

FACILITIES MAINTENANCE MANAGEMENT

Roofing - life cycle cost analysis

Projected Inflation Per Year

3.50% unless noted below

AREA	DESCRIPTION	Yr Completed	SqFt	Est Total Replacement Cost Based on Yr 2009	Life Cycle (yrs)	Est Annual Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost
							2021	2022	2023	2024	2025	2026
1	K Wing	2012	12,928	\$127,880	20	\$6,394	\$0	\$0	\$0	\$0	\$0	\$0
1	G Wing	2012	29,049	\$287,343	20	\$14,367	\$0	\$0	\$0	\$0	\$0	\$0
1	M Wing	2012	13,725	\$135,763	20	\$6,788	\$0	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	11,282	\$111,598	20	\$5,580	\$0	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	864	\$8,546	20	\$427	\$0	\$0	\$0	\$0	\$0	\$0
2	C Wing - Mechanical Room	2012	485	\$4,797	20	\$240	\$0	\$0	\$0	\$0	\$0	\$0
3	H/J Hall	2005	15,999	\$158,257	20	\$7,913	\$0	\$0	\$0	\$0	\$0	\$194,538
3	H Wing	2005	7,742	\$76,581	20	\$3,829	\$0	\$0	\$0	\$0	\$0	\$94,138
3	J Wing	2005	16,798	\$166,160	20	\$8,308	\$0	\$0	\$0	\$0	\$0	\$204,253
4	P Wing - Pool	2003	25,674	\$253,959	20	\$12,698	\$0	\$0	\$0	\$291,424	\$0	\$0
4	P Wing Hall	2003	1,376	\$13,611	20	\$681	\$0	\$0	\$0	\$15,619	\$0	\$0
4	P Wing - Gym	2003	9,548	\$94,446	20	\$4,722	\$0	\$0	\$0	\$108,379	\$0	\$0
4	P Wing East	2003	5,520	\$54,602	20	\$2,730	\$0	\$0	\$0	\$62,657	\$0	\$0
4	P Wing North	2003	1,137	\$11,247	20	\$562	\$0	\$0	\$0	\$12,906	\$0	\$0
4	P Wing West	2003	5,520	\$54,602	20	\$2,730	\$0	\$0	\$0	\$62,657	\$0	\$0
5	N Wing Court Elevator	2003	453	\$4,481	20	\$224	\$0	\$0	\$0	\$5,142	\$0	\$0
5	N Wing - Pioneer Gym	2003	31,074	\$307,374	20	\$15,369	\$0	\$0	\$0	\$352,718	\$0	\$0
5	N Wing Hall	2003	28,657	\$283,466	20	\$14,173	\$0	\$0	\$0	\$325,283	\$0	\$0
6	B Walkway	2007	846	\$8,368	20	\$418	\$0	\$0	\$0	\$0	\$0	\$0
6	C Wing	2007	5,926	\$58,618	20	\$2,931	\$0	\$0	\$0	\$0	\$0	\$0
6	D Wing Hall	2007	7,375	\$72,951	20	\$3,648	\$0	\$0	\$0	\$0	\$0	\$0
6	G Wing	2007	4,647	\$45,967	20	\$2,298	\$0	\$0	\$0	\$0	\$0	\$0
6	B Wing & Hall	2007	14,571	\$144,132	20	\$7,207	\$0	\$0	\$0	\$0	\$0	\$0
6	B Wing West	2007	11,108	\$109,877	20	\$5,494	\$0	\$0	\$0	\$0	\$0	\$0
6	B Wing	2007	3,895	\$38,528	20	\$1,926	\$0	\$0	\$0	\$0	\$0	\$0
6	D/E Connector/East	2007	1,019	\$10,080	20	\$504	\$0	\$0	\$0	\$0	\$0	\$0
6	C/D Connector/East	2007	858	\$8,487	20	\$424	\$0	\$0	\$0	\$0	\$0	\$0
6	C/D Wing Main Hall	2007	4,036	\$39,923	20	\$1,996	\$0	\$0	\$0	\$0	\$0	\$0
7	L Wing	2003	19,441	\$192,304	20	\$9,615	\$0	\$0	\$0	\$220,673	\$0	\$0
7	L & M Wing Addition - Tech Area	2003	56,299	\$556,891	20	\$27,845	\$0	\$0	\$0	\$639,045	\$0	\$0
7	S Wing - Fine Arts Bldg	2003	27,572	\$272,733	20	\$13,637	\$0	\$0	\$0	\$312,968	\$0	\$0
8	L Wing - Process Training	2001	4,794	\$47,421	20	\$2,371	\$0	\$50,798	\$0	\$0	\$0	\$0
9	E Wing	2009	19,237	\$190,286	20	\$9,514	\$0	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay Orig Bldg	2009	2,619	\$25,906	20	\$1,295	\$0	\$0	\$0	\$0	\$0	\$0
9	D Wing High Bay	2009	3,180	\$31,456	20	\$1,573	\$0	\$0	\$0	\$0	\$0	\$0
9	D Wing	2009	13,899	\$137,484	20	\$6,874	\$0	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay SLTF	2009	1,617	\$15,995	20	\$800	\$0	\$0	\$0	\$0	\$0	\$0
12	C Wing West	1999	10,409	\$102,962	18	\$5,720	\$106,566	\$0	\$0	\$0	\$0	\$0
14	F Wing	1999	30,967	\$306,315	20	\$15,316	\$317,036	\$0	\$0	\$0	\$0	\$0
17	C/D/E Connector/West	1999	19,466	\$192,551	18	\$10,697	\$199,291	\$0	\$0	\$0	\$0	\$0
17	D Wing Penthouse	1999	1,431	\$14,155	18	\$786	\$14,650	\$0	\$0	\$0	\$0	\$0
17	C/D Corridor Connector/West	1999	2,399	\$23,730	18	\$1,318	\$24,561	\$0	\$0	\$0	\$0	\$0
17	Library	1999	46,131	\$456,313	18	\$25,351	\$472,284	\$0	\$0	\$0	\$0	\$0

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1M	Midland Center Sloped Roof Area	1989	28,120	\$668,666	20	\$33,433	\$692,069	\$0	\$0	\$0	\$0	\$0
2M	Midland Center Flat Roof Area	1989	3,220	\$45,147	20	\$2,257	\$46,727	\$0	\$0	\$0	\$0	\$0
1P	Planetarium - Main Area	1996	13,163	\$130,204	20	\$6,510	\$134,761	\$0	\$0	\$0	\$0	\$0
2P	Planetarium - Low Area West Wing	1996	567	\$5,609	20	\$280	\$5,805	\$0	\$0	\$0	\$0	\$0
3P	Planetarium - Stair Tower	1996	340	\$3,363	20	\$168	\$3,481	\$0	\$0	\$0	\$0	\$0
4P	Planetarium - Observation Deck and Bridge	1996	1,968	\$83,191	25	\$3,328	\$0	\$89,117	\$0	\$0	\$0	\$0
TOTAL AREA			578,951									
TOTAL REPLACEMENT VALUE				\$6,194,325		\$313,272	\$2,017,230	\$139,915	\$0	\$2,409,471	\$0	\$492,929

Next three years

\$2,157,145

Main Campus

\$1,134,388

\$50,798

\$0 \$2,409,471

\$0 \$492,929

Midland Center

\$738,796

\$0

\$0 \$0

\$0 \$0

Bay City Planetarium

\$144,047

\$89,117

\$0 \$0

\$0 \$0