

**FAC 4423 HAZARDOUS MATERIALS STORAGE, INSTALLATION**

FY22 SUC: \$5.05 / SF  
Source: Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

**FAC 4423 HAZARDOUS MATERIALS STORAGE, INSTALLATION**

SUC \$5.05

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

UM SF

Zip Code Prefix 222

Design Life 45

Type MR

Average Size 1338.0

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	360.00 S.F.	\$8,717.33	\$10,664.36	1.8000	1	1	\$10,664.36	\$10,664.36
Replace steel siding - 2nd floor	35	14.40 C.S.F.	\$9,917.53	\$12,031.77	1.2857	1	1	\$12,031.77	\$12,031.77
Refinish aluminum louver, 1st floor	5	2.00 Ea.	\$194.07	\$240.81	9.0000	9	9	\$2,167.30	\$2,167.30
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	2.40 S.F.	\$28.94	\$34.01	45.0000	45	45	\$1,530.53	\$1,530.53
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	4.00 Ea.	\$578.95	\$690.44	2.2500	2	2	\$1,380.87	\$1,380.87
Repair steel, painted, door	14	3.00 Ea.	\$1,875.22	\$2,232.02	3.2143	3	3	\$6,696.05	\$6,696.05
Refinish 3'-0" x 7'-0" steel, painted, door	4	3.00 Ea.	\$124.20	\$152.60	11.2500	11	11	\$1,678.59	\$1,678.59
Replace 3'-0" x 7'-0" steel, painted, door	45	3.00 Ea.	\$2,115.19	\$2,459.19	1.0000	1	1	\$2,459.19	\$2,459.19
Replace tempered glass - (3% of glass) steel painted door	1	0.63 S.F.	\$14.24	\$17.01	45.0000	45	45	\$765.47	\$765.47
Repair 12' x 12' steel roll-up door	10	2.00 Ea.	\$1,351.79	\$1,604.43	4.5000	4	4	\$6,417.73	\$6,417.73
Replace 12' x 12' steel roll-up door	35	2.00 Ea.	\$5,407.17	\$6,417.73	1.2857	1	1	\$6,417.73	\$6,417.73
Debris removal, by hand and visual inspection, metal panel roofing	1	1.34 M.S.F.	\$30.53	\$37.24	45.0000	45	45	\$1,675.72	\$1,675.72
Metal roof flashing replacement, 2 SF/sq repaired, metal panel roofing	1	8.40 S.F.	\$153.72	\$186.25	45.0000	45	45	\$8,381.19	\$8,381.19
Minor metal roof panel replacement, 2.5% of roof area	20	33.45 S.F.	\$382.25	\$453.99	2.2500	2	2	\$907.97	\$907.97
Total metal roof panel replacement	30	13.20 Sq.	\$11,155.94	\$13,213.41	1.5000	1	1	\$13,213.41	\$13,213.41
Repair steel painted interior door	14	2.00 Ea.	\$586.90	\$683.13	3.2143	3	3	\$2,049.38	\$2,049.38
Refinish 3'-0" x 7'-0" steel painted interior door	4	1.00 Ea.	\$52.59	\$64.79	11.2500	11	11	\$712.65	\$712.65
Safety glass replacement, (3% of glass) steel painted interior door	1	6.30 S.F.	\$113.51	\$135.31	45.0000	45	45	\$6,088.79	\$6,088.79
Refinish concrete floor finished	25	13.10 C.S.F.	\$5,525.94	\$6,637.51	1.8000	1	1	\$6,637.51	\$6,637.51
Replace flush valve diaphragm tankless water closet	10	2.00 Ea.	\$52.44	\$65.07	4.5000	4	4	\$260.29	\$260.29
Rebuild flush valve tankless water closet	20	2.00 Ea.	\$360.87	\$434.91	2.2500	2	2	\$869.83	\$869.83
Unplug clogged line tankless water closet	5	2.00 Ea.	\$436.79	\$546.25	9.0000	9	9	\$4,916.28	\$4,916.28
Replace tankless water closet	35	2.00 Ea.	\$2,572.44	\$2,976.99	1.2857	1	1	\$2,976.99	\$2,976.99
Replace tankless flush valve	25	2.00 Ea.	\$504.43	\$592.22	1.8000	1	1	\$592.22	\$592.22
Replace wax ring gasket for tankless water closet	5	2.00 Ea.	\$283.04	\$353.65	9.0000	9	9	\$3,182.88	\$3,182.88
Replace washer in spud connection lavatory, vitreous china	7	2.00 Ea.	\$32.93	\$40.16	6.4286	6	6	\$240.96	\$240.96
Replace washer in faucet lavatory, vitreous china	2	2.00 Ea.	\$25.77	\$32.10	22.5000	22	22	\$706.28	\$706.28
Replace faucets lavatory, vitreous china	10	2.00 Ea.	\$363.45	\$437.51	4.5000	4	4	\$1,750.04	\$1,750.04

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Clean out strainer and P trap lavatory, vitreous china	2	2.00 Ea.	\$69.74	\$87.22	22.5000	22	22	\$1,918.75	\$1,918.75
Replace lavatory, vitreous china	35	2.00 Ea.	\$1,345.15	\$1,616.44	1.2857	1	1	\$1,616.44	\$1,616.44
Replace faucet washer sink, iron enamel	2	1.00 Ea.	\$12.78	\$15.92	22.5000	22	22	\$350.15	\$350.15
Clean trap sink, iron enamel	3	1.00 Ea.	\$8.57	\$10.72	15.0000	15	15	\$160.78	\$160.78
Replace faucets sink, iron enamel	10	1.00 Ea.	\$181.73	\$218.76	4.5000	4	4	\$875.02	\$875.02
Unstop sink, iron enamel	2	1.00 Ea.	\$41.82	\$52.30	22.5000	22	22	\$1,150.65	\$1,150.65
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	1.00 Ea.	\$636.70	\$757.51	1.2857	1	1	\$757.51	\$757.51
Inspect and clean shower head emergency shower station	3	1.00 Ea.	\$49.39	\$61.77	15.0000	15	15	\$926.57	\$926.57
Replace shower emergency shower station	25	1.00 Ea.	\$941.97	\$1,129.12	1.8000	1	1	\$1,129.12	\$1,129.12
Inspect and clean spray heads, emergency eye wash	3	1.00 Ea.	\$49.39	\$61.77	15.0000	15	15	\$926.57	\$926.57
Replace eye wash station, emergency eye wash	25	1.00 Ea.	\$1,114.34	\$1,325.00	1.8000	1	1	\$1,325.00	\$1,325.00
Unclog floor drain, PVC	20	2.00 Ea.	\$95.59	\$119.55	2.2500	2	2	\$239.10	\$239.10
Maintenance and repair explosionproof industrial heater	2	2.00 Ea.	\$405.39	\$473.69	22.5000	22	21	\$10,421.13	\$9,947.44
Replace heater explosionproof industrial heater	15	2.00 Ea.	\$9,087.06	\$10,400.19	3.0000	3	3	\$31,200.57	\$31,200.57
Inspect sprinkler system	1	1.00 Ea.	\$34.33	\$42.93	45.0000	45	45	\$1,931.79	\$1,931.79
Replace sprinkler head	20	6.00 Ea.	\$513.14	\$631.14	2.2500	2	2	\$1,262.27	\$1,262.27
Rebuild double check 3" backflow preventer sprinkler system	1	1.00 Ea.	\$710.41	\$851.09	45.0000	45	45	\$38,299.22	\$38,299.22
Maintenance and repair motor starter, up to 600 V	5	1.00 Ea.	\$279.64	\$337.60	9.0000	9	9	\$3,038.38	\$3,038.38
Replace starter motor starter, up to 600 V	18	1.00 Ea.	\$805.31	\$958.07	2.5000	2	2	\$1,916.15	\$1,916.15
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$40.64	\$50.92	15.0000	15	15	\$763.82	\$763.82
Maintenance and repair breaker, molded case, 480 V, 2 pole	20	2.00 Ea.	\$143.53	\$179.82	2.2500	2	2	\$359.63	\$359.63
Maintenance and inspection circuit breaker, molded case, 480 V, 2 pole	0.5	2.00 Ea.	\$64.78	\$81.16	90.0000	90	90	\$7,304.05	\$7,304.05
Maintenance and repair breaker, enclosed, 240 V, 2 pole	25	8.00 Ea.	\$574.10	\$719.27	1.8000	1	1	\$719.27	\$719.27
Replace safety switch, heavy duty 100 A	25	1.00 Ea.	\$1,158.93	\$1,373.43	1.8000	1	1	\$1,373.43	\$1,373.43
Replace high pressure sodium ballast, 250 W	10	4.00 Ea.	\$775.39	\$919.40	4.5000	4	4	\$3,677.62	\$3,677.62
Replace high pressure sodium fixture lamp, 250 W	10	4.00 Ea.	\$222.63	\$270.39	4.5000	4	4	\$1,081.56	\$1,081.56
Repair smoke detector	10	2.00 Ea.	\$112.78	\$139.43	4.5000	4	3	\$557.71	\$418.28
Check operation smoke detector	1	2.00 Ea.	\$32.39	\$40.58	45.0000	45	45	\$1,826.01	\$1,826.01
Replace smoke detector	15	2.00 Ea.	\$568.47	\$678.92	3.0000	3	3	\$2,036.77	\$2,036.77
Check and repair manual pull station	10	2.00 Ea.	\$175.39	\$215.66	4.5000	4	3	\$862.64	\$646.98
Replace manual pull station	15	2.00 Ea.	\$406.94	\$489.88	3.0000	3	3	\$1,469.65	\$1,469.65
Replace fire alarm bell, 6"	20	1.00 Ea.	\$194.96	\$235.28	2.2500	2	2	\$470.55	\$470.55
Maintenance and repair of general wiring lightning protection system	1	0.15 M.L.F.	\$14.51	\$17.97	45.0000	45	45	\$808.83	\$808.83

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Maintenance and repair lightning ground rod	1	2.00 Ea.	\$175.78	\$219.57	45.0000	45	44	\$9,880.84	\$9,661.27	
Replace lightning ground rod	25	2.00 Ea.	\$452.18	\$560.58	1.8000	1	1	\$560.58	\$560.58	
			\$74,454.01	\$88,777.91				MR Subtotal	\$239,521.79	
									MR Per Year	\$5,322.71
									PM Total	\$1,430.61
									Subtotal	\$6,753.32
									Total Per Unit	\$5.05

FAC 4423 HAZARDOUS MATERIALS STORAGE, INSTALLATIONSUC \$5.05

Release 2021 Qtr 3UM SF

Zip Code Prefix 222Design Life 45

Type PMAverage Size 1338.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	2.00	8.14	\$81.92	\$337.62	\$0.00	\$419.54	\$529.02	\$642.60
Toilet (vacuum breaker type), annualized	2.00	0.35	\$16.88	\$17.80	\$0.00	\$34.68	\$41.71	\$49.58
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
Backflow prevention device, up to 4", annualized	1.00	0.33	\$13.40	\$19.82	\$0.00	\$33.22	\$40.50	\$48.46
Panelboard, 225 A and above, annualized	1.00	0.44	\$23.20	\$29.01	\$0.00	\$52.21	\$63.23	\$75.41
Extinguishing system, dry chemical, annualized	1.00	5.61	\$5.11	\$281.92	\$0.00	\$287.03	\$372.11	\$457.45
						\$932.01	\$1,176.98	\$1,430.61



# **FAC 4423 HAZARDOUS MATERIALS STORAGE, INSTALLATION**

## **Modeled Component List CostWorks Release 2021 Qtr 3**

B20 Exterior Enclosure	
Steel, Painted	3.0 Ea.
Steel Single, Roll-Up	2.0 Ea.
B30 Roofing	
Metal Steep Roofing	13.2 Sq.
C30 Interior Finishes	
Concrete, Finished	13.1 C.S.F.
D20 Plumbing	
Tankless Water Closet	2.0 Ea.
Lavatory, Vitreous China	2.0 Ea.
Sink, Iron Enamel	1.0 Ea.
Emergency Shower Station	1.0 Ea.
Emergency Eye Wash	1.0 Ea.
D30 HVAC	
Explosionproof Industrial Heater	2.0 Ea.
D40 Fire Protection	
Sprinkler System, Fire Supression, sprinkler head	6.0 Ea.
Sprinkler System, Fire Supression , 3" backflow preventer	1.0 Ea.
Extinguishing system, dry chemical, annualized	1.0 Each
D50 Electrical	
Motor Starter, Up To 600 V	1.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.
Safety Switch, Heavy Duty 100 A	1.0 Ea.
Smoke Detector	2.0 Ea.
Manual Pull Station	2.0 Ea.
Fire Alarm Bell	1.0 Ea.
Lightning Ground Rod	2.0 Ea.

FAC 4423 HAZARDOUS MATERIALS STORAGE, INSTALLATION  
Sustainment by Year  
CostWorks Release 2021 Qtr 3

