

FAC 3711 RDTE RANGE BUILDING

FY22 SUC:	\$5.78 / SF
Source:	Calculated using R.S. Means CostWorks 2021 Qtr 3 component prices

FAC 3711 RDTE RANGE BUILDING

Release 2021 Qtr 3
Zip Code Prefix 222
Type MR

UM SF
Design Life 40
Average Size 2619.0

SUC \$5.78

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
Maintenance and repair receptacles and plugs	20	36.00 Ea.	\$1,520.76	\$1,898.59	2.0000	2	2	\$3,797.18	\$3,797.18
Repair 4-pin receptacle cover	10	4.00 Ea.	\$234.21	\$289.22	4.0000	4	4	\$1,156.90	\$1,156.90
Maintenance and repair wiring devices, switches	10	14.00 Ea.	\$591.41	\$738.34	4.0000	4	4	\$2,953.36	\$2,953.36
Maintenance and repair incandescent lighting fixtures	10	12.00 Ea.	\$826.39	\$983.82	4.0000	4	2	\$3,935.28	\$1,967.64
Replace incandescent lighting fixture lamp	5	12.00 Ea.	\$137.79	\$166.41	8.0000	8	8	\$1,331.30	\$1,331.30
Replace incandescent lighting fixture	20	12.00 Ea.	\$1,685.51	\$2,037.19	2.0000	2	2	\$4,074.38	\$4,074.38
Replace fluorescent light fixture ballast, 80 W	10	12.00 Ea.	\$1,496.02	\$1,814.85	4.0000	4	4	\$7,259.39	\$7,259.39
Replace lamps (2 lamps), 4', 34 W energy saver	10	12.00 Ea.	\$302.57	\$378.95	4.0000	4	4	\$1,515.79	\$1,515.79
Repair smoke detector	10	6.00 Ea.	\$338.33	\$418.28	4.0000	4	3	\$1,673.14	\$1,254.85
Check operation smoke detector	1	6.00 Ea.	\$97.17	\$121.73	40.0000	40	40	\$4,869.37	\$4,869.37
Replace smoke detector	15	6.00 Ea.	\$1,705.42	\$2,036.77	2.6667	2	2	\$4,073.54	\$4,073.54
Check and repair manual pull station	10	2.00 Ea.	\$175.39	\$215.66	4.0000	4	3	\$862.64	\$646.98
Replace manual pull station	15	2.00 Ea.	\$406.94	\$489.88	2.6667	2	2	\$979.76	\$979.76
Maintenance and repair of general wiring lightning protection system	1	0.20 M.L.F.	\$19.34	\$23.97	40.0000	40	40	\$958.61	\$958.61
Replace lightning protection general wiring system	25	0.20 M.L.F.	\$2,201.82	\$2,619.20	1.6000	1	1	\$2,619.20	\$2,619.20
Maintenance and repair lightning ground rod	1	4.00 Ea.	\$351.56	\$439.15	40.0000	40	39	\$17,565.95	\$17,126.80
Replace lightning ground rod	25	4.00 Ea.	\$904.36	\$1,121.16	1.6000	1	1	\$1,121.16	\$1,121.16
Maintenance and inspection generator, diesel, 750 KW	0.08	1.00 Ea.	\$64.78	\$81.16	500.0000	500	500	\$40,578.05	\$40,578.05
Maintenance and repair exit light	20	2.00 Ea.	\$74.40	\$92.01	2.0000	2	2	\$184.01	\$184.01
Replace lamp exit light	5	2.00 Ea.	\$33.69	\$39.93	8.0000	8	8	\$319.42	\$319.42
Maintenance and repair voice/data outlet	10	14.00 Ea.	\$718.10	\$896.81	4.0000	4	4	\$3,587.25	\$3,587.25
Replace voice/data outlet	20	14.00 Ea.	\$362.77	\$441.73	2.0000	2	2	\$883.47	\$883.47
Repair masonry steps	4	40.00 S.F.	\$1,020.50	\$1,235.05	10.0000	10	10	\$12,350.45	\$12,350.45
Replace metal hand rail	30	12.00 L.F.	\$908.20	\$1,050.87	1.3333	1	1	\$1,050.87	\$1,050.87
Refinish metal hand rail	7	156.00 L.F.	\$321.82	\$396.67	5.7143	5	5	\$1,983.37	\$1,983.37
Metal floor grating repairs - (2% of grating)	10	2.10 S.F.	\$70.25	\$84.58	4.0000	4	4	\$338.33	\$338.33
Replace metal floor grating	30	1,040.00 S.F.	\$41,032.05	\$47,130.43	1.3333	1	1	\$47,130.43	\$47,130.43
Repair 8" concrete block wall, 1st floor	25	41.00 S.F.	\$992.81	\$1,214.55	1.6000	1	1	\$1,214.55	\$1,214.55
Waterproof concrete block wall, 1st floor	10	20.80 C.S.F.	\$4,721.65	\$5,616.17	4.0000	4	4	\$22,464.70	\$22,464.70
Replace glass - 1st floor (1% of glass) - alum. window fixed	1	0.48 S.F.	\$5.79	\$6.80	40.0000	40	40	\$272.09	\$272.09
Repair 2'-0" x 3'-0" aluminum window - 1st floor	20	8.00 Ea.	\$1,157.89	\$1,380.87	2.0000	2	2	\$2,761.74	\$2,761.74
Repair window - 1st floor (2% of glass) - fixed glass block	8	8.00 S.F.	\$598.55	\$712.82	5.0000	5	5	\$3,564.08	\$3,564.08

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost
Refinish steel shutter - 1st floor	5	2.00 Ea.	\$194.07	\$240.81	8.0000	8	8	\$1,926.49	\$1,926.49
Repair steel, painted, door	14	2.00 Ea.	\$1,250.15	\$1,488.01	2.8571	2	2	\$2,976.02	\$2,976.02
Refinish 3'-0" x 7'-0" steel, painted, door	4	2.00 Ea.	\$82.80	\$101.73	10.0000	10	10	\$1,017.32	\$1,017.32
Replace 3'-0" x 7'-0" steel, painted, door	45	1.00 Ea.	\$705.06	\$819.73	0.8889	0	0	\$0.00	\$0.00
Minor metal roof panel replacement, 2.5% of roof area	20	65.00 S.F.	\$742.79	\$882.19	2.0000	2	2	\$1,764.37	\$1,764.37
Total metal roof panel replacement	30	26.20 Sq.	\$22,142.84	\$26,226.63	1.3333	1	1	\$26,226.63	\$26,226.63
Repair steel painted interior door	14	2.00 Ea.	\$586.90	\$683.13	2.8571	2	2	\$1,366.26	\$1,366.26
Refinish 3'-0" x 7'-0" steel painted interior door	4	2.00 Ea.	\$105.17	\$129.57	10.0000	10	10	\$1,295.73	\$1,295.73
Replace 3'-0" x 7'-0" steel painted interior door	60	2.00 Ea.	\$2,436.07	\$2,824.17	0.6667	0	0	\$0.00	\$0.00
Repair solid core wood door, interior	11	3.00 Ea.	\$880.36	\$1,024.69	3.6364	3	3	\$3,074.08	\$3,074.08
Refinish 3'-0" x 7'-0" solid core wood door, interior	4	3.00 Ea.	\$130.09	\$159.75	10.0000	10	9	\$1,597.49	\$1,437.74
Replace 3'-0" x 7'-0" solid core wood door, interior	40	3.00 Ea.	\$1,468.28	\$1,697.43	1.0000	1	1	\$1,697.43	\$1,697.43
Rebuild flush valve for a urinal	20	2.00 Ea.	\$360.87	\$434.91	2.0000	2	2	\$869.83	\$869.83
Unplug line urinal	5	2.00 Ea.	\$290.14	\$362.86	8.0000	8	8	\$2,902.85	\$2,902.85
Replace wall-hung urinal	35	2.00 Ea.	\$1,937.73	\$2,338.21	1.1429	1	1	\$2,338.21	\$2,338.21
Replace washer in spud connection lavatory, vitreous china	7	4.00 Ea.	\$65.85	\$80.32	5.7143	5	5	\$401.60	\$401.60
Replace washer in faucet lavatory, vitreous china	2	4.00 Ea.	\$51.54	\$64.21	20.0000	20	20	\$1,284.15	\$1,284.15
Repair 5/8" drywall - (2% of walls)	20	41.60 S.F.	\$69.69	\$84.80	2.0000	2	2	\$169.60	\$169.60
Refinish drywall	4	2,080.00 S.F.	\$1,291.64	\$1,588.93	10.0000	10	10	\$15,889.33	\$15,889.33
Replace vinyl tile flooring	18	291.00 S.Y.	\$14,376.41	\$17,654.98	2.2222	2	2	\$35,309.96	\$35,309.96
Replace acoustic tile ceiling, fire-rated	20	24.50 C.S.F.	\$12,843.60	\$15,138.21	2.0000	2	2	\$30,276.42	\$30,276.42
Replace flush valve diaphragm tankless water closet	10	3.00 Ea.	\$78.66	\$97.61	4.0000	4	4	\$390.43	\$390.43
Rebuild flush valve tankless water closet	20	3.00 Ea.	\$541.30	\$652.37	2.0000	2	2	\$1,304.74	\$1,304.74
Unplug clogged line tankless water closet	5	3.00 Ea.	\$655.19	\$819.38	8.0000	8	8	\$6,555.04	\$6,555.04
Replace tankless water closet	35	3.00 Ea.	\$3,858.66	\$4,465.49	1.1429	1	1	\$4,465.49	\$4,465.49
Replace flush valve diaphragm for a urinal	7	2.00 Ea.	\$52.44	\$65.07	5.7143	5	5	\$325.36	\$325.36
Replace faucets lavatory, vitreous china	10	4.00 Ea.	\$726.90	\$875.02	4.0000	4	4	\$3,500.09	\$3,500.09
Clean out strainer and P trap lavatory, vitreous china	2	4.00 Ea.	\$139.48	\$174.43	20.0000	20	20	\$3,488.63	\$3,488.63
Replace lavatory, vitreous china	35	4.00 Ea.	\$2,690.30	\$3,232.88	1.1429	1	1	\$3,232.88	\$3,232.88
Replace faucet washer sink, iron enamel	2	4.00 Ea.	\$51.11	\$63.66	20.0000	20	20	\$1,273.28	\$1,273.28
Clean trap sink, iron enamel	3	1.00 Ea.	\$8.57	\$10.72	13.3333	13	13	\$139.34	\$139.34
Replace faucets sink, iron enamel	10	1.00 Ea.	\$181.73	\$218.76	4.0000	4	4	\$875.02	\$875.02
Unstop sink, iron enamel	2	1.00 Ea.	\$41.82	\$52.30	20.0000	20	20	\$1,046.05	\$1,046.05
Replace sink, P.E.C.I. sink, iron enamel kitchen	35	1.00 Ea.	\$636.70	\$757.51	1.1429	1	1	\$757.51	\$757.51
Unclog main drain pipe & fittings, cast iron	10	1.00 Ea.	\$46.17	\$57.74	4.0000	4	4	\$230.95	\$230.95

Description	Frequency	Qty Unit	Total In-House	Total Incl OP	Design Life/Frequency	Occurrences in Design Life	Adjusted Occurrences	Life Cost	Adjusted Cost	
Replace pipe & fittings, cast iron, 4"	40	8.00 L.F.	\$535.58	\$642.86	1.0000	1	1	\$642.86	\$642.86	
General maintenance & repair distribution: gutters, pipe	1	0.02 M.L.F.	\$6.04	\$7.55	40.0000	40	40	\$302.19	\$302.19	
Replace pipe or gutter distribution	20	16.00 L.F.	\$717.39	\$882.13	2.0000	2	2	\$1,764.26	\$1,764.26	
Repair air conditioner, DX, 5 ton	10	2.00 Ea.	\$8,351.05	\$9,948.01	4.0000	4	2	\$39,792.02	\$19,896.01	
Replace air conditioner, DX, 5 ton	20	2.00 Ea.	\$15,841.65	\$18,617.42	2.0000	2	2	\$37,234.84	\$37,234.84	
Repair furnace, gas, 100 MBH residential	10	1.00 Ea.	\$4,432.73	\$5,141.36	4.0000	4	4	\$20,565.44	\$20,565.44	
Replace furnace, gas, 100 MBH residential	15	1.00 Ea.	\$1,567.47	\$1,852.17	2.6667	2	2	\$3,704.33	\$3,704.33	
Rebuild 4" diameter reduced pressure backflow preventer	10	1.00 Ea.	\$664.67	\$779.78	4.0000	4	4	\$3,119.13	\$3,119.13	
Replace sprinkler head	20	16.00 Ea.	\$1,368.36	\$1,683.03	2.0000	2	2	\$3,366.06	\$3,366.06	
Maintenance and inspection lighting panel, indoor	3	1.00 Ea.	\$40.64	\$50.92	13.3333	13	13	\$661.98	\$661.98	
Replace circuit breaker molded case, 480 V, 2 pole circuit breaker	50	2.00 Ea.	\$2,522.55	\$2,909.37	0.8000	0	0	\$0.00	\$0.00	
Maintenance and repair breaker, enclosed, 240 V, 2 pole	25	8.00 Ea.	\$574.10	\$719.27	1.6000	1	1	\$719.27	\$719.27	
Maintenance and repair safety switch general, 2 pole	8	2.00 Ea.	\$81.29	\$101.84	5.0000	5	5	\$509.21	\$509.21	
			\$173,502.85	\$205,077.56				MR Subtotal	\$448,683.44	
									MR Per Year	\$11,217.09
									PM Total	\$3,918.07
									Subtotal	\$15,135.16
									Total Per Unit	\$5.78

FAC 3711 RDTE RANGE BUILDING

SUC \$5.78

Release 2021 Qtr 3

UM SF

Zip Code Prefix 222

Design Life 40

Type PM

Average Size 2619.0

Description	Qty	Labor Hours	Bare Mat	Bare Labor	Bare Equip	Bare Total	Total In-House	Total Incl OP
Door, emergency egress, swinging, annualized	2.00	0.52	\$29.18	\$21.50	\$0.00	\$50.68	\$60.05	\$70.88
Urinals, annualized	2.00	0.46	\$12.64	\$22.91	\$0.00	\$35.54	\$43.68	\$52.45
Toilet (vacuum breaker type), annualized	3.00	0.53	\$25.33	\$26.69	\$0.00	\$52.02	\$62.56	\$74.37
Lavatories, annualized	4.00	1.39	\$23.86	\$82.81	\$0.00	\$106.67	\$133.90	\$162.33
Forced air heater, oil or gas fired, up to 120 MBH, annualized	1.00	5.63	\$51.06	\$339.19	\$0.00	\$390.24	\$497.10	\$606.52
Package unit, air cooled, 3 thru 24 ton, annualized	2.00	4.79	\$353.85	\$288.97	\$0.00	\$642.82	\$764.89	\$904.66
Extinguishing system, wet pipe, annualized	1.00	11.34	\$68.24	\$678.37	\$0.00	\$746.61	\$956.95	\$1,170.70
Emergency diesel or gas generator, over 15 KVA, annually	1.00	2.11	\$86.09	\$124.32	\$0.00	\$210.41	\$256.31	\$306.52
Uninterrupted power system, up to 200 KVA, annually	1.00	3.01	\$196.92	\$178.19	\$0.00	\$375.11	\$448.26	\$531.26
Light, emergency, hardwired system, annually	2.00	0.25	\$11.75	\$14.81	\$0.00	\$26.57	\$32.19	\$38.40
						\$2,636.68	\$3,255.90	\$3,918.07

FAC 3711 RDTE RANGE BUILDING
Modeled Component List
CostWorks Release 2021 Qtr 3

D50 Electrical

Incandescent Lighting Fixtures	12.0 Ea.
Smoke Detector	6.0 Ea.
Manual Pull Station	2.0 Ea.
Lightning Protection System	0.2 M.L.F.
Lightning Ground Rod	4.0 Ea.
Load Center, 100 A, maintenance & inspection	1.0 Ea.

B10 Superstructure

Masonry Steps	40.0 S.F.
Railing, Metal	12.0 L.F.

B20 Exterior Enclosure

Steel, Painted	1.0 Ea.
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B30 Roofing

Metal Steep Roofing	26.2 Sq.
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C10 Interior Construction

Steel Painted Interior Doors	2.0 Ea.
Solid Core Interior Doors	3.0 Ea.

D20 Plumbing

Urinal	2.0 Ea.
Tankless Water Closet	3.0 Ea.
Lavatory, Vitreous China	4.0 Ea.
Sink, Iron Enamel	1.0 Ea.

C30 Interior Finishes

Vinyl	291.0 S.Y.
Acoustic Tile, fire-rated	24.5 C.S.F.

D30 HVAC

Air Conditioner, DX Package, 5 ton	2.0 Ea.
Residential Gas Furnace, 100 MBH	1.0 Ea.

D40 Fire Protection

Backflow Preventer	1.0 Ea.
Sprinkler System, Fire Suppression, sprinkler head	16.0 Ea.

FAC 3711 RDTE RANGE BUILDING
Sustainment by Year
CostWorks Release 2021 Qtr 3

