

**6.01.24 - APPENDIX: SUPPLEMENTAL MATERIAL FOR SECTION 4.02 - LCC Sample C
DESIGN AND CONSTRUCTION STANDARD**

Project Level Entries

General Information	
Project Name:	New Laboratory Building
Location:	Texas
Analyst Name:	Travis Alexander
Discounting Convention:	End-of-Year
Discount Rate:	6%

Key Dates	
Base Date:	1-Jan-08
Length of Study Period:	25 Years

Life-Cycle Analysis Description:
This LCC was performed to determine which type of HVAC system would best support a new laboratory on campus. Results are based on a study for Biomedical Engineering facilities. The study included comparisons of installed costs, maintenance costs and operating costs for two different HVAC systems.

Summary of Results:
The results of the LCC for a new laboratory building showed that System 2 had the lowest overall costs.

Alternate Name: System 1

Alternate Description:
The system is a constant volume, double-duct configuration with heat wheel type heat recovery units serving lab areas, based on the old UT Austin Standards.

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Alternative Level Entries	
Alternate Name:	System 1
OM&R Replacement Cost	
Cost Name:	Yearly Operational Costs
Calculated Annual Simple:	\$313,398
Cost Name:	Yearly Maintenance Costs
Calculated Annual Simple:	\$11,284
Cost Name:	Installed Cost
Calculated Annual Simple:	\$776,172
Electricity Costs	
Annual Consumption:	N/A
Units:	N/A
Price/Unit:	N/A
Chilled Water Costs	
Annual Consumption:	N/A
Units:	N/A
Price/Unit:	N/A
Steam Costs	
Annual Consumption:	N/A
Units:	N/A
Price/Unit:	N/A
Water Costs	
Annual Water Usage:	N/A
Units:	N/A
Price/Unit:	N/A
Price Escalation Rates:	N/A
Non-Annually Recurring O&M and Repair Cost	
Years/Months:	N/A
Amount:	N/A
Annual Rate of Increase:	N/A

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Alternative Level Entries	
Alternate Name:	System 2
OM&R Replacement Cost	
Cost Name:	Yearly Operational Costs
Calculated Annual Simple:	\$317,649
Cost Name:	Yearly Maintenance Costs
Calculated Annual Simple:	\$14,131
Cost Name:	Installed Cost
Calculated Annual Simple:	\$664,329
Electricity Costs	
Annual Consumption:	N/A
Units:	N/A
Price/Unit:	N/A
Chilled Water Costs	
Annual Consumption:	N/A
Units:	N/A
Price/Unit:	N/A
Steam Costs	
Annual Consumption:	N/A
Units:	N/A
Price/Unit:	N/A
Water Costs	
Annual Water Usage:	N/A
Units:	N/A
Price/Unit:	N/A
Price Escalation Rates:	N/A
Non-Annually Recurring O&M and Repair Cost	
Years/Months:	N/A
Amount:	N/A
Annual Rate of Increase:	N/A

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Alternate Name: System 2
Alternate Description:
The system is a single duct variable air volume lab system, similar to the type of system found in corporate research lab.

Alternate Name:
Alternate Description:

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