

FAC 4411 COVERED STORAGE BUILDING, DEPOT

FY22 SUC:	\$2.18 / SF
Source:	Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 4411 COVERED STORAGE BUILDING, DEPOT

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 50
Average Size 18914.0

SUC \$2.18

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
Refinish concrete steps	3	260.00 S.F.	\$419.00	\$517.42	16.6667	16	16	\$8,278.78	\$8,278.78
Refinish concrete landing	3	1,900.00 S.F.	\$3,061.90	\$3,781.17	16.6667	16	16	\$60,498.79	\$60,498.79
Replace wood stairs	30	72.00 S.F.	\$2,144.11	\$2,594.28	1.6667	1	1	\$2,594.28	\$2,594.28
Repair 8" concrete block wall, 1st floor	25	1,220.00 S.F.	\$29,542.08	\$36,140.34	2.0000	2	2	\$72,280.68	\$72,280.68
Replace steel siding - 1st floor	35	1.40 C.S.F.	\$779.97	\$940.97	1.4286	1	1	\$940.97	\$940.97
Replace glass - 1st floor. (1% of glass) - alum. window	1	0.70 S.F.	\$8.44	\$9.92	50.0000	50	50	\$496.01	\$496.01
Repair 3' x 4' aluminum window - 1st floor	20	12.00 Ea.	\$3,142.77	\$3,699.62	2.5000	2	2	\$7,399.23	\$7,399.23
Replace 3' x 4' aluminum window - 1st floor	50	12.00 Ea.	\$9,777.45	\$11,396.69	1.0000	1	1	\$11,396.69	\$11,396.69
Repair steel, painted, door	14	3.00 Ea.	\$1,875.22	\$2,232.02	3.5714	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	12.5000	12	12	\$1,831.18	\$1,831.18
Replace 3'-0" x 7'-0" steel, painted, door	45	3.00 Ea.	\$2,115.19	\$2,459.19	1.1111	1	1	\$2,459.19	\$2,459.19
Repair 12' x 12' steel roll-up door	10	10.00 Ea.	\$6,758.96	\$8,022.17	5.0000	5	5	\$40,110.84	\$40,110.84
Replace 12' x 12' steel roll-up door	35	10.00 Ea.	\$27,035.83	\$32,088.67	1.4286	1	1	\$32,088.67	\$32,088.67
Debris removal, by hand and visual inspection, metal panel roofing	1	18.90 M.S.F.	\$430.62	\$525.23	50.0000	50	50	\$26,261.32	\$26,261.32
Minor metal roof finish repairs, 2% of roof area, metal panel roofing	5	486.00 S.F.	\$1,697.64	\$2,036.81	10.0000	10	10	\$20,368.09	\$20,368.09
Metal roof flashing replacement, 2 SF/sq repaired, metal panel roofing	1	2.80 S.F.	\$51.24	\$62.08	50.0000	50	50	\$3,104.15	\$3,104.15
Minor metal roof panel replacement, 2.5% of roof area	20	607.00 S.F.	\$6,936.56	\$8,238.25	2.5000	2	2	\$16,476.50	\$16,476.50
Total metal roof panel replacement	30	169.00 Sq.	\$142,829.78	\$169,171.75	1.6667	1	1	\$169,171.75	\$169,171.75
Repair 8" concrete block wall - (2% of walls) painted	25	4.30 C.S.F.	\$4,685.51	\$5,625.93	2.0000	2	2	\$11,251.86	\$11,251.86
Refinish concrete block wall painted	4	23.70 C.S.F.	\$2,391.77	\$2,912.45	12.5000	12	12	\$34,949.40	\$34,949.40
Repair steel painted interior door	14	4.00 Ea.	\$1,173.81	\$1,366.26	3.5714	3	3	\$4,098.77	\$4,098.77
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	5.00 Ea.	\$1,467.26	\$1,707.82	4.5455	4	4	\$6,831.28	\$6,831.28
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	5.00 Ea.	\$216.82	\$266.25	12.5000	12	11	\$3,194.98	\$2,928.73
Replace 3'-0" x 7'-0" solid core wood door, interior	40	5.00 Ea.	\$2,447.14	\$2,829.05	1.2500	1	1	\$2,829.05	\$2,829.05
Refinish concrete floor finished	25	131.00 C.S.F.	\$55,259.38	\$66,375.11	2.0000	2	2	\$132,750.23	\$132,750.23
Acoustic tile repairs - (2% of ceilings)	9	0.20 C.S.F.	\$181.54	\$210.98	5.5556	5	5	\$1,054.92	\$1,054.92
Replace acoustic tile ceiling, fire-rated	20	18.10 C.S.F.	\$9,488.54	\$11,183.74	2.5000	2	2	\$22,367.48	\$22,367.48

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	5.00 Ea.	\$131.10	\$162.68	5.0000	5	5	\$813.40	\$813.40
Rebuild flush valve tankless water closet	20	5.00 Ea.	\$902.17	\$1,087.29	2.5000	2	2	\$2,174.57	\$2,174.57
Unplug clogged line tankless water closet	5	5.00 Ea.	\$1,091.98	\$1,365.63	10.0000	10	10	\$13,656.34	\$13,656.34
Replace tankless water closet	35	5.00 Ea.	\$6,431.11	\$7,442.48	1.4286	1	1	\$7,442.48	\$7,442.48
Replace tankless flush valve	25	5.00 Ea.	\$1,261.08	\$1,480.55	2.0000	2	2	\$2,961.10	\$2,961.10
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	6.00 Ea.	\$98.78	\$120.48	7.1429	7	7	\$843.36	\$843.36
Replace washer in faucet lavatory, vitreous china	2	6.00 Ea.	\$77.31	\$96.31	25.0000	25	25	\$2,407.77	\$2,407.77
Replace faucets lavatory, vitreous china	10	6.00 Ea.	\$1,090.36	\$1,312.53	5.0000	5	5	\$6,562.66	\$6,562.66
Clean out strainer and P trap lavatory, vitreous china	2	6.00 Ea.	\$209.22	\$261.65	25.0000	25	25	\$6,541.19	\$6,541.19
Replace lavatory, vitreous china	35	6.00 Ea.	\$4,035.45	\$4,849.33	1.4286	1	1	\$4,849.33	\$4,849.33
Replace faucet washer sink, iron enamel	2	2.00 Ea.	\$25.55	\$31.83	25.0000	25	25	\$795.80	\$795.80
Clean trap sink, iron enamel	3	2.00 Ea.	\$17.14	\$21.44	16.6667	16	16	\$342.99	\$342.99
Replace faucets sink, iron enamel	10	2.00 Ea.	\$363.45	\$437.51	5.0000	5	5	\$2,187.55	\$2,187.55
Unstop sink, iron enamel	2	2.00 Ea.	\$83.64	\$104.60	25.0000	25	25	\$2,615.12	\$2,615.12
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	2.00 Ea.	\$1,273.40	\$1,515.02	1.4286	1	1	\$1,515.02	\$1,515.02
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
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
Inspect and clean spray heads, emergency eye wash	3	2.00 Ea.	\$98.79	\$123.54	16.6667	16	16	\$1,976.67	\$1,976.67
Replace eye wash station, emergency eye wash	25	4.00 Ea.	\$4,457.36	\$5,299.99	2.0000	2	2	\$10,599.97	\$10,599.97
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 floor drain, PVC	20	1.00 Ea.	\$47.80	\$59.77	2.5000	2	2	\$119.55	\$119.55
Unclog 4" - 12" diameter PVC main drain per L.F.	10	1.00 L.F.	\$3.79	\$4.74	5.0000	5	5	\$23.71	\$23.71
General maintenance & repair drain: roof, scupper, area	1	8.00 Ea.	\$295.90	\$370.06	50.0000	50	50	\$18,502.80	\$18,502.80
Replace drain: roof, scupper, area	40	8.00 Ea.	\$6,295.46	\$7,298.88	1.2500	1	1	\$7,298.88	\$7,298.88
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	2.00 Ea.	\$7,879.67	\$9,146.83	2.5000	2	2	\$18,293.66	\$18,293.66
Maintenance and repair standard suspended heater	2	6.00 Ea.	\$657.28	\$775.67	25.0000	25	25	\$19,391.72	\$19,391.72

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Replace heater standard suspended heater	15	6.00 Ea.	\$3,728.86	\$4,333.60	3.3333	3	3	\$13,000.79	\$13,000.79
Repair single zone rooftop unit, 10 ton	10	1.00 Ea.	\$21,550.07	\$24,925.75	5.0000	5	5	\$124,628.74	\$124,628.74
Replace single zone rooftop unit, 10 ton	15	1.00 Ea.	\$16,240.73	\$19,103.80	3.3333	3	3	\$57,311.39	\$57,311.39
Repair furnace, gas, 200 MBH residential	10	1.00 Ea.	\$11,436.88	\$13,148.54	5.0000	5	5	\$65,742.70	\$65,742.70
Replace furnace, gas, 200 MBH residential	15	1.00 Ea.	\$4,585.18	\$5,297.40	3.3333	3	3	\$15,892.19	\$15,892.19
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	55.00 Ea.	\$4,703.75	\$5,785.42	2.5000	2	2	\$11,570.85	\$11,570.85
Maintenance and repair motor starter, up to 600 V	5	1.00 Ea.	\$279.64	\$337.60	10.0000	10	10	\$3,375.98	\$3,375.98
Maintenance and inspection motor starter, up to 600 V	0.5	2.00 Ea.	\$107.96	\$135.26	100.0000	100	100	\$13,526.02	\$13,526.02
Replace metal halide fixture lamp, 400 W	5	30.00 Ea.	\$1,991.66	\$2,394.19	10.0000	10	10	\$23,941.91	\$23,941.91
Repair smoke detector	10	45.00 Ea.	\$2,537.44	\$3,137.13	5.0000	5	4	\$15,685.66	\$12,548.53
Check operation smoke detector	1	45.00 Ea.	\$728.74	\$913.01	50.0000	50	50	\$45,650.30	\$45,650.30
Replace smoke detector	15	45.00 Ea.	\$12,790.68	\$15,275.79	3.3333	3	3	\$45,827.36	\$45,827.36
Check and repair manual pull station	10	12.00 Ea.	\$1,052.36	\$1,293.96	5.0000	5	4	\$6,469.82	\$5,175.85
Replace manual pull station	15	12.00 Ea.	\$2,441.61	\$2,939.29	3.3333	3	3	\$8,817.88	\$8,817.88
Minor repairs to fire alarm control panel	5	1.00 Ea.	\$149.71	\$182.27	10.0000	10	10	\$1,822.75	\$1,822.75
Maintenance and inspection fire alarm control panel	0.5	1.00 Ea.	\$43.18	\$54.10	100.0000	100	100	\$5,410.41	\$5,410.41
Replace fire alarm control panel	15	1.00 Ea.	\$1,953.46	\$2,391.92	3.3333	3	3	\$7,175.76	\$7,175.76
Replace fire alarm bell, 6"	20	6.00 Ea.	\$1,169.77	\$1,411.65	2.5000	2	2	\$2,823.31	\$2,823.31
Maintenance and repair of general wiring lightning protection system	1	0.10 M.L.F.	\$9.67	\$11.98	50.0000	50	50	\$599.13	\$599.13
Replace lightning protection general wiring system	25	0.10 M.L.F.	\$1,100.91	\$1,309.60	2.0000	2	2	\$2,619.20	\$2,619.20
Maintenance and repair lightning ground rod	1	1.00 Ea.	\$87.89	\$109.79	50.0000	50	48	\$5,489.36	\$5,269.78
Replace lightning ground rod	25	1.00 Ea.	\$226.09	\$280.29	2.0000	2	2	\$560.58	\$560.58
Replace lamp emergency lighting fixture	2	15.00 Ea.	\$820.34	\$988.13	25.0000	25	25	\$24,703.37	\$24,703.37
Replace emergency lighting fixture	20	15.00 Ea.	\$9,035.52	\$10,646.42	2.5000	2	2	\$21,292.84	\$21,292.84
Maintenance and repair exit light	20	15.00 Ea.	\$558.02	\$690.05	2.5000	2	2	\$1,380.09	\$1,380.09
Replace lamp exit light	5	15.00 Ea.	\$252.70	\$299.45	10.0000	10	10	\$2,994.52	\$2,994.52
Replace lighting fixture exit light	20	15.00 Ea.	\$2,865.52	\$3,446.41	2.5000	2	2	\$6,892.82	\$6,892.82
Remove and replace hydraulic dock leveler lift cylinder	15	1.00 Ea.	\$8,493.80	\$9,670.61	3.3333	3	3	\$29,011.82	\$29,011.82
Remove and replace hydraulic dock leveler hydraulic pump	20	1.00 Ea.	\$1,741.46	\$1,993.26	2.5000	2	2	\$3,986.51	\$3,986.51
Replace starter motor starter, up to 600 V	18	2.00 Ea.	\$1,610.62	\$1,916.15	2.7778	2	2	\$3,832.30	\$3,832.30
Maintenance and repair breaker, molded case, 480 V, 1 pole	20	4.00 Ea.	\$287.05	\$359.63	2.5000	2	2	\$719.27	\$719.27
Maintenance and inspection circuit breaker, molded case, 480 V, 1 pole	0.5	4.00 Ea.	\$129.55	\$162.31	100.0000	100	100	\$16,231.22	\$16,231.22

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 breaker, molded case, 480 V, 2 pole	20	10.00 Ea.	\$717.63	\$899.08	2.5000	2	2	\$1,798.16	\$1,798.16	
Maintenance and inspection circuit breaker, molded case, 480 V, 2 pole	0.5	10.00 Ea.	\$323.88	\$405.78	100.0000	100	100	\$40,578.05	\$40,578.05	
Replace circuit breaker molded case, 480 V, 2 pole circuit breaker	50	10.00 Ea.	\$12,612.73	\$14,546.84	1.0000	1	1	\$14,546.84	\$14,546.84	
Replace fluorescent light fixture ballast, 80 W	10	10.00 Ea.	\$1,246.68	\$1,512.37	5.0000	5	5	\$7,561.86	\$7,561.86	
Replace lamps (2 lamps), 4', 34 W energy saver	10	10.00 Ea.	\$252.14	\$315.79	5.0000	5	5	\$1,578.95	\$1,578.95	
Replace metal halide ballast, 400 W	10	30.00 Ea.	\$5,278.56	\$6,312.06	5.0000	5	5	\$31,560.28	\$31,560.28	
			\$499,754.95	\$592,715.47				MR Subtotal	\$1,559,725.19	
									MR Per Year	\$31,194.50
									PM Total	\$10,084.74
									Subtotal	\$41,279.24
									Total Per Unit	\$2.18

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SUC \$2.18

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 50

Type PM

Average Size 18914.0

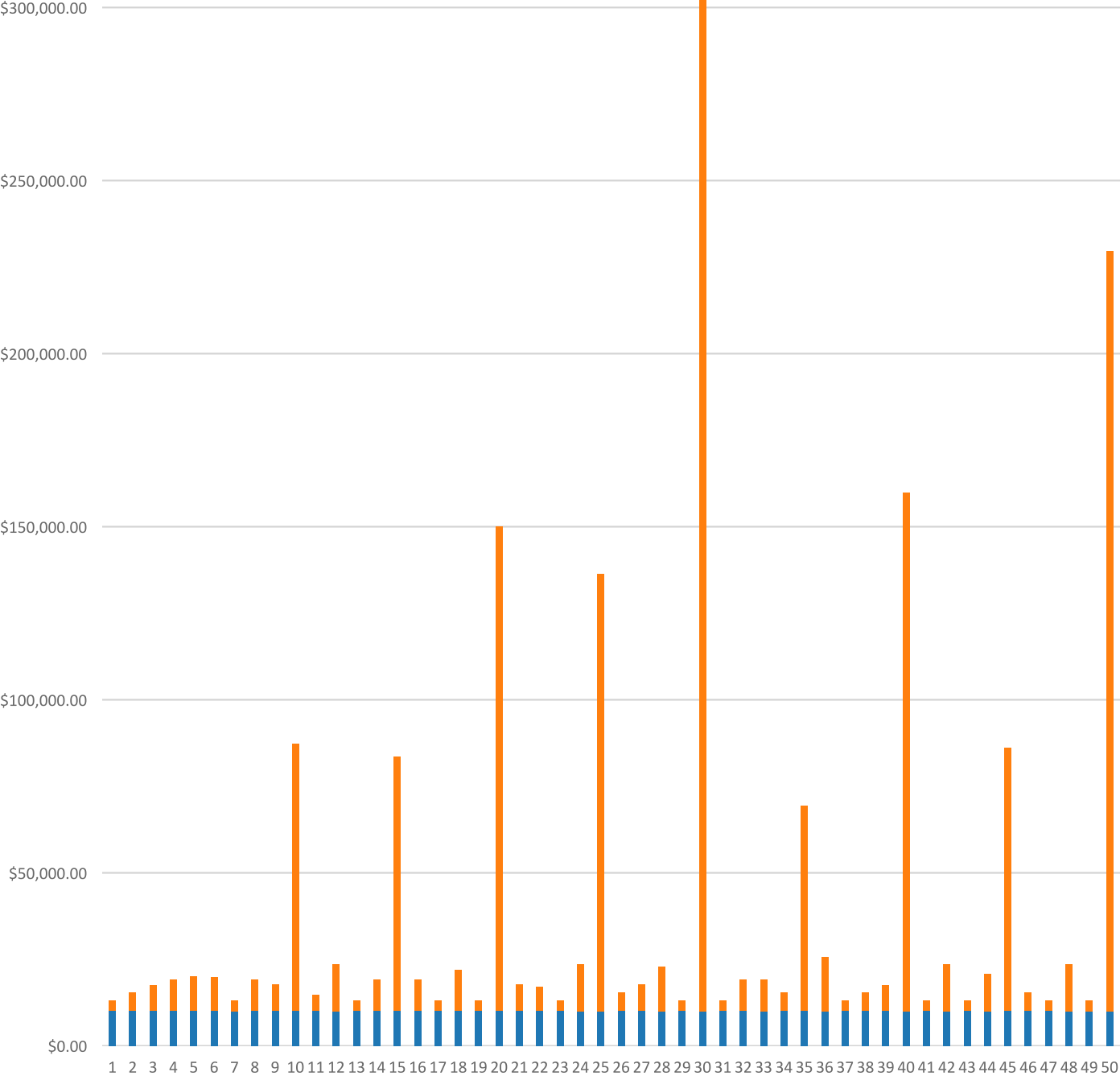
Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Lavatories, annualized	6.00	2.09	\$35.79	\$124.22	\$0.00	\$160.01	\$200.86	\$243.49
Drink fountain, annualized	2.00	1.24	\$41.45	\$62.55	\$0.00	\$104.00	\$126.91	\$151.90
Unit heater, gas radiant, annualized	8.00	8.07	\$11.73	\$405.26	\$0.00	\$416.99	\$539.74	\$663.08
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
Backflow prevention device, over 4", annualized	1.00	0.49	\$13.40	\$29.51	\$0.00	\$42.91	\$53.10	\$63.97
Extinguishing system, dry pipe, annualized	1.00	13.02	\$122.33	\$775.28	\$0.00	\$897.61	\$1,142.43	\$1,393.36
Extinguishing system, dry chemical, annualized	1.00	5.61	\$5.11	\$281.92	\$0.00	\$287.03	\$372.11	\$457.45
Panelboard, 225 A and above, annualized	1.00	0.44	\$23.20	\$29.01	\$0.00	\$52.21	\$63.23	\$75.41
Fire alarm annunciator system, annualized	1.00	11.05	\$179.39	\$652.68	\$0.00	\$832.07	\$1,045.82	\$1,268.53
Light, emergency, hardwired system, annualized	50.00	12.50	\$386.62	\$738.15	\$0.00	\$1,124.78	\$1,384.88	\$1,664.32
Hydraulic lift, loading dock, annualized	1.00	1.63	\$24.64	\$55.61	\$0.00	\$80.25	\$99.40	\$119.78
Door, emergency egress, swinging, annualized	4.00	1.04	\$58.37	\$43.00	\$0.00	\$101.37	\$120.10	\$141.76
Door, overhead, electric, roll up, to 24' high x 25' wide, annualized	10.00	40.70	\$409.60	\$1,688.11	\$0.00	\$2,097.71	\$2,645.10	\$3,212.98
Urinals, annualized	2.00	0.46	\$12.64	\$22.91	\$0.00	\$35.54	\$43.68	\$52.45
Toilet (vacuum breaker type), annualized	5.00	0.89	\$42.21	\$44.49	\$0.00	\$86.70	\$104.27	\$123.95
						\$6,640.58	\$8,324.08	\$10,084.74

FAC 4411 COVERED STORAGE BUILDING, DEPOT

Modeled Component List CostWorks Release 2021 Qtr 3

B10 Superstructure	
Wood Stairs	72.0 S.F.
B20 Exterior Enclosure	
Aluminum Window, Operating, 1st floor	12.0 Ea.
Steel, Painted	3.0 Ea.
Steel Single, Roll-Up	10.0 Ea.
B30 Roofing	
Metal Steep Roofing	169.0 Sq.
C10 Interior Construction	
Concrete Block, Painted	23.7 C.S.F.
Steel Painted Interior Doors	4.0 Ea.
Solid Core Interior Doors	5.0 Ea.
C30 Interior Finishes	
Concrete, Finished	131.0 C.S.F.
Acoustic Tile, fire-rated	18.1 C.S.F.
D20 Plumbing	
Tankless Water Closet	5.0 Ea.
Urinal	2.0 Ea.
Lavatory, Vitreous China	6.0 Ea.
Sink, Iron Enamel	2.0 Ea.
Drinking Fountain	2.0 Ea.
Emergency Eye Wash	4.0 Ea.
Circulation Pump, 1/12 HP	1.0 Ea.
Drain: Roof, Scupper, Area	8.0 Ea.
D30 HVAC	
Exhaust Fan, roof mounted exhaust fan, 8500 CFM exhaust	2.0 Ea.
Standard Suspended Heater	6.0 Ea.
Single Zone Air Conditioner, 10 ton	1.0 Ea.
Residential Gas Furnace, 200 MBH	1.0 Ea.
D40 Fire Protection	
Sprinkler System, Fire Suppression, sprinkler head	55.0 Ea.
Extinguishing system, dry pipe, annualized	1.0 Each
Extinguishing system, dry chemical, annualized	1.0 Each
D50 Electrical	
Smoke Detector	45.0 Ea.
Manual Pull Station	12.0 Ea.
Fire Alarm Control Panel	1.0 Ea.
Fire Alarm Bell	6.0 Ea.
Lightning Protection System	0.1 M.L.F.
Lightning Ground Rod	1.0 Ea.
Emergency Lighting Fixture	15.0 Ea.
Exit Light	15.0 Ea.
Motor Starter, Up To 600 V	2.0 Ea.
E10 Equipment	
Hydraulic Lift, Loading Dock, annualized	1.0 Each

FAC 4411 COVERED STORAGE BUILDING, DEPOT
Sustainment by Year
CostWorks Release 2021 Qtr 3



PM Cost
MR Cost