

**FAC 5306 MEDICAL WAREHOUSE**

FY24 SUC:	\$3.47 / SF
Source:	Calculated using R.S. Means CostWorks 2023 Qtr 4 component prices

FAC 5306 MEDICAL WAREHOUSE

Release 2023 Qtr 4  
Zip Code Prefix 222  
Type MR

UM SF  
Design Life 50  
Average Size 13605.482215

SUC \$3.47

Adjusted Occurences 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
Unplug clogged line tankless water closet	5	8.00 Ea.	\$1,839.43	\$2,302.65	10.0000	10	10	\$23,026.53	\$23,026.53
Replace tankless water closet	35	8.00 Ea.	\$11,332.44	\$13,106.57	1.4286	1	1	\$13,106.57	\$13,106.57
Replace tankless flush valve	25	8.00 Ea.	\$2,161.94	\$2,537.74	2.0000	2	2	\$5,075.48	\$5,075.48
Replace wax ring gasket for tankless water closet	5	8.00 Ea.	\$1,193.32	\$1,492.43	10.0000	10	10	\$14,924.28	\$14,924.28
Replace flush valve diaphragm for a urinal	7	3.00 Ea.	\$81.79	\$101.57	7.1429	7	7	\$710.98	\$710.98
Rebuild flush valve for a urinal	20	3.00 Ea.	\$575.64	\$693.81	2.5000	2	2	\$1,387.61	\$1,387.61
Unplug line urinal	5	3.00 Ea.	\$457.93	\$573.24	10.0000	10	10	\$5,732.45	\$5,732.45
Replace wall-hung urinal	35	3.00 Ea.	\$3,262.56	\$3,924.14	1.4286	1	1	\$3,924.14	\$3,924.14
Replace washer in spud connection lavatory, vitreous china	7	8.00 Ea.	\$138.57	\$169.13	7.1429	7	7	\$1,183.89	\$1,183.89
Replace washer in faucet lavatory, vitreous china	2	8.00 Ea.	\$108.54	\$135.34	25.0000	25	25	\$3,383.44	\$3,383.44
Replace faucets lavatory, vitreous china	10	8.00 Ea.	\$1,563.78	\$1,880.97	5.0000	5	5	\$9,404.86	\$9,404.86
Clean out strainer and P trap lavatory, vitreous china	2	8.00 Ea.	\$294.55	\$368.73	25.0000	25	25	\$9,218.14	\$9,218.14
Replace lavatory, vitreous china	35	8.00 Ea.	\$5,749.78	\$6,907.25	1.4286	1	1	\$6,907.25	\$6,907.25
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$13.45	\$16.77	25.0000	25	25	\$419.23	\$419.23
Clean trap sink, iron enamel	3	1.00 Ea.	\$9.01	\$11.27	16.6667	16	16	\$180.39	\$180.39
Replace faucets sink, iron enamel	10	1.00 Ea.	\$195.47	\$235.12	5.0000	5	5	\$1,175.61	\$1,175.61
Replace starter motor starter, up to 600 V	18	6.00 Ea.	\$5,046.13	\$6,004.48	2.7778	2	2	\$12,008.96	\$12,008.96
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$42.34	\$53.05	16.6667	16	16	\$848.82	\$848.82
Repair failed breaker, enclosed, 600 V, 3 pole	4	1.00 Ea.	\$1,083.33	\$1,251.96	12.5000	12	12	\$15,023.53	\$15,023.53
Maintenance and inspection circuit breaker, enclosed, 600 V, 3 pole	0.33	1.00 Ea.	\$34.13	\$42.76	151.5152	151	151	\$6,456.40	\$6,456.40
Replace circuit breaker enclosed, 600 V, 3 pole circuit breaker	50	1.00 Ea.	\$1,029.72	\$1,215.29	1.0000	1	1	\$1,215.29	\$1,215.29
Replace fluorescent light fixture ballast, 80 W	10	45.00 Ea.	\$4,707.28	\$5,804.59	5.0000	5	5	\$29,022.93	\$29,022.93
Replace lamps (2 lamps), 4', 34 W energy saver	10	45.00 Ea.	\$1,191.86	\$1,492.60	5.0000	5	5	\$7,463.01	\$7,463.01
Check operation smoke detector	1	35.00 Ea.	\$595.03	\$745.49	50.0000	50	50	\$37,274.36	\$37,274.36
Replace smoke detector	15	35.00 Ea.	\$10,589.34	\$12,642.64	3.3333	3	3	\$37,927.93	\$37,927.93
Check and repair manual pull station	10	4.00 Ea.	\$359.53	\$442.99	5.0000	5	4	\$2,214.94	\$1,771.95
Replace manual pull station	15	4.00 Ea.	\$835.03	\$1,007.05	3.3333	3	3	\$3,021.15	\$3,021.15
Replace fire alarm bell, 6"	20	4.00 Ea.	\$722.42	\$879.09	2.5000	2	2	\$1,758.17	\$1,758.17
Replace EMS, Three Phase, 5 Meters	15	1.00 Ea.	\$14,235.56	\$16,617.08	3.3333	3	3	\$49,851.25	\$49,851.25
Replace EMS, Mech, BTU, 3 Meters, 3 Duct Sensors, 3 Space Sensors	20	1.00 Ea.	\$15,519.60	\$18,189.23	2.5000	2	2	\$36,378.45	\$36,378.45
Maintenance and repair electrical service ground	25	0.15 M.L.F.	\$14.21	\$17.76	2.0000	2	2	\$35.52	\$35.52

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace electrical service ground	50	0.15 M.L.F.	\$693.64	\$845.45	1.0000	1	1	\$845.45	\$845.45
Maintenance and repair building structure ground	7	0.15 M.L.F.	\$14.21	\$17.76	7.1429	7	7	\$124.32	\$124.32
Repair 5/8" drywall - (2% of walls)	20	59.40 S.F.	\$99.25	\$121.29	2.5000	2	2	\$242.59	\$242.59
Refinish concrete floor finished	25	35.00 C.S.F.	\$14,580.20	\$17,591.65	2.0000	2	2	\$35,183.30	\$35,183.30
Replace vinyl tile flooring	18	71.80 S.Y.	\$3,668.20	\$4,514.19	2.7778	2	2	\$9,028.37	\$9,028.37
Repair gypsum board ceiling - (2% of ceilings)	20	0.10 C.S.F.	\$38.42	\$47.18	2.5000	2	2	\$94.36	\$94.36
Replace gypsum board ceiling, up to 12' high	40	6.40 C.S.F.	\$2,522.29	\$3,098.17	1.2500	1	1	\$3,098.17	\$3,098.17
Acoustic tile repairs - (2% of ceilings)	9	0.20 C.S.F.	\$184.76	\$214.95	5.5556	5	5	\$1,074.73	\$1,074.73
Replace acoustic tile ceiling, fire-rated	20	13.80 C.S.F.	\$7,188.81	\$8,496.62	2.5000	2	2	\$16,993.25	\$16,993.25
Replace flush valve diaphragm tankless water closet	10	8.00 Ea.	\$218.11	\$270.85	5.0000	5	5	\$1,354.24	\$1,354.24
Rebuild flush valve tankless water closet	20	8.00 Ea.	\$1,535.05	\$1,850.15	2.5000	2	2	\$3,700.30	\$3,700.30
Unstop sink, iron enamel	2	1.00 Ea.	\$44.01	\$55.09	25.0000	25	25	\$1,377.35	\$1,377.35
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	1.00 Ea.	\$1,208.43	\$1,409.28	1.4286	1	1	\$1,409.28	\$1,409.28
Check / minor repairs drinking fountain	1	2.00 Ea.	\$103.05	\$129.00	50.0000	50	50	\$6,450.01	\$6,450.01
Repair internal leaks drinking fountain	4	2.00 Ea.	\$95.54	\$119.59	12.5000	12	12	\$1,435.13	\$1,435.13
Replace refrigerant drinking fountain	2	2.00 Ea.	\$70.81	\$82.86	25.0000	25	25	\$2,071.49	\$2,071.49
Repair drain leak drinking fountain	4	2.00 Ea.	\$58.19	\$70.38	12.5000	12	10	\$844.54	\$703.79
Replace fountain drinking fountain	10	2.00 Ea.	\$3,241.63	\$3,808.60	5.0000	5	5	\$19,043.01	\$19,043.01
Inspect and clean shower head emergency shower station	3	1.00 Ea.	\$51.54	\$64.51	16.6667	16	16	\$1,032.22	\$1,032.22
Replace shower emergency shower station	25	1.00 Ea.	\$1,053.08	\$1,259.15	2.0000	2	2	\$2,518.30	\$2,518.30
Inspect and clean spray heads, emergency eye wash	3	1.00 Ea.	\$51.54	\$64.51	16.6667	16	16	\$1,032.22	\$1,032.22
Replace eye wash station, emergency eye wash	25	1.00 Ea.	\$785.91	\$955.55	2.0000	2	2	\$1,911.10	\$1,911.10
Drain and flush water heater, electric, 120 gallon	7	1.00 Ea.	\$309.15	\$387.00	7.1429	7	7	\$2,709.00	\$2,709.00
Check operation water heater, electric, 120 gallon	3	1.00 Ea.	\$2.72	\$3.40	16.6667	16	16	\$54.40	\$54.40
Replace water heater, electric, 120 gallon	15	1.00 Ea.	\$16,477.14	\$18,839.91	3.3333	3	3	\$56,519.72	\$56,519.72
Unclog floor drain, PVC	20	1.00 Ea.	\$50.45	\$63.16	2.5000	2	2	\$126.31	\$126.31
General maintenance & repair drain: roof, scupper, area	1	5.00 Ea.	\$195.90	\$245.23	50.0000	50	50	\$12,261.74	\$12,261.74
Replace drain: roof, scupper, area	40	5.00 Ea.	\$5,651.87	\$6,519.25	1.2500	1	1	\$6,519.25	\$6,519.25
Repair cooling tower, 50 ton	10	1.00 Ea.	\$1,507.54	\$1,784.63	5.0000	5	4	\$8,923.13	\$7,138.50
Replace cooling tower, 50 ton	15	1.00 Ea.	\$17,565.68	\$20,223.14	3.3333	3	3	\$60,669.41	\$60,669.41
Repair water cooled chiller, 50 ton, reciprocating	10	1.00 Ea.	\$51,727.86	\$59,740.23	5.0000	5	5	\$298,701.14	\$298,701.14
Replace chiller, water cooled 50 ton, reciprocating	20	1.00 Ea.	\$56,171.73	\$65,445.87	2.5000	2	2	\$130,891.74	\$130,891.74
Replace roof mounted exhaust fan, 2000 CFM exhaust fan	20	2.00 Ea.	\$6,192.95	\$7,190.10	2.5000	2	2	\$14,380.21	\$14,380.21

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Repair circulator pump, 1/12 - 3/4 H.P.	5	1.00 Ea.	\$103.47	\$122.05	10.0000	10	7	\$1,220.52	\$854.36
Replace circulator pump, 1/12 - 3/4 H.P.	15	1.00 Ea.	\$3,796.05	\$4,376.03	3.3333	3	3	\$13,128.10	\$13,128.10
Repair computer room A/C, chilled water, 5 ton	10	1.00 Ea.	\$8,542.57	\$9,995.14	5.0000	5	5	\$49,975.68	\$49,975.68
Inspect sprinkler system	1	1.00 Ea.	\$36.17	\$45.28	50.0000	50	50	\$2,264.22	\$2,264.22
Replace sprinkler head	20	50.00 Ea.	\$4,382.39	\$5,407.59	2.5000	2	2	\$10,815.19	\$10,815.19
Replace fire pump / electric motor assembly 100 H.P.	25	2.00 Ea.	\$96,023.93	\$110,702.65	2.0000	2	2	\$221,405.30	\$221,405.30
Repair switchgear 1200 A mainframe	5	1.00 Ea.	\$1,803.55	\$2,115.75	10.0000	10	8	\$21,157.52	\$16,926.02
Maintenance and inspection switchgear, mainframe	1	1.00 Ea.	\$68.26	\$85.52	50.0000	50	50	\$4,275.76	\$4,275.76
Replace switchgear 1200 A mainframe	20	1.00 Ea.	\$4,250.93	\$5,127.30	2.5000	2	2	\$10,254.60	\$10,254.60
Maintenance and repair motor starter, up to 600 V	5	6.00 Ea.	\$1,576.92	\$1,916.96	10.0000	10	10	\$19,169.65	\$19,169.65
Maintenance and inspection motor starter, up to 600 V	0.5	6.00 Ea.	\$341.28	\$427.58	100.0000	100	100	\$42,757.63	\$42,757.63
Replace building structure ground	50	0.15 M.L.F.	\$829.54	\$1,005.79	1.0000	1	1	\$1,005.79	\$1,005.79
Maintenance and repair of general wiring lightning protection system	1	0.15 M.L.F.	\$16.86	\$20.77	50.0000	50	50	\$1,038.63	\$1,038.63
Replace lightning protection general wiring system	25	0.15 M.L.F.	\$1,932.45	\$2,290.82	2.0000	2	2	\$4,581.63	\$4,581.63
Maintenance and repair lightning ground rod	1	1.00 Ea.	\$92.28	\$115.32	50.0000	50	48	\$5,766.08	\$5,535.43
Replace lightning ground rod	25	1.00 Ea.	\$245.60	\$303.67	2.0000	2	2	\$607.34	\$607.34
Replace lamp emergency lighting fixture	2	15.00 Ea.	\$817.39	\$987.83	25.0000	25	25	\$24,695.64	\$24,695.64
Replace emergency lighting fixture	20	15.00 Ea.	\$8,622.09	\$10,198.11	2.5000	2	2	\$20,396.21	\$20,396.21
Maintenance and repair exit light	20	6.00 Ea.	\$230.94	\$286.02	2.5000	2	2	\$572.05	\$572.05
Replace lamp exit light	5	6.00 Ea.	\$98.08	\$116.63	10.0000	10	10	\$1,166.32	\$1,166.32
Replace lighting fixture exit light	20	6.00 Ea.	\$1,056.39	\$1,281.04	2.5000	2	2	\$2,562.08	\$2,562.08
Repair 8" concrete block wall, 1st floor	25	422.00 S.F.	\$10,845.05	\$13,279.81	2.0000	2	2	\$26,559.61	\$26,559.61
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	0.40 S.F.	\$5.26	\$6.18	50.0000	50	50	\$308.81	\$308.81
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	8.00 Ea.	\$1,250.51	\$1,490.17	2.5000	2	2	\$2,980.34	\$2,980.34
Replace 2'-0" x 3'-0" aluminum window - 1st floor	50	8.00 Ea.	\$5,420.32	\$6,362.42	1.0000	1	1	\$6,362.42	\$6,362.42
Repair steel, painted, door	14	1.00 Ea.	\$702.33	\$834.19	3.5714	3	3	\$2,502.58	\$2,502.58
Refinish 3'-0" x 7'-0" steel, painted, door	4	1.00 Ea.	\$46.05	\$56.40	12.5000	12	12	\$676.75	\$676.75
Replace 3'-0" x 7'-0" steel, painted, door	45	1.00 Ea.	\$917.11	\$1,061.93	1.1111	1	1	\$1,061.93	\$1,061.93
Repair 12' x 12' steel roll-up door	10	2.00 Ea.	\$1,402.23	\$1,666.45	5.0000	5	5	\$8,332.24	\$8,332.24
Replace 12' x 12' steel roll-up door	35	2.00 Ea.	\$5,608.93	\$6,665.79	1.4286	1	1	\$6,665.79	\$6,665.79
BUR flashing repairs, 2 S.F. per sq. repaired	1	75.00 S.F.	\$284.03	\$344.97	50.0000	50	50	\$17,248.33	\$17,248.33
Minor BUR membrane replacement, 25% of roof area	15	34.00 Sq.	\$31,112.58	\$36,845.13	3.3333	3	3	\$110,535.38	\$110,535.38
Total BUR roof replacement	28	136.00 Sq.	\$119,027.28	\$140,532.67	1.7857	1	1	\$140,532.67	\$140,532.67
Repair 8" concrete block wall - (2% of walls) painted	25	2.90 C.S.F.	\$3,320.25	\$3,993.57	2.0000	2	2	\$7,987.14	\$7,987.14

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Refinish concrete block wall painted	4	45.60 C.S.F.	\$5,412.29	\$6,543.29	12.5000	12	12	\$78,519.47	\$78,519.47	
Repair steel painted interior door	14	5.00 Ea.	\$1,394.94	\$1,628.41	3.5714	3	3	\$4,885.23	\$4,885.23	
Refinish 3'-0" x 7'-0" steel painted interior door	4	5.00 Ea.	\$288.26	\$354.39	12.5000	12	12	\$4,252.64	\$4,252.64	
Repair solid core wood door, interior	11	9.00 Ea.	\$2,510.90	\$2,931.14	4.5455	4	4	\$11,724.56	\$11,724.56	
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	9.00 Ea.	\$396.13	\$488.14	12.5000	12	11	\$5,857.68	\$5,369.54	
Replace 3'-0" x 7'-0" solid core wood door, interior	40	9.00 Ea.	\$5,098.95	\$5,886.88	1.2500	1	1	\$5,886.88	\$5,886.88	
			\$608,253.92	\$714,291.25				MR Subtotal	\$1,936,892.90	
									MR Per Year	\$38,737.86
									PM Total	\$8,415.83
									Subtotal	\$47,153.69
									Total Per Unit	\$3.47

FAC 5306 MEDICAL WAREHOUSE

SUC \$3.47

Release 2023 Qtr 4

UM SF

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 13605.482215

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Refrigerator freezer, walk-in box w/external condenser, annualized	6.00	8.80	\$2,301.27	\$318.06	\$0.00	\$2,619.33	\$2,944.88	\$3,385.48
Door, emergency egress, swinging, annualized	1.00	0.26	\$16.76	\$11.48	\$0.00	\$28.25	\$33.37	\$39.33
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	2.00	8.14	\$86.15	\$359.93	\$0.00	\$446.09	\$562.68	\$683.59
Fire doors, swinging, annualized	2.00	0.78	\$31.33	\$30.91	\$0.00	\$62.24	\$74.65	\$88.62
Urinals, annualized	3.00	0.68	\$19.89	\$36.49	\$0.00	\$56.38	\$69.32	\$83.25
Toilet (vacuum breaker type), annualized	8.00	1.42	\$70.84	\$75.69	\$0.00	\$146.53	\$176.32	\$209.65
Lavatories, annualized	8.00	2.78	\$62.34	\$174.40	\$0.00	\$236.74	\$295.29	\$356.96
Drink fountain, annualized	2.00	1.24	\$74.89	\$66.27	\$0.00	\$141.16	\$168.53	\$199.65
Water cooling tower, up to 50 tons, annualized	1.00	4.55	\$21.25	\$287.76	\$0.00	\$309.01	\$397.47	\$486.98
Chiller, recip., water cooled, up to 50 tons, annualized	1.00	7.94	\$29.35	\$501.40	\$0.00	\$530.75	\$684.10	\$838.92
Circuit breaker, high voltage air, annualized	1.00	0.47	\$13.83	\$32.48	\$0.00	\$46.31	\$57.43	\$69.25
Panelboard, 225 A and above, annualized	1.00	0.44	\$22.00	\$30.41	\$0.00	\$52.42	\$63.74	\$76.16
Backflow prevention device, up to 4", annualized	1.00	0.33	\$14.02	\$20.93	\$0.00	\$34.94	\$42.62	\$51.01
Extinguishing system, dry pipe, annualized	1.00	13.02	\$104.24	\$819.68	\$0.00	\$923.92	\$1,180.24	\$1,441.78
Controls, central system, electro/pneumatic, annualized	1.00	1.92	\$169.00	\$121.21	\$0.00	\$290.21	\$343.47	\$405.19
						\$5,924.27	\$7,094.12	\$8,415.83



# FAC 5306 MEDICAL WAREHOUSE

## Modeled Component List

### CostWorks Release 2023 Qtr 4

#### D20 Plumbing

Tankless Water Closet	8.0 Ea.
Urinal	3.0 Ea.
Lavatory, Vitreous China	8.0 Ea.
Sink, Iron Enamel	1.0 Ea.
Drinking Fountain	2.0 Ea.
Emergency Shower Station	1.0 Ea.
Emergency Eye Wash	1.0 Ea.
Water Heater, Electric, 120 Gallon	1.0 Ea.
Drain: Roof, Scupper, Area	5.0 Ea.

#### D50 Electrical

Motor Starter, Up To 600 V	6.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Circuit Breaker, enclosed, 600 V, 3 pole	1.0 Ea.
Smoke Detector	35.0 Ea.
Manual Pull Station	4.0 Ea.
Fire Alarm Bell	4.0 Ea.
Electrical Service Ground	0.154 M.L.F.
Switchgear, Mainframe	1.0 Ea.
Building Structure Ground	0.154 M.L.F.
Lightning Protection System	0.154 M.L.F.
Lightning Ground Rod	1.0 Ea.
Emergency Lighting Fixture	15.0 Ea.
Exit Light	6.0 Ea.

#### C30 Interior Finishes

Concrete, Finished	35.0 C.S.F.
Vinyl	71.8 S.Y.
Gypsum Wall Board	6.4 C.S.F.
Acoustic Tile, fire-rated	13.8 C.S.F.

#### D30 HVAC

Cooling Tower, 50 ton	1.0 Ea.
Chiller, Water Cooled, Reciprocating, 50 ton	1.0 Ea.
Exhaust Fan, roof mounted exhaust fan, 2000 CFM exhaust	2.0 Ea.
Circulator Pump, 1/12 - 3/4 H.P.	1.0 Ea.

#### D40 Fire Protection

Sprinkler System, Fire Suppression, sprinkler head	50.0 Ea.
Fire Pump Electric Motor	2.0 Ea.
Extinguishing system, dry pipe, annualized	1.0 Each

#### B20 Exterior Enclosure

Aluminum Window, Fixed, 1st floor	8.0 Ea.
Steel, Painted	1.0 Ea.
Steel Single, Roll-Up	2.0 Ea.

#### B30 Roofing

Built-Up Roofing	136.0 Sq.
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#### C10 Interior Construction

Concrete Block, Painted	45.6 C.S.F.
Solid Core Interior Doors	9.0 Ea.
Fire Doors, Swinging, annualized	2.0 Each

#### E10 Equipment

Refrigerator freezer, walk-in, annualized	6.0 Each
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FAC 5306 MEDICAL WAREHOUSE  
Sustainment by Year  
CostWorks Release 2023 Qtr 4

