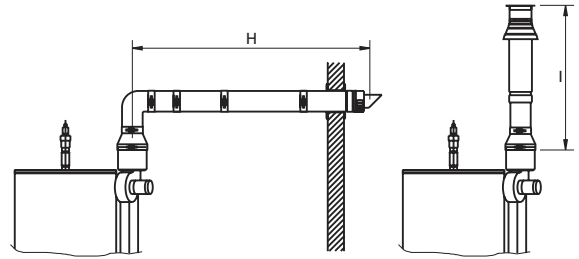
# Room Sealed CSC Heaters

\* NB. Ask for design guide for further flue information.

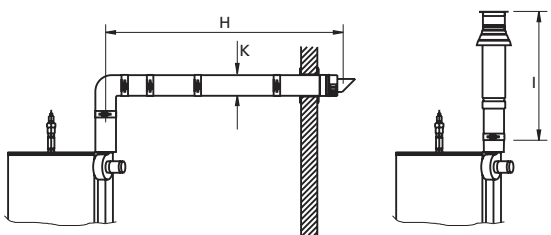
## Models CSC39, CSC59, CSC78 and CSC93



### CSC39 and CSC59 Alternative Flue Systems



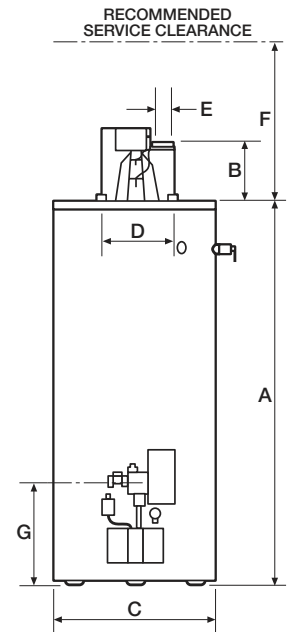
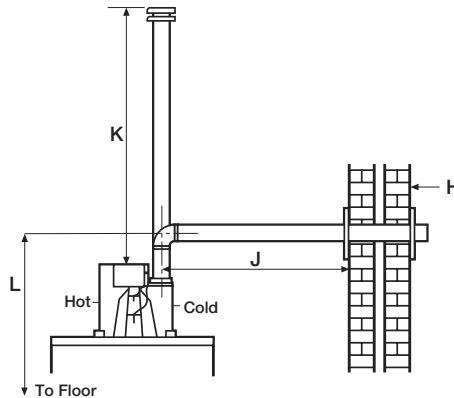
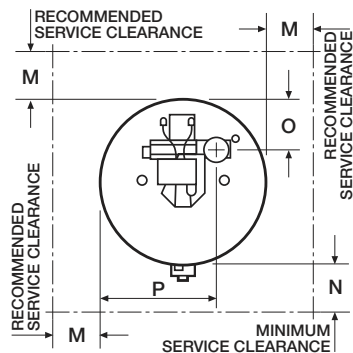
### CSC78 and CSC93 Alternative Flue Systems



| Andrews Model No.             | CSC 39                          |   | CSC 59                          |   | CSC 78                          |   | CSC 93                          |   |
|-------------------------------|---------------------------------|---|---------------------------------|---|---------------------------------|---|---------------------------------|---|
|                               | SI METRIC                       | IMPERIAL                                    | SI METRIC                       | IMPERIAL                                    | SI METRIC                       | IMPERIAL                                    | SI METRIC                       | IMPERIAL                                    |
| A. Height of Heater           | 1623 mm                         | 63 <sup>7</sup> / <sub>8</sub> in           | 1623 mm                         | 63 <sup>7</sup> / <sub>8</sub> in           | 1623 mm                         | 63 <sup>7</sup> / <sub>8</sub> in           | 1851 mm                         | 72 <sup>5</sup> / <sub>8</sub> in           |
| B. Diameter                   | 720 mm                          | 28 <sup>1</sup> / <sub>4</sub> in           | 720 mm                          | 28 <sup>1</sup> / <sub>4</sub> in           | 720 mm                          | 28 <sup>1</sup> / <sub>4</sub> in           | 720 mm                          | 28 <sup>1</sup> / <sub>4</sub> in           |
| C. Gas Connection             | 355 mm                          | 14 in                                       | 355 mm                          | 14 in                                       | 355 mm                          | 14 in                                       | 355 mm                          | 14 in                                       |
| D. Cold Inlet                 | 530 mm                          | 20 <sup>3</sup> / <sub>4</sub> in           | 530 mm                          | 20 <sup>3</sup> / <sub>4</sub> in           | 530 mm                          | 20 <sup>3</sup> / <sub>4</sub> in           | 530 mm                          | 20 <sup>3</sup> / <sub>4</sub> in           |
| E. Hot Outlet                 | 1307 mm                         | 51 <sup>3</sup> / <sub>8</sub> in           | 1307 mm                         | 51 <sup>3</sup> / <sub>8</sub> in           | 1535 mm                         | 60 <sup>3</sup> / <sub>8</sub> in           | 1535 mm                         | 60 <sup>3</sup> / <sub>8</sub> in           |
| F. Height to C/L of Flue      | 2060 mm                         | 81 in                                       | 2060 mm                         | 81 in                                       | 1980 mm                         | 78 in                                       | 2217 mm                         | 87 in                                       |
| G. Height to Flue Spigot      | 1780 mm                         | 70 in                                       | 1780 mm                         | 70 in                                       | 1780 mm                         | 70 in                                       | 2020 mm                         | 80 in                                       |
| H. Min. Flue Horizontal       | 840 mm                          | 33 in                                       | 840 mm                          | 33 in                                       | 770 mm                          | 38 in                                       | 970 mm                          | 38 in                                       |
| Max. Flue Horizontal          | 7000 mm                         | 276 in                                      | 7000 mm                         | 276 in                                      | 7000 mm                         | 276 in                                      | 7000 mm                         | 276 in                                      |
| I. Min. Flue Vertical         | 1310 mm                         | 51 <sup>1</sup> / <sub>2</sub> in           | 1310 mm                         | 51 <sup>1</sup> / <sub>2</sub> in           | 1610 mm                         | 63 <sup>3</sup> / <sub>8</sub> in           | 1610 mm                         | 63 <sup>3</sup> / <sub>8</sub> in           |
| Max. Flue Vertical            | 7000 mm                         | 276 in                                      | 7000 mm                         | 276 in                                      | 7000 mm                         | 276 in                                      | 7000 mm                         | 276 in                                      |
| J. Electrical Connection      | 1250 mm                         | 49 <sup>1</sup> / <sub>4</sub> in           | 1250 mm                         | 49 <sup>1</sup> / <sub>4</sub> in           | 1250 mm                         | 49 <sup>1</sup> / <sub>4</sub> in           | 1480 mm                         | 58 <sup>1</sup> / <sub>4</sub> in           |
| K. Flue Diameter              | 100/150 mm                      |   | 100/150 mm                      |   | 130/200 mm                      |   | 130/200 mm                      |   |
| L. Flue Adaptor               | 95 mm                           | 3 <sup>3</sup> / <sub>4</sub> in            | 95 mm                           | 3 <sup>3</sup> / <sub>4</sub> in            | Not supplied with these models  |   |                                 |   |
| Storage Capacity              | 276 l                           | 61 gals                                     | 276 l                           | 61 gals                                     | 276 l                           | 61 gals                                     | 350 l                           | 77 gals                                     |
| Rec. Thro 44°C/80°F           | 749 l/hr                        | 165 gph                                     | 1149 l/hr                       | 253 gph                                     | 1517 l/hr                       | 334 gph                                     | 1808 l/hr                       | 398 gph                                     |
| Rec. Thro 56°C/100°F          | 600 l/hr                        | 132 gph                                     | 922 l/hr                        | 203 gph                                     | 1213 l/hr                       | 267 gph                                     | 1445 l/hr                       | 318 gph                                     |
| Heat Input                    | 44 kW                           | 150,128 Btu/hr                              | 66 kW                           | 225,192 Btu/hr                              | 88 kW                           | 300,256 Btu/hr                              | 106 kW                          | 361,672 Btu/hr                              |
| Heat Output                   | 38.7 kW                         | 132,044                                     | 59.4 kW                         | 202,673                                     | 78.3 kW                         | 267,159                                     | 93.3 kW                         | 318,339                                     |
| Gas Family                    | 1 <sub>2</sub> H Natural Gas    |   |                                 |   |                                 |   |                                 |   |
| Burner Pressure               | 11.25 mbar                      | 4.5in wg                                    | 11.25 mbar                      | 4.5in wg                                    | 11.25 mbar                      | 4.5in wg                                    | 11.25 mbar                      | 4.5in wg                                    |
| Max. Gas Input Pressure       | 35.0 mbar                       | 14.0 ins wg.                                | 35.0 mbar                       | 14.0 ins wg.                                | 35.0 mbar                       | 14.0 ins wg.                                | 35.0 mbar                       | 14.0 ins wg.                                |
| Gas Flow Rate                 | 4.09 m <sup>3</sup> /hr         | 144.6 ft <sup>3</sup> /hr                   | 6.15 m <sup>3</sup> /hr         | 217.2 ft <sup>3</sup> /hr                   | 8.20 m <sup>3</sup> /hr         | 289.8 ft <sup>3</sup> /hr                   | 9.88 m <sup>3</sup> /hr         | 349.2 ft <sup>3</sup> /hr                   |
| Gas Connection                | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          |
| Flue Gas Temperature (approx) | 132°C                           |   |                                 |   | 171°C                           |   |                                 |   |
| Flue Gas Volume               | 110m <sup>3</sup> /h            |   | 109m <sup>3</sup> /h            |   | 140m <sup>3</sup> /h            |   | 164m <sup>3</sup> /h            |   |
| Injector Dia.                 | 2.4 mm                          | 0.94 in                                     | 2.9 mm                          | 0.114 in                                    | 2.9 mm                          | 0.114 in                                    | 3.1 mm                          | 0.122 in                                    |
| M. Flue Connection            | 100/150 mm                      | –   | 100/150 mm                      | –   | 130/200 mm                      | –   | 130/200 mm                      | –   |
| Inlet and Flow Cons           | Rp1 <sup>1</sup> / <sub>2</sub> | 1 <sup>1</sup> / <sub>2</sub> in BSP        | Rp1 <sup>1</sup> / <sub>2</sub> | 1 <sup>1</sup> / <sub>2</sub> in BSP        | Rp1 <sup>1</sup> / <sub>2</sub> | 1 <sup>1</sup> / <sub>2</sub> in BSP        | Rp1 <sup>1</sup> / <sub>2</sub> | 1 <sup>1</sup> / <sub>2</sub> in BSP        |
| Return Connection             | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          | Rp <sup>3</sup> / <sub>4</sub>  | <sup>3</sup> / <sub>4</sub> in BSP          |
| Drain Port Size               | R <sup>3</sup> / <sub>4</sub>   | <sup>3</sup> / <sub>4</sub> in BSPT/Ext     | R <sup>3</sup> / <sub>4</sub>   | <sup>3</sup> / <sub>4</sub> in BSPT/Ext     | R <sup>3</sup> / <sub>4</sub>   | <sup>3</sup> / <sub>4</sub> in BSPT/Ext     | R <sup>3</sup> / <sub>4</sub>   | <sup>3</sup> / <sub>4</sub> in BSPT/Ext     |
| Max. Working Pressure         | 10 bar                          | 150 psi                                     | 10 bar                          | 150 psi                                     | 10 bar                          | 150 psi                                     | 10 bar                          | 150 psi                                     |
| Maximum Test Pressure         | 20.6 bar                        | 300 psi                                     | 20.6 bar                        | 300 psi                                     | 20.6 bar                        | 300 psi                                     | 20.6 bar                        | 300 psi                                     |
| Weight Empty                  | 340 kg                          | 750 lb                                      | 340 kg                          | 750 lb                                      | 345 kg                          | 760 lb                                      | 381 kg                          | 840 lb                                      |
| Weight Full                   | 636 kg                          | 1402 lb                                     | 636 kg                          | 1402 lb                                     | 641 kg                          | 1412 lb                                     | 727 kg                          | 1603 lb                                     |
| Shipping Weight               | 354 kg                          | 780 lb                                      | 354 kg                          | 780 lb                                      | 358 kg                          | 790 lb                                      | 399 kg                          | 880 lb                                      |
| Shipping Dimension            | 770 x 1210 x 2110 mm            | 30 <sup>1</sup> / <sub>4</sub> x 47 x 83 in | 770 x 1210 x 2110 mm            | 30 <sup>1</sup> / <sub>4</sub> x 47 x 83 in | 770 x 1210 x 2110 mm            | 30 <sup>1</sup> / <sub>4</sub> x 47 x 83 in | 770 x 1210 x 2110 mm            | 30 <sup>1</sup> / <sub>4</sub> x 47 x 83 in |
| Mains Voltage                 | 220/240 V– IP 20                |   |                                 |   |                                 |   |                                 |   |
| Frequency                     | 50 Hz                           |   |                                 |   |                                 |   |                                 |   |
| Fuse                          | 5 Amp                           |   |                                 |   |                                 |   |                                 |   |

# Fan Flued

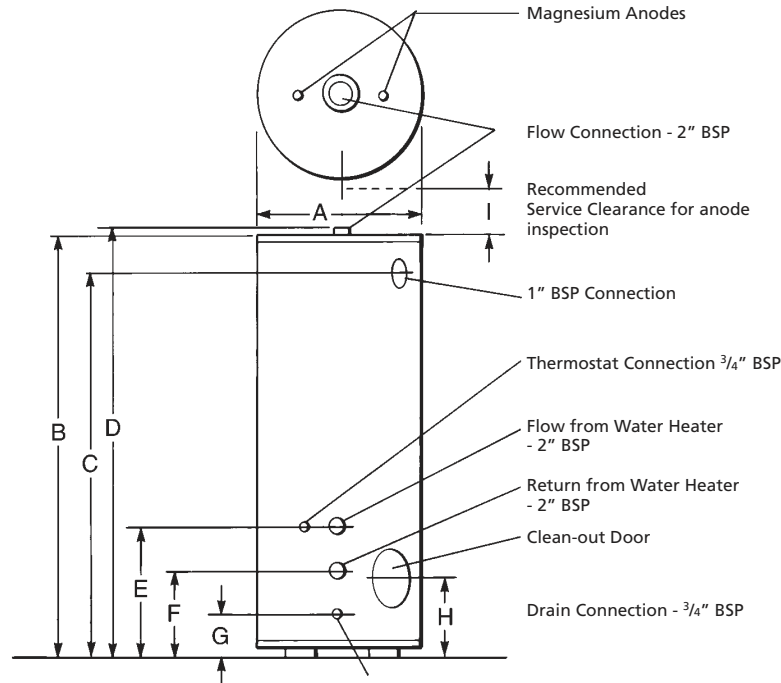
Models RFF 190 and RFF 280



| Andrews Model No.   | RFF 190             |                  | RFF 280             |                 |
|---|---------------------|------------------|---------------------|-----------------|
|   | SI METRIC           | IMPERIAL         | SI METRIC           | IMPERIAL        |
| A. Height of Heater   | 1448 mm             | 57 in            | 1524 mm             | 60 in           |
| B. Height of Flue Spigot  | 267 mm              | 10½ in           | 267 mm              | 10½ in          |
| C. Diameter   | 559 mm              | 22 in            | 660 mm              | 26 in           |
| D. Water Connection Centres   | 279 mm              | 11 in            | 279 mm              | 11 in           |
| E. Flue Spigot Connection   | 80 mm               | 3 in             | 80 mm               | 3 in            |
| F. Service Clearance  | 1400 mm             | 55 in            | 1400 mm             | 55 in           |
| G. Gas Connection   | 356 mm              | 14 in            | 395 mm              | 15½ in          |
| H. Min./Max. Wall Thickness   | 150-300 mm          | 6-12 in          | 150-300 mm          | 6-12 in         |
| J. Min Flue Horizontal  | 483 mm              | 19 in            | 533 mm              | 21 in           |
| Max Flue Horizontal   | 7000 mm             | 276 in           | 4000 mm             | 156 in          |
| K. Max. Flue Vertical   | 8000 mm             | 315 in           | 5000 mm             | 197 in          |
| L. Height to Flue Centre from Floor   | 1867 mm             | 73½ in           | 1943 mm             | 76½ in          |
| M. Service Clearance  | 305 mm              | 12 in            | 305 mm              | 12 in           |
| N. Service Clearance Front  | 610 mm              | 24 in            | 610 mm              | 24 in           |
| O. Flue Connection Centre   | 171 mm              | 6¾ in            | 222 mm              | 8¾ in           |
| P. Flue Connection Centre   | 394 mm              | 14 in            | 444 mm              | 17½ in          |
| NB: Dimensions J.K. should be decreased by 1000 mm for every 90° bend and 500 mm for every 45° bend used. |                     |                  |                     |                 |
| Storage Capacity  | 190 l               | 42 gals          | 280 l               | 62 gals         |
| Recovery thro 44°C/80°F   | 291 l/hr            | 64 gph           | 339 l/hr            | 75 gph          |
| 56°C/100°F  | 232 l/hr            | 51 gph           | 272 l/hr            | 60 gph          |
| Heat Input  | 19.5 kW             | 66,534 Btu/hr    | 23.0 kW             | 78,476 btu/hr   |
| Heat Output   | 15.0 kW             | 51,180 Btu/hr    | 17.5 kW             | 59,710 btu/hr   |
| Gas Family  |                     | ½ H Natural      |                     |                 |
| Burner Pressure   | 10 mbar             | 4in wg           | 10 mbar             | 4in wg          |
| Max. Gas Input Pressure   | 35.0 mbar           | 14.0 ins wg.     | 35.0 mbar           | 14.0 ins wg.    |
| Gas Flow Rate   | 1.82 m³/hr          | 64.3 ft³/hr      | 2.15 m³/hr          | 76 ft³/hr       |
| Gas Connection  | RP½                 | ½in BSP          | RP½                 | ½in BSP         |
| Flue Gas Temperature (approx)   | 70°C                | 158°F            | 70°C                | 158°F           |
| Flue Gas Volume   | 32 m³/h             |                  | 29 m³/h             |                 |
| Injector Diameter   | 3.81 mm             | 0.150 in         | 3.98 mm             | 0.157 in        |
| Flue Spigot Connection  | 80 mm               | 3 in             | 80 mm               | 3 in            |
| Inlet and Flow Connections  | RP¾                 | ¾in BSP          | RP¾                 | ¾in BSP         |
| Return Connection   | RP¾                 | ¾in BSP          | RP¾                 | ¾in BSP         |
| Drain Port Size   | R ¾                 | ¾in BSPT/Ext     | R ¾                 | ¾in BSPT/Ext    |
| Max. Working Pressure   | 10 bar              | 150 psi          | 10 bar              | 150 psi         |
| Max. Test Pressure  | 20.6 bar            | 300 psi          | 20.6 bar            | 300 psi         |
| Weight Empty  | 75 kg               | 165 lb           | 132 kg              | 292 lb          |
| Weight Full   | 273 kg              | 603 lb           | 418 kg              | 908 lb          |
| Shipping Weight   | 84 kg               | 185 lbs          | 144 kg              | 317 lbs         |
| Shipping Dimension Carton   | 648 x 584 x 1753 mm | 25⅝ x 23 x 69 in | 1854 x 725 x 785 mm | 73 x 28½ x 31in |
| Mains Voltage   | 220/240 - IP20      |                  |                     |                 |
| Frequency   | 50 Hz               |                  |                     |                 |
| Power Consumption   | 236W                |                  |                     |                 |
| Fuse  | 5 A                 |                  |                     |                 |

# Storage Water Tanks-Direct

Models ST66, ST100, ST166



## Features:

- **Foamlock Insulation** - a full 2" of polyurethane foam exceeds the insulating value of 5" of 1/2 lb density fibreglass insulation and gives extra jacket rigidity.
- **Vitraglas lined tank** - storage tanks are protected from the corrosive effects of hot water by an exclusive ceramic porcelain-like coating. Vitras tough interior surface for storage tanks, which must withstand the wearing effects of high volume and high temperature hot water.
- **Factory installed dielectric nipples** - no dielectric fittings or unions needed.
- **Two magnesium anode rods** - for more even distribution of corrosion protection and longer service life.
- **Hand hole clean-out** - for removal of accumulated lime and sediment deposits
- **Solid brass drain valve**
- **Steel tank** - heavy gauge steel automatically formed, rolled and welded to assure a continuous seam for glass lining. Each tank is triple tested to insure quality.

| Dimensions |          |         |          |         |          |         |
|------------|----------|---------|----------|---------|----------|---------|
| Model      | ST66     |         | ST100    |         | ST166    |         |
|            | SI Units | Imp     | SI Units | Imp     | SI Units | Imp     |
| A          | 610mm    | 24"     | 711mm    | 28"     | 813mm    | 32"     |
| B          | 1492mm   | 58 3/4" | 1588mm   | 62 1/2" | 1956mm   | 77"     |
| C          | 1334mm   | 52 1/2" | 1416mm   | 55 3/4" | 1676mm   | 66"     |
| D          | 1518mm   | 59 3/4" | 1613mm   | 63 1/2" | 1981mm   | 78"     |
| E          | 368mm    | 14 1/2" | 368mm    | 14 1/2" | 413mm    | 16 1/4" |
| F          | 235mm    | 9 1/4"  | 241mm    | 9 1/2"  | 286mm    | 11 1/4" |
| G          | 121mm    | 4 3/4"  | 127mm    | 5"      | 171mm    | 6 3/4"  |
| H          | 184mm    | 7 1/4"  | 191mm    | 7 1/2"  | 235mm    | 9 1/4"  |
| I          | 762mm    | 30"     | 762mm    | 30"     | 762mm    | 30"     |

| ANDREWS MODEL NO.        | ST 66            |                  | ST 100           |                  | ST 166           |                  |
|--------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                          | SI Units         | Imp.             | SI Units         | Imp.             | SI Units         | Imp.             |
| Storage Capacity         | 300 litres       | 66 gallons       | 455 litres       | 100 gallons      | 755 litres       | 166 gallons      |
| Flow Connection          | Rc2              | 2 in BSP T/Int.  | Rc2              | 2 in BSP T/Int.  | Rc2              | 2 in BSP T/Int.  |
| Inlet Connection         | Rc2              | 2 in BSP T/Int.  | Rc2              | 2 in BSP T/Int.  | Rc2              | 2 in BSP T/Int.  |
| Return Connection        | Rc2              | 2 in BSP T/Int.  | Rc2              | 2 in BSP T/Int.  | Rc2              | 2 in BSP T/Int.  |
| Thermostat Connection    | Rc 3/4           | 3/4 in BSP/Int.  | Rc 3/4           | 3/4 in BSP/Int.  | Rc 3/4           | 3/4 in BSP/Int.  |
| Weight Empty             | 95.2 kg          | 210 lbs          | 141 kg           | 310 lbs          | 245 kg           | 541 lbs          |
| Weight Full              | 395 kg           | 870 lbs          | 594 kg           | 1310 lbs         | 998 kg           | 2201 lbs         |
| Maximum Working Pressure | 10.3 bar 150 psi | 10.3 bar 150 psi | 10.3 bar 150 psi | 10.3 bar 150 psi | 10.3 bar 150 psi | 10.3 bar 150 psi |
| Maximum Test Pressure    | 20.6 bar 300 psi | 20.6 bar 300 psi | 20.6 bar 300 psi | 20.6 bar 300 psi | 20.6 bar 300 psi | 20.6 bar 300 psi |
| Shipping Weight          | 107 kg           | 235 lbs          | 154 kg           | 340 lbs          | 263 kg           | 581 lbs          |
| Shipping Height          | 1537mm           | 60 1/2"          | 1638mm           | 64 1/2"          | 2019mm           | 79 1/2"          |
| Crate Width              | 667mm            | 26 1/4"          | 787mm            | 31"              | 889mm            | 35"              |
| Dimensions Depth         | 667mm            | 26 1/4"          | 762mm            | 30"              | 889mm            | 35"              |



# Andrews Mini-Plate

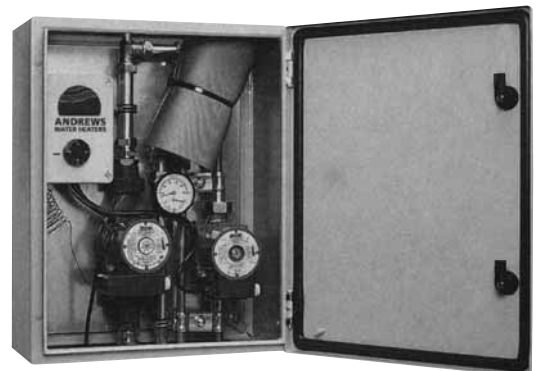
## ADD-ON SPACE HEATING PACKAGE

When the heating demand is small but high volume hot water is required the combination of an Andrews Mini Plate and an Andrews Water Heater provides the complete solution. A plate heat exchanger, pumps and electronic control assembly neatly packaged inside a compact enclosure provide an add-on space heating function for Andrews Water Heaters.

Features include:

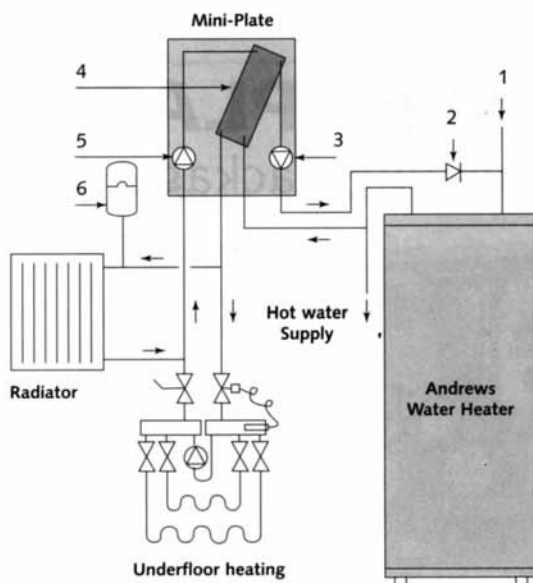
- Compact
- Long life high grade materials
- Maintenance free
- Stainless steel brazed plate heat exchanger
- Bronze pump for domestic water
- Circulation pump for space heating
- Automatic electronic control system
- Temperature and pressure gauge included
- Completely assembled and ready to install

It  
is  
designed  
specifically  
for



Applications:

- Shower rooms at sports clubs, caravan/camping sites
- Can be used with underfloor heating or radiators
- Small apartment heating
- Low background heating requirements
- Can be used with Andrews Water Heaters on Natural gas, LPG or oil.



| Technical Data                      |                      |
|-------------------------------------|----------------------|
| Height                              | 500 mm               |
| Width                               | 400 mm               |
| Depth                               | 200 mm               |
| Weight                              | 16 kg                |
| Maximum capacity of heat exchanger* | 23 kW                |
| Water connection heating side       | 22 mm                |
| Water connection, domestic side     | 15 mm                |
| Electrical supply                   | 220/240 1ph<br>50 Hz |
| Electrical load, pumps              | 104 W                |
| Electrical load, control panel      | 20 W                 |
| * Dependent upon water temperatures |                      |

### Typical System Layout

1. Cold feed (See Andrews Water Heater Installation Manual)
2. Non return valve
3. Bronze domestic water pump
4. Plate heat exchanger
5. Heating pump
6. Expansion tank

The maximum heating load of the Mini-Plate, will depend upon the Water Heater input. Size the Andrews Storage Water Heater in the normal way using the Size-it guide then add the heating load up to 23 kW maximum. In working conditions the electronic control will give priority to the domestic water heating load.



Andrews Water Heaters  
Wood Lane, Erdington  
Birmingham, B24 9QP  
Telephone: 0845 070 1055 Facsimile: 0845 070 1057  
E Mail: andrews@baxigroup.com  
www.andrewswaterheaters.co.uk