

FAC 7110 Family Housing Dwelling

RUC: \$147.00 SF

Source: Tri-Service FAC 7110 from *Tri-Service Facility Unit Costs for Military Construction* version prepared November 13, 2009

SUC: \$2.10 SF

Source: Cost Works Model in \$FY-08, 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:

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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

Design Life= 60
 Average S.F= 3425

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

Assembly Number	Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Adjusted Occurrences	lifecycle	Terminal Cutoff
B1013 530 1030	Refinish wood steps	7	1 Pord	174.000	S.F.	290.58	8	\$2,324.64	\$ 2,324.64
B1013 540 1010	Replace wood balustrade	20	1 Carp	15.000	L.F.	1,296.90	2	\$3,890.70	\$ 2,593.80
B1013 540 1030	Refinish wood balustrade	7	1 Pord	15.000	L.F.	124.80	8	\$998.40	\$ 998.40
B2013 119 1030	Waterproof brick wall - 1st floor	10	1 Rofc	13.200	C.S.F.	2,712.20	6	\$16,273.22	\$ 16,273.22
B2013 141 1010	Replace aluminum siding - 1st floor	35	1 Carp	13.200	C.S.F.	7,196.11	1	\$7,196.11	\$ 7,196.11
B2013 141 2010	Replace aluminum siding - 2nd floor	35	1 Carp	13.200	C.S.F.	8,969.14	1	\$8,969.14	\$ 8,969.14
B2023 110 1010	Replace glass - 1st flr. (1% of glass)	1	1 Carp	2.000	S.F.	21.24	60	\$1,274.40	\$ 1,274.40
B2023 110 1020	Repair 3' x 4' aluminum window - 1st floor	20	1 Carp	17.000	Ea.	4,677.38	2	\$14,032.14	\$ 9,354.76
B2023 110 1030	Replace 3' x 4' aluminum window - 1st floor	50	1 Carp	17.000	Ea.	14,771.81	1	\$14,771.81	\$ 14,771.81
B2023 110 2010	Replace glass - 2nd flr. (1% of glass)	1	1 Carp	1.000	S.F.	15.44	60	\$926.40	\$ 926.40
B2023 110 2020	Repair 3' x 4' aluminum window - 2nd floor	20	1 Carp	10.000	Ea.	3,233.60	2	\$9,700.80	\$ 6,467.20
B2023 110 2030	Replace 3' x 4' aluminum window - 2nd floor	50	1 Carp	10.000	Ea.	9,171.40	1	\$9,171.40	\$ 9,171.40
B2033 206 1010	Repair solid core, painted, door	12	1 Carp	6.000	Ea.	2,237.94	5	\$11,189.70	\$ 11,189.70
B2033 206 1020	Prepare and refinish solid core, painted, door	4	1 Pord	6.000	Ea.	333.84	15	\$5,007.60	\$ 5,007.60
B2033 206 1030	Replace 3'-0" x 7'-0" solid core, painted, door	40	1 Carp	6.000	Ea.	8,773.02	1	\$8,773.02	\$ 8,773.02
B3013 146 0100	Debris removal by hand & visual inspection shingle	1	2 Rofc	3.425	M.S.F.	73.30	60	\$4,397.70	\$ 4,397.70
B3013 146 0600	Install new shingles over existing shingles	20	2 Rofc	34.250	Sq.	7,184.28	2	\$21,552.84	\$ 14,368.56
B3013 146 0700	Removal and replacement of shingles shingles	40	2 Rofc	34.250	Sq.	10,370.22	1	\$10,370.22	\$ 10,370.22
C1023 120 1020	Refinish 3'-0" x 7'-0" hollow core wood door interior	4	1 Pord	12.000	Ea.	623.76	15	\$9,356.40	\$ 9,356.40
C1023 120 1030	Replace 3'-0" x 7'-0" hollow core wood door interior	30	1 Carp	18.000	Ea.	6,766.56	1	\$13,533.12	\$ 6,766.56
C2013 440 0030	Refinish wood steps	10	1 Pord	66.000	S.F.	167.64	6	\$1,005.84	\$ 1,005.84
C2013 445 0030	Refinish wood stair railing interior	7	1 Pord	16.000	L.F.	40.64	8	\$325.12	\$ 325.12
C2013 445 0040	Replace wood stair railing interior	40	1 Carp	16.000	L.F.	213.12	1	\$213.12	\$ 213.12
C3013 214 0010	Repair 5/8" drywall - (2% of walls)	20	1 Carp	101.080	S.F.	193.06	2	\$579.19	\$ 386.13
C3013 214 0030	Refinish drywall	4	1 Pord	2,527.000	S.F.	1,869.98	15	\$28,049.70	\$ 28,049.70
C3013 214 0040	Replace 5/8" drywall	75	2 Carp	5,054.000	S.F.	13,595.26	0	\$0.00	\$ -
C3013 220 0010	Repair 4" x 4" thin set ceramic tile - (2% of walls)	10	1 Tilf	0.214	C.S.F.	195.25	6	\$1,171.47	\$ 1,171.47
C3013 220 0020	Replace 4" x 4" thin set ceramic tile	75	1 Tilf	10.700	C.S.F.	10,641.47	0	\$0.00	\$ -
C3023 410 0020	Replace vinyl floor	18	1 Tilf	97.777	S.Y.	5,700.40	3	\$17,101.20	\$ 17,101.20
C3023 420 0010	Ceramic tile floor repairs - (2% of floors)	15	1 Tilf	0.016	C.S.F.	12.32	3	\$49.27	\$ 36.95
C3023 420 0020	Replace 2" x 2" thin set ceramic tile floor	50	1 Tilf	0.800	C.S.F.	1,294.06	1	\$1,294.06	\$ 1,294.06
C3023 472 0020	Sand and refinish parquet floor	12	1 Carp	775.000	S.F.	4,123.00	5	\$20,615.00	\$ 20,615.00
C3023 472 0030	Replace 5/16" oak parquet floor	40	2 Carp	930.000	S.F.	11,652.90	1	\$11,652.90	\$ 11,652.90
C3033 107 0010	Repair sheetrock ceiling - (2% of ceilings)	20	1 Carp	0.380	C.S.F.	161.98	2	\$485.95	\$ 323.97
C3033 107 0020	Refinish sheetrock ceiling	20	1 Pord	19.000	C.S.F.	2,950.51	2	\$8,851.53	\$ 5,901.02
C3033 107 0040	Replace sheetrock ceiling	40	2 Carp	19.000	C.S.F.	8,312.69	1	\$8,312.69	\$ 8,312.69
D2013 130 0010	Unplug clogged line flush-tank water closet	5	1 Plum	4.000	Ea.	840.72	12	\$10,088.64	\$ 10,088.64
D2013 130 0020	Replace washer / diaphragm in ball cock flush-tank	5	1 Plum	4.000	Ea.	69.60	12	\$835.20	\$ 835.20
D2013 130 0030	Replace valve and ball cock assembly flush-tank wa	15	1 Plum	4.000	Ea.	370.72	3	\$1,482.88	\$ 1,112.16
D2013 130 0040	Install gasket between tank and bowl flush-tank wat	20	1 Plum	4.000	Ea.	154.12	2	\$462.36	\$ 308.24
D2013 130 0050	Replace two piece water closet flush-tank	35	2 Plum	4.000	Ea.	1,985.44	1	\$1,985.44	\$ 1,985.44
D2013 130 0060	Replace one piece water closet flush-tank	35	2 Plum	4.000	Ea.	3,082.92	1	\$3,082.92	\$ 3,082.92
D2013 330 0010	Replace washer in spud connection lavatory, vitreo	7	1 Plum	4.000	Ea.	113.32	8	\$906.56	\$ 906.56
D2013 330 0020	Replace washer in faucet lavatory, vitreous china	2	1 Plum	4.000	Ea.	49.16	30	\$1,474.80	\$ 1,474.80
D2013 330 0040	Replace faucets lavatory, vitreous china	10	1 Plum	4.000	Ea.	596.24	6	\$3,577.44	\$ 3,577.44
D2013 330 0050	Clean out strainer and P trap lavatory, vitreous chin	5	1 Plum	1.600	Ea.	53.71	12	\$644.54	\$ 644.54
D2013 330 0060	Replace lavatory, vitreous china	35	2 Plum	4.000	Ea.	2,542.80	1	\$2,542.80	\$ 2,542.80
D2013 450 0040	Replace faucets laundry sink, plastic	10	1 Plum	2.000	Ea.	298.12	6	\$1,788.72	\$ 1,788.72
D2013 450 0050	Clean out strainer and P trap laundry sink, plastic	2	1 Plum	2.000	Ea.	67.14	30	\$2,014.20	\$ 2,014.20
D2013 450 0060	Replace laundry sink ,plastic	20	2 Plum	2.000	Ea.	1,109.80	2	\$3,329.40	\$ 2,219.60
D2013 550 0020	Replace mixing valve barrel bathtub, fiberglass	10	1 Plum	0.400	Ea.	70.53	6	\$423.17	\$ 423.17
D2013 550 0030	Replace mixing valve bathtub, fiberglass	10	1 Plum	2.000	Ea.	658.00	6	\$3,948.00	\$ 3,948.00
D2013 550 0070	Replace bathtub, fiberglass	20	2 Plum	2.000	Ea.	2,437.44	2	\$7,312.32	\$ 4,874.88

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Design Life= 60
 Average S.F= 3425

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

Assembly Number	Description	Frequency	Crew	Qty	Unit	Total Incl. O&P	Adjusted Occurrences	lifecycle	Terminal Cutoff
D2013 770 0020	Replace mixing valve barrel shower, misc.	2	1 Plum	0.400	Ea.	70.53	30	\$2,115.84	\$ 2,115.84
D2013 770 0030	Replace mixing valve shower, misc.	10	1 Plum	2.000	Ea.	658.00	6	\$3,948.00	\$ 3,948.00
D2013 770 0280	Replace shower surface, ceramic tile	30	D7	2.000	Ea.	2,051.60	1	\$4,103.20	\$ 2,051.60
D2023 110 0020	Replace pipe and fittings, copper 3/4"	20	2 Plum	32.000	L.F.	687.36	2	\$2,062.08	\$ 1,374.72
D2023 160 0030	Remove old insulation & replace with new, pipe 3/4	15	1 Plum	32.000	L.F.	273.28	3	\$1,093.12	\$ 819.84
D2023 220 0010	Drain and flush water heater, electric, 120 gallon	7	1 Plum	2.000	Ea.	566.08	8	\$4,528.64	\$ 4,528.64
D2023 220 0020	Check operation water heater, electric, 120 gallon	3	1 Plum	2.000	Ea.	4.96	20	\$99.20	\$ 99.20
D2023 220 0030	Replace water heater, electric, 120 gallon	15	2 Plum	2.000	Ea.	600.32	3	\$2,401.28	\$ 1,800.96
D2033 110 0020	Unclog main drain pipe & fittings, cast iron	10	1 Plum	1.000	Ea.	44.41	6	\$266.46	\$ 266.46
D2033 110 0030	Replace pipe & fittings, cast iron	40	2 Plum	8.000	L.F.	405.60	1	\$405.60	\$ 405.60
D2043 110 1010	General maintenance & repair distribution: gutters,	1	1 Plum	0.200	M.L.F.	58.08	60	\$3,484.92	\$ 3,484.92
D2043 110 1020	Replace pipe or gutter distribution	20	1 Plum	200.000	L.F.	1,754.09	2	\$5,262.27	\$ 3,508.18
D3043 120 2010	Repair fan coil unit, 3 ton	10	1 Stpi	2.000	Ea.	0.00	6	\$0.00	\$ -
D3043 120 2030	Replace fan coil unit, 3 ton	15	Q5	2.000	Ea.	0.00	3	\$0.00	\$ -
D3053 245 2010	Repair heat pump, 5 ton, air to air split	10	1 Stpi	2.000	Ea.	0.00	6	\$0.00	\$ -
D3053 245 2030	Replace heat pump, 5 ton, air to air split	20	Q5	2.000	Ea.	14,553.40	2	\$43,660.20	\$ 29,106.80
D5013 280 0020	Maintenance and inspection lighting panel, indoor	3	1 Elec	2.000	Ea.	71.26	20	\$1,425.20	\$ 1,425.20
D5023 150 0010	Maintenance and repair receptacles and plugs	20	1 Elec	2.600	Ea.	100.70	2	\$302.09	\$ 201.40
D5023 150 0020	Replace receptacle/plug receptacles and plugs	20	1 Elec	26.000	Ea.	1,674.92	2	\$5,024.76	\$ 3,349.84
D5023 220 0010	Maintenance and repair wiring devices, switches	10	1 Elec	2.600	Ea.	100.70	6	\$604.19	\$ 604.19
D5023 220 0020	Replace switch wiring devices, switches	15	1 Elec	2.000	Ea.	124.70	3	\$498.80	\$ 374.10
D5023 240 0010	Maintenance and repair incandescent lighting fixtur	10	1 Elec	20.000	Ea.	1,127.80	6	\$6,766.80	\$ 6,766.80
D5023 240 0030	Replace lighting fixture incandescent	20	1 Elec	20.000	Ea.	2,857.00	2	\$8,571.00	\$ 5,714.00
D5023 260 0010	Replace fluor. ballast for fluorescent lighting fixture	10	1 Elec	4.000	Ea.	480.32	6	\$2,881.92	\$ 2,881.92
D5023 260 0030	Replace fixture fluorescent lighting fixture, 80 W	20	1 Elec	4.000	Ea.	860.44	2	\$2,581.32	\$ 1,720.88
D5033 710 0020	Check operation smoke detector	1	1 Elec	10.000	Ea.	143.00	60	\$8,580.00	\$ 8,580.00
D5033 710 0030	Replace smoke detector	15	1 Elec	10.000	Ea.	2,269.90	3	\$9,079.60	\$ 6,809.70
						\$196,006.02			
						MR Subtotal		\$	380,706.30
						MR Per Year		\$	6,345.11
						PM Per Year		\$	1,087.42
						Subtotal		\$	7,432.53
						Total Per Unit		\$	2.17

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Qty	Description	Total Incl. O&P	Zip Code Prefix	Type	Release
2.000	Air handling unit, 3 thru 24 tons, annualized	533.20	200	FMR	2008 Qtr 2
2.000	Heat pump, air cooled, up to 5 ton, annualized	554.22	200	FMR	2008 Qtr 2
		\$1,087.42			

FAC 7110 Sustainment by Year - Terminal Cutoff Applied

