

# FACILITIES MAINTENANCE MANAGEMENT

## Roofing - life cycle cost analysis

Projected Inflation Per Year

3.50% unless noted below

AREA	DESCRIPTION	Year Comp.	SqFt	Est Total Replacement Cost Based on Yr 2021	Life Cycle (yrs)	Est Annual Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost	Est Replacement Cost
							2022	2023	2024	2025	2026
1	K Wing	2012	12,928	\$263,214	20	\$13,161	\$0	\$0	\$0	\$0	\$0
1	G Wing	2012	29,049	\$591,438	20	\$29,572	\$0	\$0	\$0	\$0	\$0
1	M Wing	2012	13,725	\$279,441	20	\$13,972	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	11,282	\$229,702	20	\$11,485	\$0	\$0	\$0	\$0	\$0
1	Z Wing - Garage	2012	864	\$17,591	20	\$880	\$0	\$0	\$0	\$0	\$0
2	C Wing - Mechanical Room	2012	485	\$9,875	20	\$494	\$0	\$0	\$0	\$0	\$0
3	H/J Hall	2005	15,999	\$325,740	20	\$16,287	\$0	\$0	\$0	\$0	\$386,877
3	H Wing	2005	7,742	\$157,627	20	\$7,881	\$0	\$0	\$0	\$0	\$187,212
3	J Wing	2005	16,798	\$342,007	20	\$17,100	\$0	\$0	\$0	\$0	\$406,197
4	P Wing - Pool	2003	25,674	\$522,723	20	\$26,136	\$0	\$0	\$579,552	\$0	\$0
4	P Wing Hall	2003	1,376	\$28,015	20	\$1,401	\$0	\$0	\$31,061	\$0	\$0
4	P Wing - Gym	2003	9,548	\$194,397	20	\$9,720	\$0	\$0	\$215,532	\$0	\$0
4	P Wing East	2003	5,520	\$112,387	20	\$5,619	\$0	\$0	\$124,606	\$0	\$0
4	P Wing North	2003	1,137	\$23,149	20	\$1,157	\$0	\$0	\$25,666	\$0	\$0
4	P Wing West	2003	5,520	\$112,387	20	\$5,619	\$0	\$0	\$124,606	\$0	\$0
5	N Wing Court Elevator	2003	453	\$9,223	20	\$461	\$0	\$0	\$10,226	\$0	\$0
5	N Wing - Pioneer Gym	2003	31,074	\$632,667	20	\$31,633	\$0	\$0	\$701,449	\$0	\$0
5	N Wing Hall	2003	28,657	\$583,457	20	\$29,173	\$0	\$0	\$646,889	\$0	\$0
6	B Walkway	2007	846	\$17,225	20	\$861	\$0	\$0	\$0	\$0	\$0
6	C Wing	2007	5,926	\$120,653	20	\$6,033	\$0	\$0	\$0	\$0	\$0
6	D Wing Hall	2007	7,375	\$150,155	20	\$7,508	\$0	\$0	\$0	\$0	\$0
6	G Wing	2007	4,647	\$94,613	20	\$4,731	\$0	\$0	\$0	\$0	\$0
6	B Wing & Hall	2007	14,571	\$296,666	20	\$14,833	\$0	\$0	\$0	\$0	\$0
6	B Wing West	2007	11,108	\$226,159	20	\$11,308	\$0	\$0	\$0	\$0	\$0
6	B Wing	2007	3,895	\$79,302	20	\$3,965	\$0	\$0	\$0	\$0	\$0
6	D/E Connector/East	2007	1,019	\$20,747	20	\$1,037	\$0	\$0	\$0	\$0	\$0
6	C/D Connector/East	2007	858	\$17,469	20	\$873	\$0	\$0	\$0	\$0	\$0
6	C/D Wing Main Hall	2007	4,036	\$82,173	20	\$4,109	\$0	\$0	\$0	\$0	\$0
7	L Wing	2003	19,441	\$395,819	20	\$19,791	\$0	\$0	\$438,851	\$0	\$0
7	L & M Wing Addition - Tech Area	2003	56,299	\$1,146,248	20	\$57,312	\$0	\$0	\$1,270,865	\$0	\$0
7	S Wing - Fine Arts Bldg	2003	27,572	\$561,366	20	\$28,068	\$0	\$0	\$622,396	\$0	\$0
8	L Wing - Process Training	2001	4,794	\$97,606	20	\$4,880	\$101,022	\$0	\$0	\$0	\$0
9	E Wing	2009	19,237	\$391,665	20	\$19,583	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay Orig Bldg	2009	2,619	\$53,323	20	\$2,666	\$0	\$0	\$0	\$0	\$0
9	D Wing High Bay	2009	3,180	\$64,745	20	\$3,237	\$0	\$0	\$0	\$0	\$0
9	D Wing	2009	13,899	\$282,984	20	\$14,149	\$0	\$0	\$0	\$0	\$0
9	C Wing High Bay SLTF	2009	1,617	\$32,922	20	\$1,646	\$0	\$0	\$0	\$0	\$0
12	C Wing West	2021	10,409	\$211,927	30	\$7,064	\$0	\$0	\$0	\$0	\$0
14	F Wing	2020	30,967	\$630,488	20	\$31,524	\$0	\$0	\$0	\$0	\$0
17	C/D/E Connector/West	2021	19,466	\$396,328	30	\$13,211	\$0	\$0	\$0	\$0	\$0
17	D Wing Penthouse	2021	1,431	\$29,135	30	\$971	\$0	\$0	\$0	\$0	\$0
17	C/D Corridor Connector/West	2021	2,399	\$48,844	30	\$1,628	\$0	\$0	\$0	\$0	\$0
17	Library	2021	46,131	\$939,227	30	\$31,308	\$0	\$0	\$0	\$0	\$0

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							2022	2023	2024	2025	2026
1M	Midland Center Sloped Roof Area	1989	28,120	\$668,666	20	\$33,433	\$692,069	\$0	\$0	\$0	\$0
2M	Midland Center Flat Roof Area	1989	3,220	\$45,147	20	\$2,257	\$46,727	\$0	\$0	\$0	\$0
DM1	Downtown Midland Center	2020	9,219	\$129,257	20	\$6,463	\$0	\$0	\$0	\$0	\$0
DM2	Downtown Midland Center - Green Roof	2020	2,768	\$38,809	20	\$1,940	\$0	\$0	\$0	\$0	\$0
DS1	Downtown Saginaw Center	2018	12,580	\$176,380	20	\$8,819	\$0	\$0	\$0	\$0	\$0
1P	Planetarium - Main Area	1996	13,163	\$267,999	20	\$13,400	\$277,379	\$0	\$0	\$0	\$0
2P	Planetarium - Low Area West Wing	1996	567	\$11,544	20	\$577	\$11,948	\$0	\$0	\$0	\$0
3P	Planetarium - Stair Tower	1996	340	\$6,922	20	\$346	\$7,165	\$0	\$0	\$0	\$0
4P	Planetarium - Observation Deck and Bridge	1996	1,968	\$83,191	25	\$3,328	\$86,103	\$0	\$0	\$0	\$0
<b>TOTAL AREA</b>			603,518								
<b>TOTAL REPLACEMENT VALUE</b>				\$12,250,741	\$584,614	\$1,222,412	\$0	\$4,791,699	\$0	\$980,285	

Next three years	\$6,014,111				
Main Campus	\$101,022	\$0	\$4,791,699	\$0	\$980,285
Midland Center	\$738,796	\$0	\$0	\$0	\$0
DT Midland Center	\$0	\$0	\$0	\$0	\$0
DT Saginaw Center	\$0	\$0	\$0	\$0	\$0
Bay City Planetarium	\$382,595	\$0	\$0	\$0	\$0