

FAC 1722 PHYSIOLOGICAL TRAINING FACILITY

FY22 SUC: \$4.54 / SF
Source: Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 1722 PHYSIOLOGICAL TRAINING FACILITY

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 50
Average Size 8365.0

SUC \$4.54

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
Repair 8" concrete block wall, 1st floor	25	400.00 S.F.	\$9,685.93	\$11,849.29	2.0000	2	2	\$23,698.58	\$23,698.58
Refinish steel siding - 2nd floor	20	400.00 C.S.F.	\$112,310.55	\$138,984.41	2.5000	2	2	\$277,968.82	\$277,968.82
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	46.00 Ea.	\$6,657.89	\$7,940.01	2.5000	2	2	\$15,880.02	\$15,880.02
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	46.00 Ea.	\$22,454.06	\$26,612.11	1.0000	1	1	\$26,612.11	\$26,612.11
Repair steel, painted, door	14	1.00 Ea.	\$625.07	\$744.01	3.5714	3	3	\$2,232.02	\$2,232.02
Refinish 3'-0" x 7'-0" steel, painted, door	4	2.00 Ea.	\$82.80	\$101.73	12.5000	12	12	\$1,220.79	\$1,220.79
Replace 3'-0" x 7'-0" steel, painted, door	45	2.00 Ea.	\$1,410.13	\$1,639.46	1.1111	1	1	\$1,639.46	\$1,639.46
Replace tempered glass - (3% of glass) steel painted door	1	3.10 S.F.	\$70.05	\$83.70	50.0000	50	50	\$4,185.13	\$4,185.13
Prepare and refinish 3'-0" x 7'-0" steel painted. door	4	1.00 Ea.	\$80.08	\$99.00	12.5000	12	12	\$1,188.02	\$1,188.02
Replace 3'-0" x 7'-0" steel, with wire glass, door	45	1.00 Ea.	\$1,164.36	\$1,359.11	1.1111	1	1	\$1,359.11	\$1,359.11
Minor metal roof finish repairs, 2% of roof area, metal panel roofing	5	172.86 S.F.	\$603.82	\$724.45	10.0000	10	10	\$7,244.50	\$7,244.50
Metal roof flashing replacement, 2 SF/sq repaired, metal panel roofing	1	4.86 S.F.	\$88.94	\$107.76	50.0000	50	50	\$5,387.91	\$5,387.91
Minor metal roof panel replacement, 2.5% of roof area	20	216.07 S.F.	\$2,469.22	\$2,932.59	2.5000	2	2	\$5,865.17	\$5,865.17
Total metal roof panel replacement	30	86.43 Sq.	\$73,046.02	\$86,517.83	1.6667	1	1	\$86,517.83	\$86,517.83
Repair 8" concrete block wall - (2% of walls) painted	25	1.60 C.S.F.	\$1,743.45	\$2,093.37	2.0000	2	2	\$4,186.74	\$4,186.74
Repair steel painted interior door	14	3.00 Ea.	\$880.36	\$1,024.69	3.5714	3	3	\$3,074.08	\$3,074.08
Refinish 3'-0" x 7'-0" steel painted interior door	4	3.00 Ea.	\$157.76	\$194.36	12.5000	12	12	\$2,332.31	\$2,332.31
Replace 3'-0" x 7'-0" steel painted interior door	60	3.00 Ea.	\$3,654.10	\$4,236.25	0.8333	0	0	\$0.00	\$0.00
Repair solid core wood door, interior	11	20.00 Ea.	\$5,869.05	\$6,831.28	4.5455	4	4	\$27,325.12	\$27,325.12
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	20.00 Ea.	\$867.29	\$1,064.99	12.5000	12	11	\$12,779.92	\$11,714.93
Replace 3'-0" x 7'-0" solid core wood door, interior	40	20.00 Ea.	\$9,788.55	\$11,316.20	1.2500	1	1	\$11,316.20	\$11,316.20
Repair 5/8" drywall - (2% of walls)	20	186.11 S.F.	\$311.80	\$379.38	2.5000	2	2	\$758.77	\$758.77
Repair 4" x 4" thin set ceramic tile - (2% of walls)	10	0.08 C.S.F.	\$65.68	\$79.14	5.0000	5	5	\$395.70	\$395.70
Replace 4" x 4" thin set ceramic tile	75	4.00 C.S.F.	\$3,549.24	\$4,288.31	0.6667	0	0	\$0.00	\$0.00
Replace vinyl tile flooring	18	35.00 S.Y.	\$1,729.12	\$2,123.45	2.7778	2	2	\$4,246.90	\$4,246.90
Terrazzo floor repairs - (2% of floors)	15	6.10 S.F.	\$99.21	\$118.80	3.3333	3	3	\$356.41	\$356.41
Repair gypsum board ceiling - (2% of ceilings)	20	0.11 C.S.F.	\$39.84	\$48.91	2.5000	2	2	\$97.82	\$97.82

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Refinish gypsum board ceiling, up to 12' high	20	5.59 C.S.F.	\$721.64	\$892.07	2.5000	2	1	\$1,784.14	\$892.07
Replace gypsum board ceiling, up to 12' high	40	5.59 C.S.F.	\$2,075.56	\$2,548.78	1.2500	1	1	\$2,548.78	\$2,548.78
Acoustic tile repairs - (2% of ceilings)	9	0.61 C.S.F.	\$553.70	\$643.50	5.5556	5	5	\$3,217.51	\$3,217.51
Replace flush valve diaphragm tankless water closet	10	4.00 Ea.	\$104.88	\$130.14	5.0000	5	5	\$650.72	\$650.72
Rebuild flush valve tankless water closet	20	4.00 Ea.	\$721.74	\$869.83	2.5000	2	2	\$1,739.66	\$1,739.66
Unplug clogged line tankless water closet	5	4.00 Ea.	\$873.58	\$1,092.51	10.0000	10	10	\$10,925.07	\$10,925.07
Replace tankless water closet	35	4.00 Ea.	\$5,144.88	\$5,953.98	1.4286	1	1	\$5,953.98	\$5,953.98
Replace tankless flush valve	25	4.00 Ea.	\$1,008.86	\$1,184.44	2.0000	2	2	\$2,368.88	\$2,368.88
Replace wax ring gasket for tankless water closet	5	4.00 Ea.	\$566.08	\$707.31	10.0000	10	10	\$7,073.06	\$7,073.06
Replace flush valve diaphragm for a urinal	7	2.00 Ea.	\$52.44	\$65.07	7.1429	7	7	\$455.50	\$455.50
Rebuild flush valve for a urinal	20	2.00 Ea.	\$360.87	\$434.91	2.5000	2	2	\$869.83	\$869.83
Unplug line urinal	5	2.00 Ea.	\$290.14	\$362.86	10.0000	10	10	\$3,628.56	\$3,628.56
Replace wall-hung urinal	35	2.00 Ea.	\$1,937.73	\$2,338.21	1.4286	1	1	\$2,338.21	\$2,338.21
Replace washer in spud connection lavatory, vitreous china	7	4.00 Ea.	\$65.85	\$80.32	7.1429	7	7	\$562.24	\$562.24
Replace washer in faucet lavatory, vitreous china	2	4.00 Ea.	\$51.54	\$64.21	25.0000	25	25	\$1,605.18	\$1,605.18
Replace faucets lavatory, vitreous china	10	4.00 Ea.	\$726.90	\$875.02	5.0000	5	5	\$4,375.11	\$4,375.11
Clean out strainer and P trap lavatory, vitreous china	2	4.00 Ea.	\$139.48	\$174.43	25.0000	25	25	\$4,360.79	\$4,360.79
Replace lavatory, vitreous china	35	4.00 Ea.	\$2,690.30	\$3,232.88	1.4286	1	1	\$3,232.88	\$3,232.88
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	2.00 Ea.	\$97.76	\$122.27	50.0000	50	50	\$6,113.26	\$6,113.26
Repair internal leaks drinking fountain	4	2.00 Ea.	\$90.16	\$112.76	12.5000	12	12	\$1,353.07	\$1,353.07
Correct water pressure drinking fountain	2	2.00 Ea.	\$83.64	\$104.60	25.0000	25	25	\$2,615.12	\$2,615.12
Replace refrigerant drinking fountain	2	2.00 Ea.	\$65.37	\$76.54	25.0000	25	25	\$1,913.46	\$1,913.46
Repair drain leak drinking fountain	4	2.00 Ea.	\$67.83	\$81.07	12.5000	12	10	\$972.83	\$810.69
Replace fountain drinking fountain	10	2.00 Ea.	\$2,562.31	\$3,029.12	5.0000	5	5	\$15,145.59	\$15,145.59
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
Unclog floor drain, PVC	20	1.00 Ea.	\$47.80	\$59.77	2.5000	2	2	\$119.55	\$119.55

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
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	1.00 Ea.	\$2,031.05	\$2,390.45	7.1429	7	7	\$16,733.15	\$16,733.15
Replace boiler, gas, 250 MBH	30	1.00 Ea.	\$9,398.04	\$11,210.13	1.6667	1	1	\$11,210.13	\$11,210.13
Replace fan & motor, propeller exhaust, 1000 CFM exhaust fan	15	2.00 Ea.	\$1,708.75	\$2,014.11	3.3333	3	3	\$6,042.32	\$6,042.32
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	1.00 Ea.	\$3,939.83	\$4,573.41	2.5000	2	2	\$9,146.83	\$9,146.83
Repair circulator pump, 1/12 - 3/4 H.P.	5	1.00 Ea.	\$98.13	\$115.73	10.0000	10	7	\$1,157.31	\$810.12
Replace emergency lighting fixture	20	5.00 Ea.	\$3,011.84	\$3,548.81	2.5000	2	2	\$7,097.61	\$7,097.61
Maintenance and repair exit light	20	5.00 Ea.	\$186.01	\$230.02	2.5000	2	2	\$460.03	\$460.03
Replace lamp exit light	5	5.00 Ea.	\$84.23	\$99.82	10.0000	10	10	\$998.17	\$998.17
Replace lighting fixture exit light	20	5.00 Ea.	\$955.17	\$1,148.80	2.5000	2	2	\$2,297.61	\$2,297.61
Replace circulator pump, 1/12 - 3/4 H.P.	15	1.00 Ea.	\$3,822.30	\$4,402.23	3.3333	3	3	\$13,206.68	\$13,206.68
Replace terminal reheat, 18" x 24" coil	15	2.00 Ea.	\$4,018.01	\$4,624.74	3.3333	3	3	\$13,874.23	\$13,874.23
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
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., 16,000 CFM	10	1.00 Ea.	\$1,502.82	\$1,746.04	5.0000	5	4	\$8,730.18	\$6,984.14
Replace central station A.H.U., 16,000 CFM	15	1.00 Ea.	\$66,939.65	\$77,045.08	3.3333	3	3	\$231,135.23	\$231,135.23
Rebuild 4" diameter reduced pressure backflow preventer	10	1.00 Ea.	\$664.67	\$779.78	5.0000	5	5	\$3,898.92	\$3,898.92
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	51.00 Ea.	\$4,361.66	\$5,364.66	2.5000	2	2	\$10,729.33	\$10,729.33
Maintenance and repair motor starter, up to 600 V	5	4.00 Ea.	\$1,118.56	\$1,350.39	10.0000	10	10	\$13,503.92	\$13,503.92
Maintenance and inspection motor starter, up to 600 V	0.5	4.00 Ea.	\$215.92	\$270.52	100.0000	100	100	\$27,052.03	\$27,052.03
Replace starter motor starter, up to 600 V	18	4.00 Ea.	\$3,221.24	\$3,832.30	2.7778	2	2	\$7,664.59	\$7,664.59
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$40.64	\$50.92	16.6667	16	16	\$814.74	\$814.74
Maintenance and repair incandescent lighting fixtures	10	4.00 Ea.	\$275.46	\$327.94	5.0000	5	3	\$1,639.70	\$983.82
Replace incandescent lighting fixture lamp	5	4.00 Ea.	\$45.93	\$55.47	10.0000	10	10	\$554.71	\$554.71
Replace incandescent lighting fixture	20	4.00 Ea.	\$561.84	\$679.06	2.5000	2	2	\$1,358.13	\$1,358.13
Replace fluorescent light fixture ballast, 80 W	10	100.00 Ea.	\$12,466.84	\$15,123.72	5.0000	5	3	\$75,618.62	\$45,371.17
Replace lamps (2 lamps), 4', 34 W energy saver	10	100.00 Ea.	\$2,521.40	\$3,157.89	5.0000	5	5	\$15,789.47	\$15,789.47
Replace fluorescent fixture, lay-in, recess mtd, 2' x 4', two 40 W	20	100.00 Ea.	\$22,743.70	\$27,741.52	2.5000	2	2	\$55,483.03	\$55,483.03
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	4.00 Ea.	\$350.79	\$431.32	5.0000	5	4	\$2,156.61	\$1,725.28

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Replace manual pull station	15	4.00 Ea.	\$813.87	\$979.76	3.3333	3	3	\$2,939.29	\$2,939.29	
Replace fire alarm bell, 6"	20	4.00 Ea.	\$779.85	\$941.10	2.5000	2	2	\$1,882.20	\$1,882.20	
Replace lamp emergency lighting fixture	2	5.00 Ea.	\$273.45	\$329.38	25.0000	25	25	\$8,234.46	\$8,234.46	
			\$551,413.71	\$655,359.42				MR Subtotal	\$1,633,680.43	
									MR Per Year	\$32,625.80
									PM Total	\$5,338.89
									Subtotal	\$37,964.69
									Total Per Unit	\$4.54

FAC 1722 PHYSIOLOGICAL TRAINING FACILITY

SUC \$4.54

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 8365.0

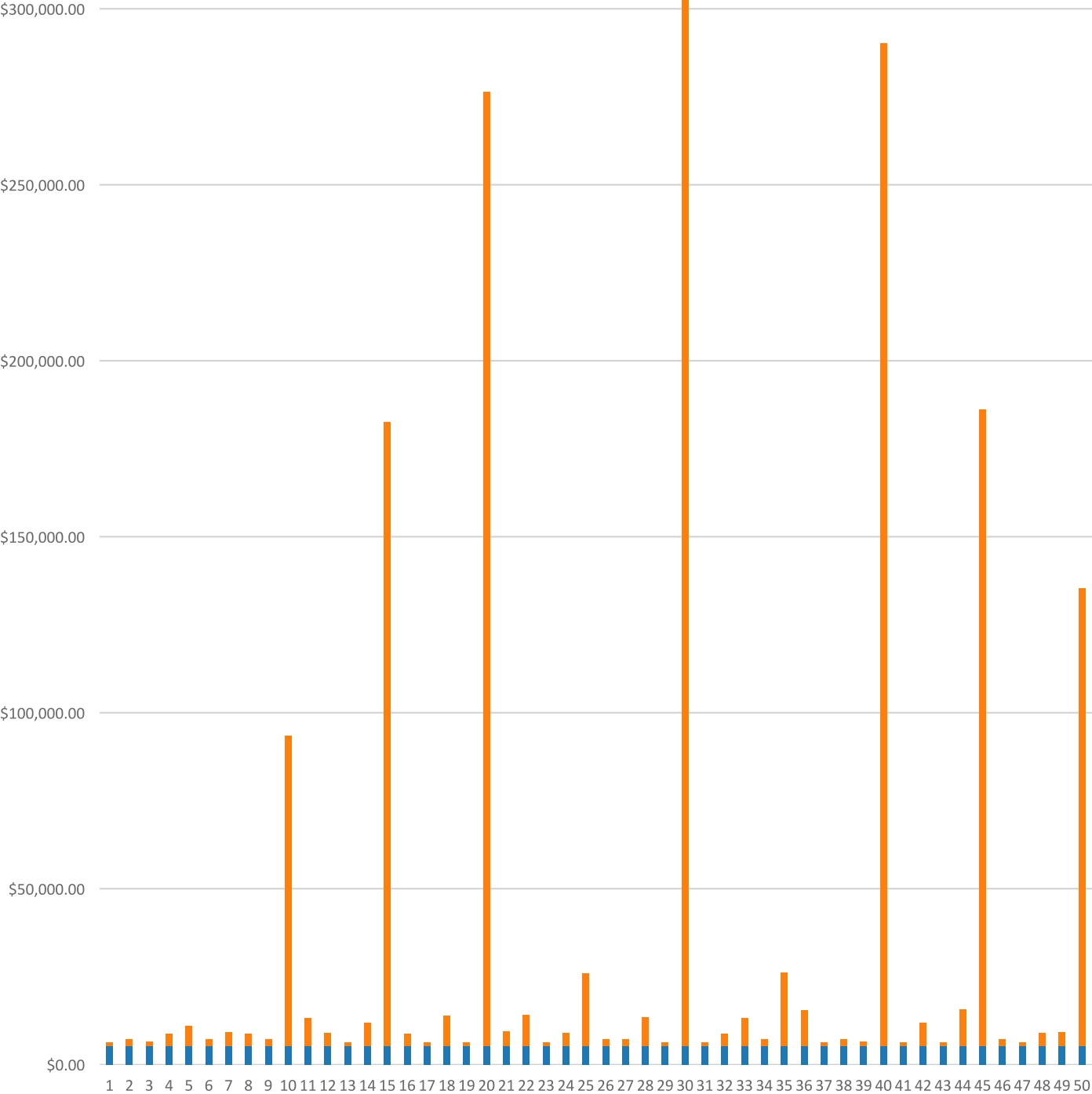
Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Package unit, air cooled, 3 thru 24 ton, annualized	1.00	2.40	\$176.92	\$144.48	\$0.00	\$321.41	\$382.45	\$452.33
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Panelboard, 225 A and above, annualized	3.00	1.32	\$69.59	\$87.02	\$0.00	\$156.62	\$189.68	\$226.23
Door, emergency egress, swinging, annualized	2.00	0.52	\$29.18	\$21.50	\$0.00	\$50.68	\$60.05	\$70.88
Fire doors, swinging, annualized	2.00	0.78	\$28.64	\$29.12	\$0.00	\$57.76	\$69.36	\$82.39
Urinals, annualized	3.00	0.68	\$18.96	\$34.36	\$0.00	\$53.32	\$65.52	\$78.67
Toilet (vacuum breaker type), annualized	4.00	0.71	\$33.77	\$35.59	\$0.00	\$69.36	\$83.41	\$99.16
Lavatories, annualized	4.00	1.39	\$23.86	\$82.81	\$0.00	\$106.67	\$133.90	\$162.33
Drink fountain, annualized	2.00	1.24	\$41.45	\$62.55	\$0.00	\$104.00	\$126.91	\$151.90
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
Fan coil unit, annualized	3.00	10.01	\$339.70	\$504.81	\$0.00	\$844.51	\$1,029.92	\$1,232.32
						\$3,535.35	\$4,414.43	\$5,338.89

FAC 1722 PHYSIOLOGICAL TRAINING FACILITY

Modeled Component List CostWorks Release 2021 Qtr 3

B20 Exterior Enclosure	
Aluminum Window, Fixed, 1st floor	46.0 Ea.
Steel, Painted	2.0 Ea.
Steel, Painted, w/ wire glass	1.0 Ea.
B30 Roofing	
Metal Steep Roofing	86.43 Sq.
C10 Interior Construction	
Steel Painted Interior Doors	3.0 Ea.
Solid Core Interior Doors	20.0 Ea.
Fire Doors, Swinging, annualized	2.0 Each
C30 Interior Finishes	
Tile	4.0 C.S.F.
Vinyl	35.0 S.Y.
Gypsum Wall Board	5.59 C.S.F.
D20 Plumbing	
Tankless Water Closet	4.0 Ea.
Urinal	2.0 Ea.
Lavatory, Vitreous China	4.0 Ea.
Sink, Iron Enamel	1.0 Ea.
Drinking Fountain	2.0 Ea.
Water Heater, Electric, 120 Gallon	1.0 Ea.
Drain: Roof, Scupper, Area	2.0 Ea.
D30 HVAC	
Boiler, Gas, 250 MBH	1.0 Ea.
Exhaust Fan, propeller exh., 4700 CFM	2.0 Ea.
Exhaust Fan, roof mounted exhaust fan, 8500 CFM exhaust	1.0 Ea.
Circulator Pump, 1/12 - 3/4 H.P.	1.0 Ea.
Terminal Reheat Coil, 18" x 24"	2.0 Ea.
Single Zone Air Conditioner, 25 ton	1.0 Ea.
Central Station Air Conditioning Air Handling Unit, 16,000 CFM	1.0 Ea.
D50 Electrical	
Emergency Lighting Fixture	5.0 Ea.
Exit Light	5.0 Ea.
Motor Starter, Up To 600 V	4.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Incandescent Lighting Fixtures	4.0 Ea.
Fluorescent Lighting Fixture	100.0 Ea.
Smoke Detector	18.0 Ea.
Manual Pull Station	4.0 Ea.
Fire Alarm Bell	4.0 Ea.
D40 Fire Protection	
Backflow Preventer	1.0 Ea.
Sprinkler System, Fire Suppression, sprinkler head	51.0 Ea.

FAC 1722 PHYSIOLOGICAL TRAINING FACILITY
Sustainment by Year
CostWorks Release 2021 Qtr 3



PM Cost
MR Cost