

FAC 1732 TRAINING AIDS SUPPORT BUILDING

FY22 SUC:	\$2.38 / SF
Source:	Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 1732 TRAINING AIDS SUPPORT BUILDING

SUC \$2.38

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.

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 40
Average Size 8075.69

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace tankless flush valve	25	2.00 Ea.	\$504.43	\$592.22	1.6000	1	1	\$592.22	\$592.22
Replace wax ring gasket for tankless water closet	5	2.00 Ea.	\$283.04	\$353.65	8.0000	8	8	\$2,829.22	\$2,829.22
Replace flush valve diaphragm for a urinal	7	2.00 Ea.	\$52.44	\$65.07	5.7143	5	5	\$325.36	\$325.36
Rebuild flush valve for a urinal	20	2.00 Ea.	\$360.87	\$434.91	2.0000	2	2	\$869.83	\$869.83
Unplug line urinal	5	2.00 Ea.	\$290.14	\$362.86	8.0000	8	8	\$2,902.85	\$2,902.85
Replace wall-hung urinal	35	2.00 Ea.	\$1,937.73	\$2,338.21	1.1429	1	1	\$2,338.21	\$2,338.21
Replace washer in spud connection lavatory, vitreous china	7	2.00 Ea.	\$32.93	\$40.16	5.7143	5	5	\$200.80	\$200.80
Replace washer in faucet lavatory, vitreous china	2	2.00 Ea.	\$25.77	\$32.10	20.0000	20	20	\$642.07	\$642.07
Replace faucets sink, iron enamel	10	1.00 Ea.	\$181.73	\$218.76	4.0000	4	4	\$875.02	\$875.02
Unstop sink, iron enamel	2	1.00 Ea.	\$41.82	\$52.30	20.0000	20	20	\$1,046.05	\$1,046.05
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	1.00 Ea.	\$636.70	\$757.51	1.1429	1	1	\$757.51	\$757.51
Check / minor repairs drinking fountain	1	1.00 Ea.	\$48.88	\$61.13	40.0000	40	40	\$2,445.30	\$2,445.30
Repair internal leaks drinking fountain	4	1.00 Ea.	\$45.08	\$56.38	10.0000	10	10	\$563.78	\$563.78
Correct water pressure drinking fountain	2	1.00 Ea.	\$41.82	\$52.30	20.0000	20	20	\$1,046.05	\$1,046.05
Replace refrigerant drinking fountain	2	1.00 Ea.	\$32.68	\$38.27	20.0000	20	20	\$765.38	\$765.38
Repair drain leak drinking fountain	4	1.00 Ea.	\$33.92	\$40.53	10.0000	10	8	\$405.35	\$324.28
Replace fountain drinking fountain	10	1.00 Ea.	\$1,281.16	\$1,514.56	4.0000	4	4	\$6,058.24	\$6,058.24
Inspect and clean spray heads, emergency eye wash	3	1.00 Ea.	\$49.39	\$61.77	13.3333	13	13	\$803.02	\$803.02
Replace eye wash station, emergency eye wash	25	1.00 Ea.	\$1,114.34	\$1,325.00	1.6000	1	1	\$1,325.00	\$1,325.00
Drain and flush water heater, electric, 120 gallon	7	1.00 Ea.	\$294.38	\$368.15	5.7143	5	5	\$1,840.77	\$1,840.77
Check operation water heater, electric, 120 gallon	3	1.00 Ea.	\$2.59	\$3.23	13.3333	13	13	\$42.03	\$42.03
Replace water heater, electric, 120 gallon	15	1.00 Ea.	\$14,632.58	\$16,736.89	2.6667	2	2	\$33,473.78	\$33,473.78
Unclog floor drain, PVC	20	1.00 Ea.	\$47.80	\$59.77	2.0000	2	2	\$119.55	\$119.55
Repair joint pipe and fittings, PVC	10	2.00 Ea.	\$302.58	\$376.00	4.0000	4	4	\$1,504.00	\$1,504.00
General maintenance & repair drain: roof, scupper, area	1	2.00 Ea.	\$73.98	\$92.51	40.0000	40	40	\$3,700.56	\$3,700.56
Replace drain: roof, scupper, area	40	2.00 Ea.	\$1,573.86	\$1,824.72	1.0000	1	1	\$1,824.72	\$1,824.72
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	1.00 Ea.	\$3,939.83	\$4,573.41	2.0000	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	8.0000	8	6	\$925.85	\$694.39
Replace circulator pump, 1/12 - 3/4 H.P.	15	1.00 Ea.	\$3,822.30	\$4,402.23	2.6667	2	2	\$8,804.46	\$8,804.46
Repair damaged pipe insulation, fiberglass 3/4"	5	4.00 Ea.	\$75.76	\$93.26	8.0000	8	8	\$746.11	\$746.11

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Repair damaged pipe insulation, fiberglass 2"	5	2.00 Ea.	\$48.01	\$58.68	8.0000	8	8	\$469.41	\$469.41
Replace pipe insulation, fiberglass 3/4"	5	0.03 M.L.F.	\$226.70	\$278.33	8.0000	8	8	\$2,226.65	\$2,226.65
Replace pipe insulation, fiberglass 2"	5	0.01 M.L.F.	\$97.98	\$119.27	8.0000	8	8	\$954.15	\$954.15
Repair single zone rooftop unit, 5 ton	10	1.00 Ea.	\$2,372.90	\$2,849.79	4.0000	4	4	\$11,399.16	\$11,399.16
Replace single zone rooftop unit, 5 ton	15	1.00 Ea.	\$8,500.58	\$10,094.10	2.6667	2	2	\$20,188.20	\$20,188.20
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	40.0000	40	40	\$1,717.15	\$1,717.15
Replace sprinkler head	20	40.00 Ea.	\$3,420.91	\$4,207.58	2.0000	2	2	\$8,415.16	\$8,415.16
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$40.64	\$50.92	13.3333	13	13	\$661.98	\$661.98
Maintenance and repair safety switch, 3 pole safety switch, heavy duty	8	1.00 Ea.	\$40.64	\$50.92	5.0000	5	5	\$254.61	\$254.61
Maintenance and inspection safety switch, 3 pole, heavy duty	1	1.00 Ea.	\$40.64	\$50.92	40.0000	40	40	\$2,036.86	\$2,036.86
Replace safety switch, heavy duty 30 A	25	1.00 Ea.	\$576.35	\$690.44	1.6000	1	1	\$690.44	\$690.44
Maintenance and repair receptacles and plugs	20	74.00 Ea.	\$3,126.01	\$3,902.66	2.0000	2	2	\$7,805.31	\$7,805.31
Maintenance and repair wiring devices, switches	10	19.00 Ea.	\$802.63	\$1,002.03	4.0000	4	4	\$4,008.13	\$4,008.13
Replace wiring devices, switches	15	19.00 Ea.	\$1,242.18	\$1,543.22	2.6667	2	2	\$3,086.43	\$3,086.43
Replace fluorescent light fixture ballast, 80 W	10	60.00 Ea.	\$7,480.11	\$9,074.23	4.0000	4	2	\$36,296.94	\$18,148.47
Replace lamps (2 lamps), 4', 34 W energy saver	10	60.00 Ea.	\$1,512.84	\$1,894.74	4.0000	4	4	\$7,578.94	\$7,578.94
Replace fluorescent fixture, lay-in, recess mtd, 2' x 4', two 40 W	20	60.00 Ea.	\$13,646.22	\$16,644.91	2.0000	2	2	\$33,289.82	\$33,289.82
Repair smoke detector	10	15.00 Ea.	\$845.81	\$1,045.71	4.0000	4	3	\$4,182.84	\$3,137.13
Check operation smoke detector	1	15.00 Ea.	\$242.91	\$304.34	40.0000	40	40	\$12,173.41	\$12,173.41
Replace smoke detector	15	15.00 Ea.	\$4,263.56	\$5,091.93	2.6667	2	2	\$10,183.86	\$10,183.86
Check and repair manual pull station	10	2.00 Ea.	\$175.39	\$215.66	4.0000	4	3	\$862.64	\$646.98
Replace manual pull station	15	2.00 Ea.	\$406.94	\$489.88	2.6667	2	2	\$979.76	\$979.76
Replace fire alarm bell, 6"	20	2.00 Ea.	\$389.92	\$470.55	2.0000	2	2	\$941.10	\$941.10
Replace faucets lavatory, vitreous china	10	2.00 Ea.	\$363.45	\$437.51	4.0000	4	4	\$1,750.04	\$1,750.04
Clean out strainer and P trap lavatory, vitreous china	2	2.00 Ea.	\$69.74	\$87.22	20.0000	20	20	\$1,744.32	\$1,744.32
Replace lavatory, vitreous china	35	2.00 Ea.	\$1,345.15	\$1,616.44	1.1429	1	1	\$1,616.44	\$1,616.44
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$12.78	\$15.92	20.0000	20	20	\$318.32	\$318.32
Clean trap sink, iron enamel	3	1.00 Ea.	\$8.57	\$10.72	13.3333	13	13	\$139.34	\$139.34
BUR flashing repairs, 2 S.F. per sq. repaired	1	2.10 S.F.	\$7.35	\$8.92	40.0000	40	40	\$356.91	\$356.91
Minor BUR membrane replacement, 25% of roof area	15	20.19 Sq.	\$16,248.68	\$19,287.78	2.6667	2	2	\$38,575.56	\$38,575.56
Place new BUR membrane over existing	20	80.76 Sq.	\$39,166.56	\$46,176.02	2.0000	2	2	\$92,352.04	\$92,352.04
Total BUR roof replacement	28	80.76 Sq.	\$62,962.20	\$74,456.53	1.4286	1	1	\$74,456.53	\$74,456.53
Repair 8" concrete block wall - (2% of walls) painted	25	1.20 C.S.F.	\$1,307.59	\$1,570.03	1.6000	1	1	\$1,570.03	\$1,570.03
Repair steel painted interior door	14	2.00 Ea.	\$586.90	\$683.13	2.8571	2	2	\$1,366.26	\$1,366.26

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Refinish 3'-0" x 7'-0" steel painted interior door	4	2.00 Ea.	\$105.17	\$129.57	10.0000	10	10	\$1,295.73	\$1,295.73
Replace 3'-0" x 7'-0" steel painted interior door	60	2.00 Ea.	\$2,436.07	\$2,824.17	0.6667	0	0	\$0.00	\$0.00
Repair solid core wood door, interior	11	5.00 Ea.	\$1,467.26	\$1,707.82	3.6364	3	3	\$5,123.46	\$5,123.46
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	5.00 Ea.	\$216.82	\$266.25	10.0000	10	9	\$2,662.48	\$2,396.24
Replace 3'-0" x 7'-0" solid core wood door, interior	40	5.00 Ea.	\$2,447.14	\$2,829.05	1.0000	1	1	\$2,829.05	\$2,829.05
Repair 5/8" drywall - (2% of walls)	20	128.80 S.F.	\$215.78	\$262.56	2.0000	2	2	\$525.11	\$525.11
Replace 5/8" drywall	75	6,440.00 S.F.	\$15,009.11	\$18,368.21	0.5333	0	0	\$0.00	\$0.00
Refinish concrete floor finished	25	40.50 C.S.F.	\$17,084.01	\$20,520.55	1.6000	1	1	\$20,520.55	\$20,520.55
Replace vinyl tile flooring	18	55.56 S.Y.	\$2,744.66	\$3,370.58	2.2222	2	2	\$6,741.17	\$6,741.17
Replace carpet	8	201.90 S.Y.	\$11,107.80	\$12,828.10	5.0000	5	5	\$64,140.50	\$64,140.50
Repair gypsum board ceiling - (2% of ceilings)	20	0.05 C.S.F.	\$18.11	\$22.23	2.0000	2	2	\$44.46	\$44.46
Refinish gypsum board ceiling, up to 12' high	20	5.00 C.S.F.	\$645.47	\$797.92	2.0000	2	1	\$1,595.83	\$797.92
Replace gypsum board ceiling, up to 12' high	40	5.00 C.S.F.	\$1,856.50	\$2,279.77	1.0000	1	1	\$2,279.77	\$2,279.77
Acoustic tile repairs - (2% of ceilings)	9	0.10 C.S.F.	\$90.77	\$105.49	4.4444	4	4	\$421.97	\$421.97
Replace acoustic tile ceiling, fire-rated	20	27.50 C.S.F.	\$14,416.29	\$16,991.87	2.0000	2	2	\$33,983.73	\$33,983.73
Replace flush valve diaphragm tankless water closet	10	2.00 Ea.	\$52.44	\$65.07	4.0000	4	4	\$260.29	\$260.29
Rebuild flush valve tankless water closet	20	2.00 Ea.	\$360.87	\$434.91	2.0000	2	2	\$869.83	\$869.83
Unplug clogged line tankless water closet	5	2.00 Ea.	\$436.79	\$546.25	8.0000	8	8	\$4,370.03	\$4,370.03
Replace tankless water closet	35	2.00 Ea.	\$2,572.44	\$2,976.99	1.1429	1	1	\$2,976.99	\$2,976.99
Point and refinish painted concrete block wall, 1st floor	25	29.60 C.S.F.	\$13,905.40	\$17,162.23	1.6000	1	1	\$17,162.23	\$17,162.23
Repair 3'-9" x 5'-5" steel frame window - 1st floor.	20	12.00 Ea.	\$3,579.64	\$4,205.02	2.0000	2	2	\$8,410.03	\$8,410.03
Refinish 3'-9" x 5'-5" steel frame window - 1st floor.	5	12.00 Ea.	\$960.99	\$1,192.16	8.0000	8	8	\$9,537.29	\$9,537.29
Replace 3'-9" x 5'-5" steel frame window - 1st floor.	45	12.00 Ea.	\$19,882.30	\$22,893.25	0.8889	0	0	\$0.00	\$0.00
Finish new 3'-9" x 5'-5" steel frame window - 1st floor.	45	12.00 Ea.	\$833.79	\$1,033.98	0.8889	0	0	\$0.00	\$0.00
Refinish 3'-0" x 7'-0" steel, painted, door	4	4.00 Ea.	\$165.60	\$203.46	10.0000	10	10	\$2,034.65	\$2,034.65
Replace 3'-0" x 7'-0" steel, painted, door	45	4.00 Ea.	\$2,820.26	\$3,278.92	0.8889	0	0	\$0.00	\$0.00
Repair 12' x 12' steel roll-up door	10	1.00 Ea.	\$675.90	\$802.22	4.0000	4	4	\$3,208.87	\$3,208.87
Refinish 12' x 12' steel roll-up door	5	1.00 Ea.	\$203.45	\$249.19	8.0000	8	8	\$1,993.51	\$1,993.51
Replace 12' x 12' steel roll-up door	35	1.00 Ea.	\$2,703.58	\$3,208.87	1.1429	1	1	\$3,208.87	\$3,208.87
Debris removal and visual inspection of built-up roofing	0.5	8.08 M.S.F.	\$304.14	\$370.96	80.0000	80	80	\$29,676.71	\$29,676.71
Non-destructive moisture inspection of built-up roofing	5	8.08 M.S.F.	\$943.72	\$1,151.06	8.0000	8	8	\$9,208.51	\$9,208.51
Minor BUR membrane repairs, 2% of roof area	1	1.61 Sq.	\$781.88	\$927.83	40.0000	40	40	\$37,113.37	\$37,113.37
			\$324,515.97	\$385,574.10				MR Subtotal	\$724,977.13

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
								MR Per Year	\$18,124.43
								PM Total	\$1,127.09
								Subtotal	\$19,251.52
								Total Per Unit	\$2.38

FAC 1732 TRAINING AIDS SUPPORT BUILDING

SUC \$2.38

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 40

Type PM

Average Size 8075.69

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Lavatories, annualized	2.00	0.70	\$11.93	\$41.41	\$0.00	\$53.34	\$66.95	\$81.16
Drink fountain, annualized	1.00	0.62	\$20.73	\$31.28	\$0.00	\$52.00	\$63.46	\$75.95
Controls, central system, electro/pneumatic, annually	1.00	1.92	\$70.77	\$115.41	\$0.00	\$186.18	\$227.88	\$273.12
Panelboard, 225 A and above, annualized	1.00	0.44	\$23.20	\$29.01	\$0.00	\$52.21	\$63.23	\$75.41
Door, emergencyegress, swinging, annualized	2.00	0.52	\$29.18	\$21.50	\$0.00	\$50.68	\$60.05	\$70.88
Door, overhead, manual, up to 24' high x 25' wide, annualized	1.00	2.20	\$11.88	\$90.84	\$0.00	\$102.72	\$131.16	\$160.19
Fire doors, swinging, annualized	7.00	2.74	\$100.25	\$101.90	\$0.00	\$202.15	\$242.75	\$288.35
Urinals, annualized	2.00	0.46	\$12.64	\$22.91	\$0.00	\$35.54	\$43.68	\$52.45
Toilet (vacuum breaker type), annualized	2.00	0.35	\$16.88	\$17.80	\$0.00	\$34.68	\$41.71	\$49.58
						\$769.50	\$940.86	\$1,127.09

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Modeled Component List CostWorks Release 2021 Qtr 3

D20 Plumbing	
Urinal	2.0 Ea.
Sink, Iron Enamel	1.0 Ea.
Drinking Fountain	1.0 Ea.
Emergency Eye Wash	1.0 Ea.
Water Heater, Electric, 120 Gallon	1.0 Ea.
Drain: Roof, Scupper, Area	2.0 Ea.
Lavatory, Vitreous China	2.0 Ea.
Tankless Water Closet	2.0 Ea.
D30 HVAC	
Exhaust Fan, roof mounted exhaust fan, 8500 CFM exhaust	1.0 Ea.
Circulator Pump, 1/12 - 3/4 H.P.	1.0 Ea.
Single Zone Air Conditioner, 5 ton	1.0 Ea.
D40 Fire Protection	
Sprinkler System, Fire Suppression, sprinkler head	40.0 Ea.
D50 Electrical	
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Safety Switch, Heavy Duty	1.0 Ea.
Fluorescent Lighting Fixture	60.0 Ea.
Smoke Detector	15.0 Ea.
Manual Pull Station	2.0 Ea.
Fire Alarm Bell	2.0 Ea.
B30 Roofing	
Built-Up Roofing	80.757 Sq.
C10 Interior Construction	
Steel Painted Interior Doors	2.0 Ea.
Solid Core Interior Doors	5.0 Ea.
Fire Doors, Swinging, annualized	7.0 Each
C30 Interior Finishes	
Drywall	6440.0 S.F.
Concrete, Finished	40.5 C.S.F.
Vinyl	55.556 S.Y.
Carpet	201.9 S.Y.
Gypsum Wall Board	5.0 C.S.F.
Acoustic Tile, fire-rated	27.5 C.S.F.
B20 Exterior Enclosure	
Steel Frame, Operating, 1st floor	12.0 Ea.
Steel, Painted	4.0 Ea.
Steel Single, Roll-Up	1.0 Ea.

FAC 1732 TRAINING AIDS SUPPORT BUILDING
Sustainment by Year
CostWorks Release 2021 Qtr 3

