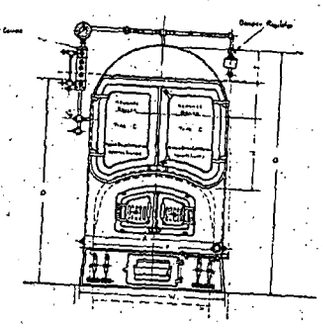
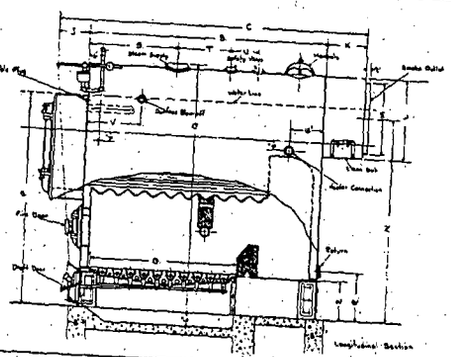
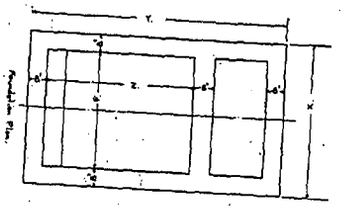


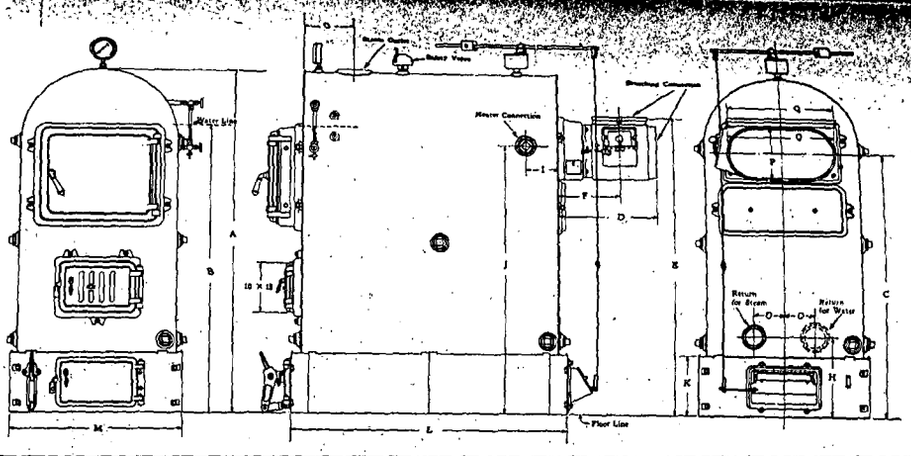




## KEWANEE STEEL BOILERS
## TYPE C—ELECTRIC WELD
### For Burning Coal

| Number of Boiler | 749 | 750 | 751 | 752 | 753 | 754 | 755 | 756 | 757 | 758 | 759 | 760 | 761 | 762 | 763 | 764 | 765 | 766 | 767 | 768 | 769 | 770 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity, Steam | 2300 | 2690 | 3250 | 3630 | 4060 | 4550 | 5250 | 5950 | 6470 | 7000 | 8280 | 9610 | 10850 | 12110 | 14300 | 16380 | 18660 | 20750 | 22520 | 25530 | 28780 | 33070 |
| Heating Surface...sq. ft. | 164 | 192 | 232 | 262 | 290 | 325 | 375 | 425 | 462 | 498 | 591 | 686 | 775 | 865 | 1025 | 1170 | 1333 | 1482 | 1608 | 1824 | 2056 | 2362 |
| Area of Grate...sq. ft. | 9.1 | 10.3 | 11.0 | 11.6 | 12.4 | 13.9 | 15.5 | 18.0 | 19.7 | 21.5 | 22.4 | 24.3 | 24.7 | 26.9 | 27.6 | 30.1 | 32.9 | 35.6 | 36.0 | 38.9 | 42.1 | 45.2 |
| Diameter of Stack...sq. ft. | 18 | 20 | 20 | 20 | 22 | 22 | 22 | 24 | 24 | 26 | 26 | 28 | 30 | 30 | 32 | 32 | 34 | 34 | 38 | 38 | 40 | 40 |
| Minimum Height of Stack...in. | 45 | 50 | 50 | 55 | 55 | 55 | 60 | 60 | 60 | 65 | 65 | 65 | 70 | 70 | 70 | 70 | 80 | 90 | 90 | 90 | 100 | 100 |
| Diameter of Stack, Two Boilers...in. | 26 | 28 | 28 | 28 | 31 | 31 | 31 | 34 | 34 | 36 | 36 | 40 | 42 | 42 | 46 | 46 | 48 | 48 | 52 | 54 | 54 | 54 |
| *Minimum* Height of Stack, Two Boilers...ft. | 55 | 60 | 60 | 65 | 65 | 65 | 70 | 70 | 70 | 75 | 75 | 75 | 80 | 80 | 80 | 80 | 90 | 90 | 100 | 100 | 110 | 110 |
| Size of Steam Opening...in. | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 10 | 10 | 10 |
| Size of Return Opening...in. | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Size of Safety Valve Opening...in. | 2 | 2 | 2 | 2 | 2 | 2 | 2½ | 3 | 3 | 3 | 3 | 3½ | 3½ | 3½ | 3½ | 4 | 4 | 2-2½ | 2-2½ | 2-3 | 2-3 | 2-3 |
| A—Width of Boiler...in. | 36 | 36 | 36 | 36 | 42 | 42 | 42 | 48 | 48 | 48 | 54 | 54 | 60 | 60 | 66 | 66 | 72 | 72 | 78 | 78 | 84 | 84 |
| B—Length of Boiler...ft. in. | 4-2 | 4-8 | 5-8 | 6-4 | 5-10½ | 6-6½ | 7-6 | 6-1 | 6-7 | 7-1 | 7-5½ | 8-7 | 8-0½ | 8-11 | 9-7 | 10-10 | 9-10½ | 10-11 | 10-10 | 12-2½ | 10-11 | 12-5 |
| C—Overall Length of Boiler...ft. in. | 5-10 | 6-4 | 7-4 | 8-0 | 7-10½ | 8-6½ | 9-6 | 8-3 | 8-9 | 9-3 | 9-8½ | 10-10 | 10-4½ | 11-3 | 11-11 | 13-2 | 12-8½ | 13-9 | 13-8 | 15-0½ | 13-9 | 15-3 |
| D—Overall Height of Boiler...in. | 77½ | 77½ | 77½ | 77½ | 83½ | 83½ | 83½ | 97 | 97 | 97 | 99 | 99 | 108½ | 108½ | 111½ | 111½ | 117½ | 117½ | 121¼ | 121¼ | 135 | 135 |
| E—Height of Ash-pit Base...in. | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 | 21 | 21 |
| F—Width of Grates and Ash-pit...in. | 30 | 30 | 30 | 30 | 36 | 36 | 42 | 42 | 42 | 42 | 47½ | 47½ | 52½ | 52½ | 58½ | 58½ | 64 | 64 | 70 | 70 | 76 | 76 |
| G—Length of Grates...in. | 43 | 49 | 56 | 56 | 50 | 56 | 62 | 62 | 68 | 74 | 68 | 74 | 68 | 74 | 68 | 74 | 74 | 80 | 74 | 80 | 80 | 86 |
| H—Height of Front Smokebox...in. | 34 | 34 | 34 | 34 | 34 | 34 | 34 | 42 | 42 | 42 | 42 | 42 | 48 | 48 | 48 | 48 | 51 | 51 | 52 | 52 | 61 | 61 |
| I—Top Front Smokebox to Top of Boiler...in. | 10 | 10 | 10 | 10 | 13 | 13 | 13 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 18 | 18 | 17 | 17 | 19 | 19 | 21 | 21 |
| J—Depth of Front Smokebox...in. | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 14 | 14 |
| K—Depth of Rear Smokebox...in. | 11 | 11 | 11 | 11 | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 16 | 16 | 16 | 16 | 20 | 20 | 20 | 20 | 20 | 20 |
| L—Height of Rear Smokebox...in. | 26 | 26 | 26 | 26 | 29 | 29 | 29 | 35½ | 35½ | 35½ | 35 | 35 | 36 | 36 | 39 | 39 | 43 | 43 | 45½ | 45½ | 49½ | 49½ |
| M—Diameter of Smoke Outlet...in. | 22 | 22 | 22 | 22 | 24 | 24 | 24 | 26 | 26 | 26 | 28 | 28 | 32 | 32 | 34 | 34 | 36 | 36 | 40 | 40 | 42 | 42 |
| N—Height Smoke Outlet above Floor...in. | 64½ | 64½ | 64½ | 64½ | 69 | 69 | 69 | 79 | 79 | 79 | 81½ | 81½ | 90½ | 90½ | 93 | 93 | 96 | 96 | 99 | 99 | 110 | 110 |
| O—Height of Water Column...in. | 67 | 67 | 67 | 67 | 70 | 70 | 70 | 80 | 80 | 80 | 82 | 82 | 91 | 91 | 92½ | 92½ | 98 | 98 | 100 | 100 | 111½ | 111½ |
| P—Height of Water Line...in. | 69 | 69 | 69 | 69 | 72 | 72 | 72 | 82 | 82 | 82 | 85 | 85 | 94 | 94 | 95 | 95 | 101 | 101 | 103 | 103 | 114 | 114 |
| Q—Height of Steam Supply...in. | 79½ | 79½ | 79½ | 79½ | 85½ | 85½ | 85½ | 99 | 99 | 99 | 101 | 101 | 110½ | 110½ | 113½ | 113½ | 119½ | 119½ | 123½ | 123½ | 137 | 137 |
| R—Height of Return...in. | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 19 | 19 | 19 | 19 | 19 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 26 | 26 |
| S—Location of Steam Supply...in. | 10½ | 14 | 14 | 16 | 14 | 16 | 18 | 16 | 18 | 21 | 18 | 21 | 18 | 21 | 18 | 21 | 21 | 21 | 21 | 21 | 24 | 24 |
| T—Location of 1st Safety Valve...in. | 8½ | 10 | 10 | 10 | 10 | 10 | 11 | 12 | 13 | 14 | 13 | 14 | 13 | 14 | 13 | 14 | 14 | 14 | 14 | 14 | 15 | 15 |
| U—Location of 2nd Safety Valve...in. | | | | | | | | | | | | | | | | | | 10 | 10 | 11 | 12 | 12 |
| V—Location of Surface Blow-Off...in. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 18 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| W—Width of Base...in. | 38½ | 38½ | 38½ | 38½ | 44½ | 44½ | 44½ | 50½ | 50½ | 50½ | 56½ | 56½ | 63 | 63 | 69 | 69 | 75 | 75 | 81 | 81 | 87½ | 87½ |
| X—Width of Foundation...in. | 46 | 46 | 46 | 46 | 52 | 52 | 52 | 58 | 58 | 58 | 63½ | 63½ | 69½ | 69½ | 75½ | 75½ | 81½ | 81½ | 87½ | 87½ | 93½ | 93½ |
| Y—Length of Foundation...in. | 59 | 65 | 77 | 85 | 80 | 88 | 99 | 82 | 88 | 94 | 112 | 106 | 115 | 125 | 120 | 130 | 135 | 135 | 140 | 140 | 150 | 150 |
| Z—Length of Ash-pit...in. | 39 | 45 | 57 | 65 | 60 | 68 | 79 | 62 | 68 | 74 | 92 | 86 | 95 | 105 | 100 | 110 | 115 | 115 | 120 | 120 | 130 | 130 |
| Outside Surface to Cover...sq. ft. | 43 | 49 | 56 | 64 | 50 | 56 | 62 | 68 | 74 | 80 | 94 | 106 | 115 | 125 | 140 | 150 | 160 | 180 | 180 | 200 | 220 | 240 |
| Boiler Weight...lbs. | 1750 | 1950 | 2250 | 2500 | 2700 | 3000 | 3400 | 3800 | 4200 | 4600 | 5200 | 5800 | 6400 | 7000 | 7800 | 8600 | 9400 | 10200 | 11000 | 12000 | 13000 | 14000 |
| Oil Casing | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2100 | 2200 | 2300 | 2400 | 2500 | 2600 | 2700 | 2800 | 2900 | 3000 | 3100 |
| Water | 1200 | 1400 | 1700 | 1900 | 2100 | 2400 | 2800 | 3200 | 3600 | 4000 | 4600 | 5200 | 5800 | 6400 | 7200 | 8000 | 8800 | 9600 | 10400 | 11400 | 12400 | 13400 |





## KEWANEE
## RESIDENCE
## TYPE R
## BOILERS

### Nos. 740-770
### For Burning Coal

| Number of Boiler | 740 | 741 | 742 | 743 | 745 | 746 | 747 | 748 |
|---|---|---|---|---|---|---|---|---|
| Rated Capacity, Steam...sq. ft. | 370 | 510 | 690 | 920 | 1210 | 1560 | 1780 | 1960 |
| Rated Capacity, Water...sq. ft. | 590 | 820 | 1100 | 1470 | 1940 | 2500 | 2850 | 3140 |
| Heating Surface...sq. ft. | 49 | 60 | 71 | 82 | 101 | 114 | 127 | 140 |
| Grate Area...sq. ft. | 2.6 | 3.5 | 4.4 | 5.3 | 6.3 | 7.3 | 8.4 | 9.4 |
| Width of Boiler...in. | 27 | 27 | 27 | 27 | 31 | 31 | 31 | 31 |
| Length of Boiler...in. | 27½ | 33½ | 39½ | 45½ | 45½ | 51½ | 57½ | 63½ |
| Size of Steam or Water Outlet...in. | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 6 |
| Size of Steam Return Inlet...in. | 2½ | 2½ | 2½ | 2½ | 3 | 3 | 3 | 3 |
| Size of Inlet added for Water...in. | 2½ | 2½ | 2½ | 2½ | 4 | 4 | 4 | 4 |
| Size of Safety Valve Opening...in. | 1 | 1 | 1¼ | 1¼ | 1½ | 1½ | 1½ | 2 |
| A—Overall Height, Floor to Top of Shell...in. | 66½ | 66½ | 66½ | 66½ | 70¼ | 70¼ | 70¼ | 70¼ |
| B—Height of Water-line...in. | 56½ | 56½ | 56½ | 56½ | 58½ | 58½ | 58½ | 58½ |
| Diameter of Chimney...in. | 12 | 12 | 12 | 12 | 16 | 16 | 16 | 16 |
| Height of Chimney...ft. | 35 | 35 | 35 | 35 | 40 | 40 | 40 | 40 |
| Diameter of Breeching...in. | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 |
| Size of Breeching Connection, P x Q...in. | 8½x17 | 8½x17 | 8½x17 | 8½x17 | 11x22 | 11x22 | 11x22 | 11x22 |
| C—Height of End Breeching Connection Center...in. | 52 | 52 | 52 | 52 | 54 | 54 | 54 | 54 |
| D—Back of Boiler to End Breeching Connection...in. | 17½ | 17½ | 17½ | 17½ | 20 | 20 | 20 | 20 |

| Number of Boiler | 740 | 741 | 742 | 743 | 745 | 746 | 747 | 748 |
|---|---|---|---|---|---|---|---|---|
| E—Height of Breeching Connection...in. | 58½ | 58½ | 58½ | 58½ | 61½ | 61½ | 61½ | 61½ |
| F—Back of Boiler to Top Breeching Connection Center...in. | 11¼ | 11¼ | 11¼ | 11¼ | 12½ | 12½ | 12½ | 12½ |
| G—Steam Outlet Center to Boiler Front...in. | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 |
| H—Height of Return Inlet Ctrs., in. | 15¼ | 15¼ | 15¼ | 15¼ | 16 | 16 | 16 | 16 |
| O—Return Inlet Offset from Boiler Center...in. | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 |
| Heater Connection Size...in. | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| I—Heater Connection Center from Back of Boiler...in. | 6½ | 6½ | 6½ | 6½ | 6½ | 6½ | 6½ | 6½ |
| J—Heater Connection, Height from Floor...in. | 52¼ | 52¼ | 52¼ | 52¼ | 54¼ | 54¼ | 54¼ | 54¼ |
| K—Height of Base...in. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| L—Length of Base...in. | 31½ | 37½ | 43½ | 49½ | 49½ | 55½ | 61½ | 67½ |
| M—Width of Base...in. | 30 | 30 | 30 | 30 | 34 | 34 | 34 | 34 |
| Outside Surface to Cover, Unjacketed...sq. ft. | 38 | 44 | 49 | 54 | 60 | 66 | 71 | 77 |
| Approximate Weight...lbs. | 1800 | 2000 | 2300 | 2500 | 2800 | 3050 | 3300 | 3550 |

Oil Burning Boiler Nos. 1740-1748—Capacity, Steam, 450 to 2380 sq. ft.; Water, 720 to 3810 sq. ft. For Anthracite, Nos. 2740-2770—Capacity, Steam, 430 to 1960 sq. ft.; Water, 690 to 3140 sq. ft