

23 22 Steam and Condensate Piping and Pumps

23 22 23 – Steam Condensate Pumps

| 23 22 23.10 Condensate Return System | | Crew | Daily Output | Labor-Hours | Unit | Material | 2022 Bare Costs | | Total | Total Incl O&P |
|--------------------------------------|------------------|------|--------------|-------------|------|----------|-----------------|-------|--------|----------------|
| 2130 | 1 HP, 25 GPM | Q-1 | 1.20 | 13.333 | Ea. | 7,725 | Labor | 840 | 8,565 | 9,750 |
| 2140 | 1-1/2 HP, 45 GPM | | 1 | 16 | | 9,025 | Equipment | | 10,025 | 11,400 |
| 2150 | 1-1/2 HP, 60 GPM | | 1 | 16 | | 10,100 | | 1,000 | 11,100 | 12,600 |

23 31 HVAC Ducts and Casings

23 31 13 – Metal Ducts

23 31 13.13 Rectangular Metal Ducts

| | | | | | | | | | | |
|------|---|------|-----|------|-----|------|-------|-----|-------|-------|
| 0010 | RECTANGULAR METAL DUCTS | | | | | | | | | |
| 0020 | Fabricated rectangular, includes fittings, joints, supports, | | | | | | | | | |
| 0021 | allowance for flexible connections and field sketches. | | | | | | | | | |
| 0030 | Does not include "as-built dwgs." or insulation. | | | | | | | | | |
| 0031 | NOTE: Fabrication and installation are combined | | | | | | | | | |
| 0040 | as LABOR cost. Approx. 25% fittings assumed. | | | | | | | | | |
| 0042 | Fabrication/Inst. is to commercial quality standards | | | | | | | | | |
| 0043 | (SMACNA or equiv.) for structure, sealing, leak testing, etc. | | | | | | | | | |
| 0050 | Add to labor for elevated installation | | | | | | | | | |
| 0051 | of fabricated ductwork | | | | | | | | | |
| 0052 | 10' to 15' high | | | | | | | 6% | | |
| 0053 | 15' to 20' high | | | | | | | 12% | | |
| 0054 | 20' to 25' high | | | | | | | 15% | | |
| 0055 | 25' to 30' high | | | | | | | 21% | | |
| 0056 | 30' to 35' high | | | | | | | 24% | | |
| 0057 | 35' to 40' high | | | | | | | 30% | | |
| 0058 | Over 40' high | | | | | | | 33% | | |
| 0072 | For duct insulation see Line 23 07 13.10 3000 | | | | | | | | | |
| 0100 | Aluminum, alloy 3003-H14, under 100 lb. | Q-10 | 75 | .320 | Lb. | 3.18 | 20 | | 23.18 | 34 |
| 0110 | 100 to 500 lb. | | 80 | .300 | | 1.80 | 18.90 | | 20.70 | 30.50 |
| 0120 | 500 to 1,000 lb. | | 95 | .253 | | 2.04 | 15.95 | | 17.99 | 26 |
| 0140 | 1,000 to 2,000 lb. | | 120 | .200 | | 1.98 | 12.60 | | 14.58 | 21 |
| 0150 | 2,000 to 5,000 lb. | | 130 | .185 | | 1.92 | 11.65 | | 13.57 | 19.65 |
| 0160 | Over 5,000 lb. | Q-10 | 145 | .166 | Lb. | 1.98 | 10.45 | | 12.43 | 17.90 |
| 0500 | Galvanized steel, under 200 lb. | | 235 | .102 | | .63 | 6.45 | | 7.08 | 10.40 |
| 0520 | 200 to 500 lb. | | 245 | .098 | | .70 | 6.20 | | 6.90 | 10.05 |
| 0540 | 500 to 1,000 lb. | | 255 | .094 | | .66 | 5.95 | | 6.61 | 9.70 |
| 0560 | 1,000 to 2,000 lb. | | 265 | .091 | | .68 | 5.70 | | 6.38 | 9.35 |
| 0570 | 2,000 to 5,000 lb. | | 275 | .087 | | .56 | 5.50 | | 6.06 | 8.90 |
| 0580 | Over 5,000 lb. | | 285 | .084 | | .68 | 5.30 | | 5.98 | 8.75 |
| 1000 | Stainless steel, type 304, under 100 lb. | | 165 | .145 | | 5.20 | 9.15 | | 14.35 | 19.50 |
| 1020 | 100 to 500 lb. | | 175 | .137 | | 4.17 | 8.65 | | 12.82 | 17.65 |
| 1030 | 500 to 1,000 lb. | | 190 | .126 | | 3.03 | 7.95 | | 10.98 | 15.35 |
| 1040 | 1,000 to 2,000 lb. | | 200 | .120 | | 2.70 | 7.55 | | 10.25 | 14.35 |
| 1050 | 2,000 to 5,000 lb. | | 225 | .107 | | 2.33 | 6.75 | | 9.08 | 12.70 |
| 1060 | Over 5,000 lb. | | 235 | .102 | | 2.93 | 6.45 | | 9.38 | 12.90 |
| 1100 | For medium pressure ductwork, add | | | | | | 15% | | | |
| 1200 | For high pressure ductwork, add | | | | | | 40% | | | |
| 1210 | For welded ductwork, add | | | | | | 85% | | | |
| 1220 | For 30% fittings, add | | | | | | 11% | | | |
| 1224 | For 40% fittings, add | | | | | | 34% | | | |
| 1228 | For 50% fittings, add | | | | | | 56% | | | |
| 1232 | For 60% fittings, add | | | | | | 79% | | | |
| 1236 | For 70% fittings, add | | | | | | 101% | | | |