

FAC 1402 AIR DEFENSE OPERATIONS BUILDING

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|-----------|---|
| FY22 SUC: | \$5.48 / SF |
| Source: | Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices |

FAC 1402 AIR DEFENSE OPERATIONS BUILDING

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 50
Average Size 8354.0

SUC \$5.48

Adjusted Occurrences are the occurrences remaining after subtracting Repair/Replacement Overlaps. Overlap reduction removes a repair when it occurs the same year as a replacement.

| Description | Frequency | Qty Unit | Total In-House | Total Incl OP | Design Life/Frequency | Occurrences in Design Life | Adjusted Occurrences | Life Cost | Adjusted Cost |
|---|-----------|-----------|----------------|---------------|-----------------------|----------------------------|----------------------|--------------|---------------|
| Replace washer in faucet lavatory, vitreous china | 2 | 8.00 Ea. | \$103.08 | \$128.41 | 25.0000 | 25 | 25 | \$3,210.36 | \$3,210.36 |
| Replace faucets lavatory, vitreous china | 10 | 8.00 Ea. | \$1,453.81 | \$1,750.04 | 5.0000 | 5 | 5 | \$8,750.22 | \$8,750.22 |
| Clean out strainer and P trap lavatory, vitreous china | 2 | 8.00 Ea. | \$278.95 | \$348.86 | 25.0000 | 25 | 25 | \$8,721.58 | \$8,721.58 |
| Replace lavatory, vitreous china | 35 | 8.00 Ea. | \$5,380.60 | \$6,465.77 | 1.4286 | 1 | 1 | \$6,465.77 | \$6,465.77 |
| Replace faucet washer sink, iron enamel | 2 | 1.00 Ea. | \$12.78 | \$15.92 | 25.0000 | 25 | 25 | \$397.90 | \$397.90 |
| Clean trap sink, iron enamel | 3 | 1.00 Ea. | \$8.57 | \$10.72 | 16.6667 | 16 | 16 | \$171.50 | \$171.50 |
| Replace faucets sink, iron enamel | 10 | 1.00 Ea. | \$181.73 | \$218.76 | 5.0000 | 5 | 5 | \$1,093.78 | \$1,093.78 |
| Unstop sink, iron enamel | 2 | 1.00 Ea. | \$41.82 | \$52.30 | 25.0000 | 25 | 25 | \$1,307.56 | \$1,307.56 |
| Replace sink, P.E.C.I. sink, iron enamel kitchen | 35 | 1.00 Ea. | \$636.70 | \$757.51 | 1.4286 | 1 | 1 | \$757.51 | \$757.51 |
| Check / minor repairs drinking fountain | 1 | 3.00 Ea. | \$146.65 | \$183.40 | 50.0000 | 50 | 50 | \$9,169.89 | \$9,169.89 |
| Repair internal leaks drinking fountain | 4 | 3.00 Ea. | \$135.24 | \$169.13 | 12.5000 | 12 | 12 | \$2,029.60 | \$2,029.60 |
| Correct water pressure drinking fountain | 2 | 3.00 Ea. | \$125.46 | \$156.91 | 25.0000 | 25 | 25 | \$3,922.67 | \$3,922.67 |
| Replace refrigerant drinking fountain | 2 | 3.00 Ea. | \$98.05 | \$114.81 | 25.0000 | 25 | 25 | \$2,870.19 | \$2,870.19 |
| Repair drain leak drinking fountain | 4 | 3.00 Ea. | \$101.75 | \$121.60 | 12.5000 | 12 | 10 | \$1,459.25 | \$1,216.04 |
| Replace fountain drinking fountain | 10 | 3.00 Ea. | \$3,843.47 | \$4,543.68 | 5.0000 | 5 | 5 | \$22,718.38 | \$22,718.38 |
| Drain and flush water heater, electric, 120 gallon | 7 | 1.00 Ea. | \$294.38 | \$368.15 | 7.1429 | 7 | 7 | \$2,577.08 | \$2,577.08 |
| Check operation water heater, electric, 120 gallon | 3 | 1.00 Ea. | \$2.59 | \$3.23 | 16.6667 | 16 | 16 | \$51.73 | \$51.73 |
| Replace water heater, electric, 120 gallon | 15 | 1.00 Ea. | \$14,632.58 | \$16,736.89 | 3.3333 | 3 | 3 | \$50,210.67 | \$50,210.67 |
| Replace pump / motor assembly circulation pump, 1/12 HP | 10 | 1.00 Ea. | \$1,100.58 | \$1,290.00 | 5.0000 | 5 | 5 | \$6,449.98 | \$6,449.98 |
| Unclog main drain pipe & fittings, cast iron | 10 | 1.00 Ea. | \$46.17 | \$57.74 | 5.0000 | 5 | 5 | \$288.68 | \$288.68 |
| Unclog floor drain, PVC | 20 | 1.00 Ea. | \$47.80 | \$59.77 | 2.5000 | 2 | 2 | \$119.55 | \$119.55 |
| General maintenance & repair drain: roof, scupper, area | 1 | 2.00 Ea. | \$73.98 | \$92.51 | 50.0000 | 50 | 50 | \$4,625.70 | \$4,625.70 |
| Replace drain: roof, scupper, area | 40 | 2.00 Ea. | \$1,573.86 | \$1,824.72 | 1.2500 | 1 | 1 | \$1,824.72 | \$1,824.72 |
| Repair boiler, gas, 250 MBH | 7 | 2.00 Ea. | \$4,062.11 | \$4,780.90 | 7.1429 | 7 | 7 | \$33,466.31 | \$33,466.31 |
| Replace boiler, gas, 250 MBH | 30 | 2.00 Ea. | \$18,796.09 | \$22,420.25 | 1.6667 | 1 | 1 | \$22,420.25 | \$22,420.25 |
| Replace metal flue, gas vent, galvanized, 48" diameter metal flue / chimney | 10 | 2.00 L.F. | \$10,179.47 | \$11,596.04 | 5.0000 | 5 | 5 | \$57,980.19 | \$57,980.19 |
| Repair computer room air conditioner, air cooled, 5 ton | 10 | 1.00 Ea. | \$4,277.08 | \$5,096.24 | 5.0000 | 5 | 5 | \$25,481.19 | \$25,481.19 |
| Replace computer room air conditioner, air cooled, 5 ton | 20 | 1.00 Ea. | \$38,211.35 | \$43,798.01 | 2.5000 | 2 | 2 | \$87,596.02 | \$87,596.02 |
| Repair single zone rooftop unit, 25 ton | 10 | 1.00 Ea. | \$47,397.42 | \$54,623.55 | 5.0000 | 5 | 4 | \$273,117.75 | \$218,494.20 |

| Description | Frequency | Qty Unit | Total In-House | Total Incl OP | Design Life/Frequency | Occurrences in Design Life | Adjusted Occurrences | Life Cost | Adjusted Cost |
|--|-----------|-------------|----------------|---------------|-----------------------|----------------------------|----------------------|--------------|---------------|
| Replace single zone rooftop unit, 25 ton | 15 | 1.00 Ea. | \$51,343.17 | \$59,585.52 | 3.3333 | 3 | 3 | \$178,756.56 | \$178,756.56 |
| Repair central station A.H.U., 5400 CFM | 10 | 1.00 Ea. | \$827.08 | \$970.82 | 5.0000 | 5 | 4 | \$4,854.11 | \$3,883.28 |
| Replace central station A.H.U., 5400 CFM | 15 | 1.00 Ea. | \$23,424.06 | \$27,083.63 | 3.3333 | 3 | 3 | \$81,250.90 | \$81,250.90 |
| Inspect sprinkler system | 1 | 1.00 Ea. | \$34.33 | \$42.93 | 50.0000 | 50 | 50 | \$2,146.43 | \$2,146.43 |
| Replace sprinkler head | 20 | 70.00 Ea. | \$5,986.60 | \$7,363.27 | 2.5000 | 2 | 2 | \$14,726.53 | \$14,726.53 |
| Rebuild double check 3" backflow preventer sprinkler system | 1 | 1.00 Ea. | \$710.41 | \$851.09 | 50.0000 | 50 | 50 | \$42,554.69 | \$42,554.69 |
| Repair switchgear 1200 A mainframe | 5 | 1.00 Ea. | \$1,904.54 | \$2,227.57 | 10.0000 | 10 | 8 | \$22,275.75 | \$17,820.60 |
| Maintenance and inspection switchgear, mainframe | 1 | 1.00 Ea. | \$64.78 | \$81.16 | 50.0000 | 50 | 50 | \$4,057.80 | \$4,057.80 |
| Replace switchgear 1200 A mainframe | 20 | 1.00 Ea. | \$4,350.12 | \$5,225.48 | 2.5000 | 2 | 2 | \$10,450.95 | \$10,450.95 |
| Maintenance and repair motor starter, up to 600 V | 5 | 3.00 Ea. | \$838.92 | \$1,012.79 | 10.0000 | 10 | 10 | \$10,127.94 | \$10,127.94 |
| Replace starter motor starter, up to 600 V | 18 | 3.00 Ea. | \$2,415.93 | \$2,874.22 | 2.7778 | 2 | 2 | \$5,748.45 | \$5,748.45 |
| Maintenance and inspection lighting panel, indoor | 3 | 1.00 Ea. | \$40.64 | \$50.92 | 16.6667 | 16 | 16 | \$814.74 | \$814.74 |
| Repair failed breaker, molded case, 600 V, 3 pole | 10 | 1.00 Ea. | \$372.07 | \$442.63 | 5.0000 | 5 | 5 | \$2,213.16 | \$2,213.16 |
| Maintenance and inspection circuit breaker, molded case, 600 V, 3 pole | 0.33 | 1.00 Ea. | \$32.39 | \$40.58 | 151.5152 | 151 | 151 | \$6,127.29 | \$6,127.29 |
| Replace circuit breaker molded case, 600 V, 3 pole circuit breaker | 50 | 1.00 Ea. | \$5,188.92 | \$5,939.49 | 1.0000 | 1 | 1 | \$5,939.49 | \$5,939.49 |
| Maintenance and repair receptacles and plugs | 20 | 36.00 Ea. | \$1,520.76 | \$1,898.59 | 2.5000 | 2 | 2 | \$3,797.18 | \$3,797.18 |
| Replace receptacle/plug receptacles and plugs | 20 | 36.00 Ea. | \$2,590.40 | \$3,193.08 | 2.5000 | 2 | 2 | \$6,386.16 | \$6,386.16 |
| Maintenance and repair wiring devices, switches | 10 | 28.00 Ea. | \$1,182.82 | \$1,476.68 | 5.0000 | 5 | 5 | \$7,383.41 | \$7,383.41 |
| Maintenance and repair incandescent lighting fixtures | 10 | 7.00 Ea. | \$482.06 | \$573.90 | 5.0000 | 5 | 5 | \$2,869.48 | \$2,869.48 |
| Replace fluorescent light fixture ballast, 80 W | 10 | 67.00 Ea. | \$8,352.79 | \$10,132.89 | 5.0000 | 5 | 5 | \$50,664.47 | \$50,664.47 |
| Replace lamps (2 lamps), 4', 34 W energy saver | 10 | 67.00 Ea. | \$1,689.34 | \$2,115.79 | 5.0000 | 5 | 5 | \$10,578.94 | \$10,578.94 |
| Repair smoke detector | 10 | 18.00 Ea. | \$1,014.98 | \$1,254.85 | 5.0000 | 5 | 4 | \$6,274.27 | \$5,019.41 |
| Check operation smoke detector | 1 | 18.00 Ea. | \$291.50 | \$365.20 | 50.0000 | 50 | 50 | \$18,260.12 | \$18,260.12 |
| Replace smoke detector | 15 | 18.00 Ea. | \$5,116.27 | \$6,110.31 | 3.3333 | 3 | 3 | \$18,330.94 | \$18,330.94 |
| Check and repair manual pull station | 10 | 2.00 Ea. | \$175.39 | \$215.66 | 5.0000 | 5 | 4 | \$1,078.30 | \$862.64 |
| Replace manual pull station | 15 | 2.00 Ea. | \$406.94 | \$489.88 | 3.3333 | 3 | 3 | \$1,469.65 | \$1,469.65 |
| Replace fire alarm bell, 6" | 20 | 3.00 Ea. | \$584.89 | \$705.83 | 2.5000 | 2 | 2 | \$1,411.65 | \$1,411.65 |
| Replace EMS, Three Phase, 5 Meters | 15 | 1.00 Ea. | \$15,802.46 | \$18,399.79 | 3.3333 | 3 | 3 | \$55,199.37 | \$55,199.37 |
| Replace EMS, Mech, BTU, 3 Meters, 3 Duct Sensors, 3 Space Sensors | 20 | 1.00 Ea. | \$17,137.72 | \$20,030.68 | 2.5000 | 2 | 2 | \$40,061.35 | \$40,061.35 |
| Maintenance and repair of general wiring lightning protection system | 1 | 1.00 M.L.F. | \$96.72 | \$119.83 | 50.0000 | 50 | 50 | \$5,991.33 | \$5,991.33 |
| Maintenance and repair lightning ground rod | 1 | 4.00 Ea. | \$351.56 | \$439.15 | 50.0000 | 50 | 50 | \$21,957.43 | \$21,957.43 |

| Description | Frequency | Qty Unit | Total In-House | Total Incl OP | Design Life/Frequency | Occurrences in Design Life | Adjusted Occurrences | Life Cost | Adjusted Cost |
|--|-----------|--------------|----------------|---------------|-----------------------|----------------------------|----------------------|-------------|---------------|
| Repair 8" concrete block wall, 1st floor | 25 | 322.50 S.F. | \$7,809.28 | \$9,553.49 | 2.0000 | 2 | 2 | \$19,106.98 | \$19,106.98 |
| Replace 8" concrete block wall, 1st floor | 60 | 32.25 C.S.F. | \$38,243.81 | \$46,218.37 | 0.8333 | 0 | 0 | \$0.00 | \$0.00 |
| Replace 8" concrete block wall, 2nd floor | 60 | 29.88 C.S.F. | \$37,838.97 | \$45,802.47 | 0.8333 | 0 | 0 | \$0.00 | \$0.00 |
| Repair clay brick wall, 1st floor | 25 | 700.00 S.F. | \$30,083.63 | \$36,921.13 | 2.0000 | 2 | 2 | \$73,842.25 | \$73,842.25 |
| Replace clay brick wall, 2nd floor | 75 | 7.00 C.S.F. | \$15,815.69 | \$19,242.96 | 0.6667 | 0 | 0 | \$0.00 | \$0.00 |
| Replace glass - 1st floor (1% of glass) - alum. window fixed | 1 | 6.00 S.F. | \$72.35 | \$85.03 | 50.0000 | 50 | 50 | \$4,251.48 | \$4,251.48 |
| Repair 2'-0" x 3'-0" aluminum window - 1st floor | 20 | 10.00 Ea. | \$1,447.37 | \$1,726.09 | 2.5000 | 2 | 2 | \$3,452.18 | \$3,452.18 |
| Replace 2'-0" x 3'-0" aluminum window - 1st floor | 50 | 36.00 Ea. | \$17,572.74 | \$20,826.87 | 1.0000 | 1 | 1 | \$20,826.87 | \$20,826.87 |
| Replace glass - 2nd floor (1% of glass) - alum. window fixed | 1 | 0.72 S.F. | \$76.46 | \$94.37 | 50.0000 | 50 | 50 | \$4,718.54 | \$4,718.54 |
| Repair 2'-0" x 3'-0" aluminum window - 2nd floor | 20 | 10.00 Ea. | \$1,913.19 | \$2,304.56 | 2.5000 | 2 | 2 | \$4,609.12 | \$4,609.12 |
| Replace 2'-0" x 3'-0" aluminum window - 2nd floor | 50 | 36.00 Ea. | \$19,249.72 | \$22,909.36 | 1.0000 | 1 | 1 | \$22,909.36 | \$22,909.36 |
| Repair steel, painted, door | 14 | 4.00 Ea. | \$2,500.30 | \$2,976.02 | 3.5714 | 3 | 3 | \$8,928.07 | \$8,928.07 |
| Refinish 3'-0" x 7'-0" steel, painted, door | 4 | 4.00 Ea. | \$165.60 | \$203.46 | 12.5000 | 12 | 12 | \$2,441.58 | \$2,441.58 |
| Replace 3'-0" x 7'-0" steel, painted, door | 45 | 4.00 Ea. | \$2,820.26 | \$3,278.92 | 1.1111 | 1 | 1 | \$3,278.92 | \$3,278.92 |
| Non - destructive moisture inspection, thermosetting | 5 | 4.20 M.S.F. | \$490.79 | \$598.62 | 10.0000 | 10 | 10 | \$5,986.21 | \$5,986.21 |
| Minor membrane repairs, 2% of roof area, thermoset | 1 | 4.20 Sq. | \$1,425.44 | \$1,697.58 | 50.0000 | 50 | 50 | \$84,878.87 | \$84,878.87 |
| Total EPDM roof replacement | 25 | 42.00 Sq. | \$25,387.11 | \$30,113.76 | 2.0000 | 2 | 2 | \$60,227.52 | \$60,227.52 |
| Repair steel painted interior door | 14 | 0.40 Ea. | \$117.38 | \$136.63 | 3.5714 | 3 | 3 | \$409.88 | \$409.88 |
| Refinish 3'-0" x 7'-0" steel painted interior door | 4 | 4.00 Ea. | \$210.34 | \$259.15 | 12.5000 | 12 | 12 | \$3,109.74 | \$3,109.74 |
| Replace 3'-0" x 7'-0" steel painted interior door | 60 | 4.00 Ea. | \$4,872.14 | \$5,648.33 | 0.8333 | 0 | 0 | \$0.00 | \$0.00 |
| Repair solid core wood door, interior | 11 | 4.80 Ea. | \$1,408.57 | \$1,639.51 | 4.5455 | 4 | 4 | \$6,558.03 | \$6,558.03 |
| Refinish 3'-0" x 7'-0" solid core wood door, interior | 4 | 48.00 Ea. | \$2,081.51 | \$2,555.98 | 12.5000 | 12 | 11 | \$30,671.81 | \$28,115.83 |
| Replace 3'-0" x 7'-0" solid core wood door, interior | 40 | 48.00 Ea. | \$23,492.51 | \$27,158.89 | 1.2500 | 1 | 1 | \$27,158.89 | \$27,158.89 |
| Repair concrete steps | 15 | 3.30 S.F. | \$75.41 | \$87.29 | 3.3333 | 3 | 3 | \$261.86 | \$261.86 |
| Replace concrete steps | 100 | 33.00 S.F. | \$1,764.14 | \$2,151.34 | 0.5000 | 0 | 0 | \$0.00 | \$0.00 |
| Replace metal stair railing, interior | 45 | 37.00 L.F. | \$1,589.36 | \$1,860.35 | 1.1111 | 1 | 1 | \$1,860.35 | \$1,860.35 |
| Repair 5/8" drywall - (2% of walls) | 20 | 369.50 S.F. | \$619.04 | \$753.22 | 2.5000 | 2 | 2 | \$1,506.44 | \$1,506.44 |
| Refinish drywall | 4 | 1.00 S.F. | \$0.62 | \$0.76 | 12.5000 | 12 | 12 | \$9.17 | \$9.17 |
| Replace 5/8" drywall | 75 | 1.00 S.F. | \$2.33 | \$2.85 | 0.6667 | 0 | 0 | \$0.00 | \$0.00 |
| Refinish concrete floor finished | 25 | 23.88 C.S.F. | \$10,073.24 | \$12,099.52 | 2.0000 | 2 | 2 | \$24,199.05 | \$24,199.05 |
| Replace vinyl tile flooring | 18 | 31.33 S.Y. | \$1,547.81 | \$1,900.79 | 2.7778 | 2 | 2 | \$3,801.58 | \$3,801.58 |
| Terrazzo floor repairs - (2% of floors) | 15 | 12.18 S.F. | \$198.10 | \$237.22 | 3.3333 | 3 | 3 | \$711.65 | \$711.65 |
| Replace terrazzo floor | 75 | 6.09 C.S.F. | \$9,476.33 | \$11,315.29 | 0.6667 | 0 | 0 | \$0.00 | \$0.00 |
| Repair gypsum board ceiling - (2% of ceilings) | 20 | 0.12 C.S.F. | \$41.65 | \$51.13 | 2.5000 | 2 | 2 | \$102.26 | \$102.26 |
| Refinish gypsum board ceiling, up to 12' high | 20 | 5.75 C.S.F. | \$742.29 | \$917.60 | 2.5000 | 2 | 2 | \$1,835.21 | \$1,835.21 |

| Description | Frequency | Qty Unit | Total In-House | Total Incl OP | Design Life/Frequency | Occurrences in Design Life | Adjusted Occurrences | Life Cost | Adjusted Cost |
|--|-----------|----------|----------------|---------------|-----------------------|----------------------------|----------------------|----------------|----------------|
| Replace flush valve diaphragm tankless water closet | 10 | 8.00 Ea. | \$209.76 | \$260.29 | 5.0000 | 5 | 5 | \$1,301.43 | \$1,301.43 |
| Rebuild flush valve tankless water closet | 20 | 8.00 Ea. | \$1,443.47 | \$1,739.66 | 2.5000 | 2 | 2 | \$3,479.31 | \$3,479.31 |
| Unplug clogged line tankless water closet | 5 | 8.00 Ea. | \$1,747.16 | \$2,185.01 | 10.0000 | 10 | 10 | \$21,850.15 | \$21,850.15 |
| Replace tankless water closet | 35 | 8.00 Ea. | \$10,289.77 | \$11,907.96 | 1.4286 | 1 | 1 | \$11,907.96 | \$11,907.96 |
| Replace tankless flush valve | 25 | 8.00 Ea. | \$2,017.72 | \$2,368.88 | 2.0000 | 2 | 2 | \$4,737.77 | \$4,737.77 |
| Replace wax ring gasket for tankless water closet | 5 | 8.00 Ea. | \$1,132.15 | \$1,414.61 | 10.0000 | 10 | 10 | \$14,146.12 | \$14,146.12 |
| Replace flush valve diaphragm for a urinal | 7 | 4.00 Ea. | \$104.88 | \$130.14 | 7.1429 | 7 | 7 | \$911.00 | \$911.00 |
| Rebuild flush valve for a urinal | 20 | 4.00 Ea. | \$721.74 | \$869.83 | 2.5000 | 2 | 2 | \$1,739.66 | \$1,739.66 |
| Unplug line urinal | 5 | 4.00 Ea. | \$580.29 | \$725.71 | 10.0000 | 10 | 10 | \$7,257.12 | \$7,257.12 |
| Replace wall-hung urinal | 35 | 4.00 Ea. | \$3,875.45 | \$4,676.42 | 1.4286 | 1 | 1 | \$4,676.42 | \$4,676.42 |
| Replace washer in spud connection lavatory, vitreous china | 7 | 8.00 Ea. | \$131.70 | \$160.64 | 7.1429 | 7 | 7 | \$1,124.48 | \$1,124.48 |
| | | | \$591,054.18 | \$698,868.14 | | | | MR Subtotal | \$1,713,480.91 |
| | | | | | | | | MR Per Year | \$34,174.00 |
| | | | | | | | | PM Total | \$11,576.82 |
| | | | | | | | | Subtotal | \$45,750.82 |
| | | | | | | | | Total Per Unit | \$5.48 |

FAC 1402 AIR DEFENSE OPERATIONS BUILDING

SUC \$5.48

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 8354.0

| Description | Qty | Labor Hours | Bare Mat | Bare Labor | Bare Equip | Bare Total | Total In-House | Total Incl OP |
|--|------|-------------|----------|------------|------------|------------|----------------|---------------|
| Extinguishing system, wet pipe, annualized | 1.00 | 11.34 | \$68.24 | \$678.37 | \$0.00 | \$746.61 | \$956.95 | \$1,170.70 |
| Circuit breaker, high voltage air, annualized | 1.00 | 0.47 | \$15.16 | \$31.08 | \$0.00 | \$46.24 | \$57.08 | \$68.67 |
| Panelboard, 225 A and above, annualized | 2.00 | 0.88 | \$46.39 | \$58.02 | \$0.00 | \$104.41 | \$126.46 | \$150.82 |
| Motor control center, over 400 A, annualized | 1.00 | 0.39 | \$23.20 | \$25.90 | \$0.00 | \$49.10 | \$59.19 | \$70.44 |
| Power stablizer, annualized | 1.00 | 0.62 | \$9.28 | \$36.78 | \$0.00 | \$46.06 | \$58.02 | \$70.44 |
| Uninterrupted power system, up to 200 KVA, annualized | 1.00 | 22.92 | \$280.43 | \$1,346.80 | \$0.00 | \$1,627.23 | \$2,059.32 | \$2,505.42 |
| Extinguishing system, FM200, annualized | 1.00 | 9.26 | \$611.65 | \$462.52 | \$0.00 | \$1,074.18 | \$1,274.10 | \$1,504.61 |
| Light, emergency, hardwired system, annualized | 8.00 | 2.00 | \$61.86 | \$118.10 | \$0.00 | \$179.96 | \$221.58 | \$266.29 |
| Door, emergency egress, swinging, annualized | 4.00 | 1.04 | \$58.37 | \$43.00 | \$0.00 | \$101.37 | \$120.10 | \$141.76 |
| Urinals, annualized | 4.00 | 0.91 | \$25.27 | \$45.81 | \$0.00 | \$71.09 | \$87.36 | \$104.89 |
| Toilet (vacuum breaker type), annualized | 6.00 | 1.06 | \$50.65 | \$53.39 | \$0.00 | \$104.04 | \$125.12 | \$148.74 |
| Lavatories, annualized | 4.00 | 1.39 | \$23.86 | \$82.81 | \$0.00 | \$106.67 | \$133.90 | \$162.33 |
| Drink fountain, annualized | 3.00 | 1.86 | \$62.18 | \$93.83 | \$0.00 | \$156.00 | \$190.37 | \$227.84 |
| Boiler, hot water, oil, gas, or comb. fired, 120 - 500 MBH, annualized | 1.00 | 15.88 | \$77.34 | \$947.08 | \$0.00 | \$1,024.42 | \$1,316.27 | \$1,612.00 |
| Air handling unit, 3 thru 24 tons, annualized | 2.00 | 4.12 | \$448.88 | \$207.92 | \$0.00 | \$656.80 | \$764.06 | \$893.77 |
| Air handling unit, computer room, annualized | 1.00 | 3.42 | \$127.39 | \$171.79 | \$0.00 | \$299.18 | \$363.46 | \$434.10 |
| VAV Boxes, annualized | 8.00 | 7.47 | \$76.84 | \$451.07 | \$0.00 | \$527.91 | \$670.91 | \$817.76 |
| Package unit, air cooled, 3 thru 24 ton, annualized | 2.00 | 4.79 | \$353.85 | \$288.97 | \$0.00 | \$642.82 | \$764.89 | \$904.66 |
| Controls, central system, electro/pneumatic, annually | 1.00 | 1.92 | \$70.77 | \$115.41 | \$0.00 | \$186.18 | \$227.88 | \$273.12 |
| Backflow prevention device, up to 4", annualized | 1.00 | 0.33 | \$13.40 | \$19.82 | \$0.00 | \$33.22 | \$40.50 | \$48.46 |
| | | | | | | \$7,783.48 | \$9,617.52 | \$11,576.82 |

FAC 1402 AIR DEFENSE OPERATIONS BUILDING

Modeled Component List CostWorks Release 2021 Qtr 3

D20 Plumbing

| | |
|------------------------------------|---------|
| Lavatory, Vitreous China | 8.0 Ea. |
| Sink, Iron Enamel | 1.0 Ea. |
| Drinking Fountain | 3.0 Ea. |
| Water Heater, Electric, 120 Gallon | 1.0 Ea. |
| Circulation Pump, 1/12 HP | 1.0 Ea. |
| Drain: Roof, Scupper, Area | 2.0 Ea. |
| Tankless Water Closet | 8.0 Ea. |
| Urinal | 4.0 Ea. |

D30 HVAC

| | |
|--|----------|
| Boiler, Gas, 250 MBH | 2.0 Ea. |
| Computer Room A/C Units, Air Cooled, 5 ton | 1.0 Ea. |
| Single Zone Air Conditioner, 25 ton | 1.0 Ea. |
| Central Station Air Conditioning Air Handling Unit, 5400 CFM | 1.0 Ea. |
| VAV Box | 8.0 Each |

D40 Fire Protection

| | |
|---|----------|
| Sprinkler System, Fire Supression, sprinkler head | 70.0 Ea. |
| Sprinkler System, Fire Supression , 3" backflow preventer | 1.0 Ea. |
| Extinguishing system, FM200 | 1.0 Each |

D50 Electrical

| | |
|--|----------|
| Switchgear, Mainframe | 1.0 Ea. |
| Motor Starter, Up To 600 V | 3.0 Ea. |
| Load Center, 100 A, maintenance & inspection | 1.0 Ea. |
| Circuit Breaker, molded case, 600 V, 3 pole | 1.0 Ea. |
| Smoke Detector | 18.0 Ea. |
| Manual Pull Station | 2.0 Ea. |
| Fire Alarm Bell | 3.0 Ea. |
| UPS, up to 200 KVA, annualized | 1.0 Each |

B20 Exterior Enclosure

| | |
|-----------------------------------|--------------|
| Concrete Block, 1st floor | 32.25 C.S.F. |
| Concrete Block, 2nd floor | 29.88 C.S.F. |
| Aluminum Window, Fixed, 1st floor | 36.0 Ea. |
| Aluminum Window, Fixed, 2nd floor | 36.0 Ea. |
| Steel, Painted | 4.0 Ea. |

B30 Roofing

| | |
|-----------|----------|
| EPDM Roof | 42.0 Sq. |
|-----------|----------|

C10 Interior Construction

| | |
|------------------------------|----------|
| Steel Painted Interior Doors | 4.0 Ea. |
| Solid Core Interior Doors | 48.0 Ea. |

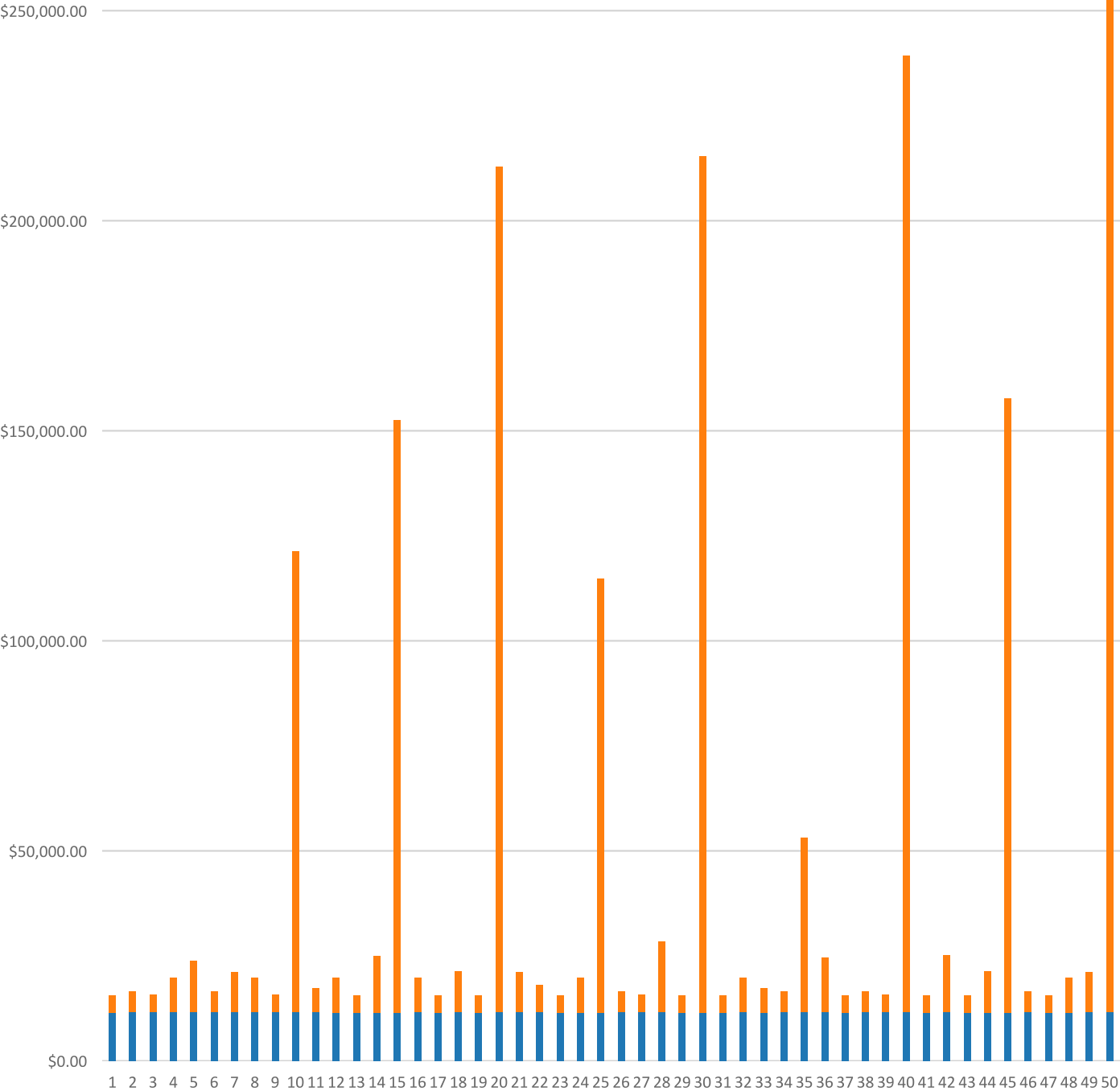
C20 Stairs

| | |
|------------------------------|-----------|
| Concrete Steps | 33.0 S.F. |
| Metal Interior Stair Railing | 37.0 L.F. |

C30 Interior Finishes

| | |
|--------------------|--------------|
| Drywall | 1.0 S.F. |
| Concrete, Finished | 23.88 C.S.F. |
| Vinyl | 31.33 S.Y. |
| Terrazzo | 6.09 C.S.F. |

FAC 1402 AIR DEFENSE OPERATIONS BUILDING
Sustainment by Year
CostWorks Release 2021 Qtr 3



PM Cost
MR Cost