

**FAC 4427      Small Arms Storage Installation**

RUC:            \$244.32 SF

Source:        USACE PAX Newsletter 3.2.2 dated 20 Mar 09  
CC 42283  
Deflated to FY-09 using Appendix C newsletter  
In V12, Tri-Service and USACE PAX Newsletter values were  
updated while all other values were inflated only.

SUC:            \$2.69 SF

Source:        Cost Works model, inflated to FY-09 using Green Book Table 5-6 (O&M  
less DHP)  
In V12, values were inflated only.

Model follows:

Chart:        A chart showing relative annual sustainment requirements  
follows:

**FAC 4427-Small Arms Storage, Installation  
CostWorks 2008 Quarter 2**

Design Life= 55  
Average S.F= 2,501

C.S.F=100 S.F; MSF=1000 S.F  
Sq=100 S.F; M.L.F=1000 L.F

This spreadsheet was  
exported from R.S Means  
CostWorks

Terminal Cutoff is the removal of a single task occurrence if that task occurs  
within 10% of the end of the design life and if the frequency of the task exceeds  
20% of the design life. This prevents scheduling major work near the end of the  
design life

Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Point & refinish block wall - 1st floor	25	1 Bric	22.240	C.S.F.	8,261.94	10,143.66	2008 Qtr 2	2	1	\$ 10,143.66
Point & refinish block wall - 2nd floor	25	1 Bric	24.010	C.S.F.	10,511.10	12,894.09	2008 Qtr 2	2	1	\$ 12,894.09
Repair steel, painted, door	14	1 Carp	1.000	Ea.	582.44	686.36	2008 Qtr 2	3	3	\$ 2,059.08
Refinish 3'-0" x 7'-0" steel, painted, door	4	1 Pord	1.000	Ea.	32.91	40.31	2008 Qtr 2	13	13	\$ 524.03
Replace 3'-0" x 7'-0" steel, painted, door	45	1 Carp	1.000	Ea.	532.08	620.04	2008 Qtr 2	1	1	\$ 620.04
Debris removal and visual inspection built-up roofing	0.5	2 Rofc	2.501	M.S.F.	73.38	88.41	2008 Qtr 2	110	110	\$ 9,725.14
Non-destructive moisture inspection built-up roofing	5	2 Rofc	2.501	M.S.F.	227.04	274.61	2008 Qtr 2	11	11	\$ 3,020.71
Total roof replacement built-up roofing	28	G1	25.010	Sq.	14,275.21	16,905.51	2008 Qtr 2	1	1	\$ 16,905.51
Minor membrane repairs - (2% of roof area) built-up roofing	1	G5	0.500	Sq.	172.26	203.52	2008 Qtr 2	55	55	\$ 11,193.60
Flashing repairs - (2 S.F. per sq. repaired) built-up roofing	1	2 Rofc	1.000	S.F.	3.36	4.00	2008 Qtr 2	55	55	\$ 220.00
Minor membrane replacement - (25% of roof area) built-up roofing	15	G5	6.253	Sq.	3,716.97	4,433.88	2008 Qtr 2	3	3	\$ 13,301.63
Repair steel painted interior door	14	1 Carp	2.000	Ea.	335.50	396.28	2008 Qtr 2	3	3	\$ 1,188.84
Refinish 3'-0" x 7'-0" steel painted interior door	4	1 Pord	2.000	Ea.	98.80	121.64	2008 Qtr 2	13	13	\$ 1,581.32
Replace 3'-0" x 7'-0" steel painted interior door	60	1 Carp	2.000	Ea.	1,875.08	2,179.92	2008 Qtr 2	0	0	\$ -
Refinish drywall	4	1 Pord	1,132.000	S.F.	679.20	837.68	2008 Qtr 2	13	13	\$ 10,889.84
Replace 5/8" drywall	75	2 Carp	1,132.000	S.F.	2,524.36	3,045.08	2008 Qtr 2	0	0	\$ -
Repair 5/8" drywall - (2% of walls)	20	1 Carp	22.640	S.F.	36.00	43.24	2008 Qtr 2	2	2	\$ 86.48
Refinish concrete floor finished	25	2 Cefi	25.010	C.S.F.	8,739.49	10,521.46	2008 Qtr 2	2	1	\$ 10,521.46
Check / minor repairs drinking fountain	1	1 Plum	1.000	Ea.	37.58	47.34	2008 Qtr 2	55	55	\$ 2,603.70
Repair internal leaks drinking fountain	4	1 Plum	1.000	Ea.	35.14	43.43	2008 Qtr 2	13	13	\$ 564.59
Correct water pressure drinking fountain	2	1 Plum	1.000	Ea.	32.21	40.50	2008 Qtr 2	27	27	\$ 1,093.50
Replace refrigerant drinking fountain	2	1 Plum	1.000	Ea.	15.84	18.86	2008 Qtr 2	27	27	\$ 509.22
Repair drain leak drinking fountain	4	1 Plum	1.000	Ea.	22.63	27.03	2008 Qtr 2	13	13	\$ 351.39
Replace fountain drinking fountain	10	2 Plum	1.000	Ea.	1,005.84	1,193.57	2008 Qtr 2	5	5	\$ 5,967.85
Unclog floor drain, PVC	20	1 Plum	1.000	Ea.	37.09	45.87	2008 Qtr 2	2	2	\$ 91.74
Repair joint pipe and fittings, PVC	10	1 Plum	1.000	Ea.	115.94	144.14	2008 Qtr 2	5	5	\$ 720.70
Replace pipe, 4" pipe and fittings, PVC	30	2 Plum	8.000	L.F.	473.60	585.52	2008 Qtr 2	1	1	\$ 585.52
General maintenance & repair drain: roof, scupper, area	1	1 Plum	2.000	Ea.	56.70	71.34	2008 Qtr 2	55	55	\$ 3,923.70
Replace drain: roof, scupper, area	40	1 Plum	2.000	Ea.	796.68	936.28	2008 Qtr 2	1	1	\$ 936.28
Replace roof mounted exhaust fan, 8500 CFM exhaust fan	20	Q20	1.000	Ea.	2,619.48	3,050.64	2008 Qtr 2	2	2	\$ 6,101.28
Repair single zone rt. unit, 5 ton	10	2 Stpi	1.000	Ea.	1,929.71	2,314.56	2008 Qtr 2	5	5	\$ 11,572.80
Replace single zone rt. unit, 5 ton	15	Q5	1.000	Ea.	7,276.88	8,588.60	2008 Qtr 2	3	3	\$ 25,765.80
Repair fan coil unit, 1 ton	10	1 Stpi	1.000	Ea.	369.22	441.02	2008 Qtr 2	5	5	\$ 2,205.10
Replace fan coil unit, 1 ton	15	Q5	1.000	Ea.	1,098.30	1,295.56	2008 Qtr 2	3	3	\$ 3,886.68
Inspect sprinkler system	1	1 Plum	1.000	Ea.	26.55	32.89	2008 Qtr 2	55	55	\$ 1,808.95
Rebuild double check 3" backflow preventer sprinkler system	1	1 Plum	1.000	Ea.	598.06	715.83	2008 Qtr 2	55	55	\$ 39,370.65

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**CostWorks 2008 Quarter 2**

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Description	Frequency	Crew	Qty	Unit	Total In-House	Total Incl. O&P	Release	Occurrences in Design Life	Adjusted Occurrences	Terminal Cutoff
Replace sprinkler head	20	1 Plum	26.000	Ea.	1,655.68	2,039.96	2008 Qtr 2	2	2	\$ 4,079.92
Replace fire alarm bell, 6"	20	1 Elec	1.000	Ea.	142.28	171.51	2008 Qtr 2	2	2	\$ 343.02
Repair failed breaker, 3 pole circuit breaker	10	1 Elec	1.000	Ea.	342.23	400.69	2008 Qtr 2	5	5	\$ 2,003.45
Maintenance and inspection C.B., 3 pole circuit breaker	0.33	1 Elec	1.000	Ea.	22.91	28.50	2008 Qtr 2	166	166	\$ 4,731.00
Replace C.B. molded case, 600 V, 3 pole circuit breaker	50	1 Elec	1.000	Ea.	3,157.74	3,611.55	2008 Qtr 2	1	0	\$ -
Maintenance and inspection lighting panel, indoor	3	1 Elec	1.000	Ea.	28.50	35.63	2008 Qtr 2	18	18	\$ 641.34
Replace fluor. ballast for fluorescent lighting fixture, 80 W	10	1 Elec	19.000	Ea.	1,892.02	2,281.52	2008 Qtr 2	5	5	\$ 11,407.60
Replace lamps (2 lamps) fluorescent lighting fixture, 80 W	10	1 Elec	19.000	Ea.	483.36	592.42	2008 Qtr 2	5	5	\$ 2,962.10
Maintenance and repair receptacles and plugs	20	1 Elec	20.000	Ea.	621.80	774.60	2008 Qtr 2	2	2	\$ 1,549.20
Replace receptacle/plug receptacles and plugs	20	1 Elec	20.000	Ea.	1,055.20	1,288.40	2008 Qtr 2	2	2	\$ 2,576.80
Maintenance and repair wiring devices, switches	10	1 Elec	10.000	Ea.	310.90	387.30	2008 Qtr 2	5	5	\$ 1,936.50
Replace switch wiring devices, switches	15	1 Elec	10.000	Ea.	512.10	623.50	2008 Qtr 2	3	3	\$ 1,870.50
Check and repair manual pull station	10	1 Elec	1.000	Ea.	69.21	84.87	2008 Qtr 2	5	5	\$ 424.35
Replace manual pull station	15	1 Elec	1.000	Ea.	125.74	151.89	2008 Qtr 2	3	3	\$ 455.67
Repair smoke detector	10	1 Elec	4.000	Ea.	152.76	188.00	2008 Qtr 2	5	5	\$ 940.00
Check operation smoke detector	1	1 Elec	4.000	Ea.	45.60	57.20	2008 Qtr 2	55	55	\$ 3,146.00
Replace smoke detector	15	1 Elec	4.000	Ea.	758.20	907.96	2008 Qtr 2	3	3	\$ 2,723.88
Repair steel unpainted door steel	14	1 Carp	1.000	Ea.	167.75	198.14	2008 Qtr 2	3	3	\$ 594.42
Replace 3'-0" x 7'-0" steel unpainted door & frame steel	60	1 Carp	1.000	Ea.	937.54	1,089.96	2008 Qtr 2	0	0	\$ -

**\$81,706.09      \$97,946.27**

MR Subtotal    \$ 255,320.63

MR Per Year    \$   4,642.19

PM Per Year    \$   2,320.89

Subtotal        \$   6,963.08

Total Per Unit    \$       2.78

**CostWorks 2009 Quarter 1 - FAC 4427-Small Arms Storage, Installation**

Qty	Assembly Number	Description	Total In-House	Total Incl. O&P	Zip Code Prefix	Type	Release
3.000	C1025 110 1950	Fire doors, swinging, annualized	74.67	89.58	200	FMR	2008 Qtr 2
1.000	B2035 225 1950	Door, emergency egress, swinging, annualized	49.51	57.51	200	FMR	2008 Qtr 2
1.000	D2015 800 1950	Drink fountain, annualized	49.50	59.36	200	FMR	2008 Qtr 2
1.000	D3045 160 1950	VAV Boxes, annualized	61.31	76.00	200	FMR	2008 Qtr 2
1.000	D3045 210 1950	Fan, axial, up to 5,000 CFM, annualized	70.55	86.20	200	FMR	2008 Qtr 2
1.000	D3055 210 1950	Package unit, air cooled, 3 thru 24 ton, annualized	207.71	251.03	200	FMR	2008 Qtr 2
1.000	D4015 100 1950	Backflow prevention device, up to 4", annualized	18.89	23.42	200	FMR	2008 Qtr 2
1.000	D4015 150 1950	Extinguishing system, wet pipe, annualized	806.79	983.35	200	FMR	2008 Qtr 2
1.000	D5015 260 1950	Panelboard, 225 A and above, annualized	56.96	67.71	200	FMR	2008 Qtr 2
1.000	D5015 220 1950	Circuit breaker, high voltage air, annualized	26.98	33.59	200	FMR	2008 Qtr 2
1.000	D5035 810 1950	Security, intrusion alarm system, annualized	265.36	326.54	200	FMR	2008 Qtr 2
1.000	D3045 120 1950	Fan coil unit, annualized	215.71	266.60	200	FMR	2008 Qtr 2
			<b>\$1,903.94</b>	<b>\$2,320.89</b>			

FAC 4427 Sustainment by Year - Terminal Cutoff Applied

