

TITLE

he original University of Idaho Library was designed by architects Whitehouse and Price from Spokane, Washington. The original building was completed in 1957 at a cost of \$1,362,295. The building's footprint was 138 feet wide by 205 feet long. It consisted of a basement, a ground floor, and three additional floors. The building housed the campus branch of U.S. Post Office between 1957 and 1990. In 1991 architects

Ellis-Feeney from Lewiston, Idaho were hired to remodel the building and design a 66,000 sq. ft. addition at a cost of \$12.3 million. The addition included the new clock tower, built at 86 feet above grade.

The Library is a major depository of U.S. and Idaho Documents, Patents Defense Mapping Agency and is a designated Earth Science Information Center. Library collections include 1.3 million volumes, 1.5 million U.S. documents,



BUILDING AT A GLANCE

Name	University of Idaho
Location	Moscow, ID
Owner	University of Idaho
Principal Use Includes	
	Library
Gross Square Footage	
	157,450
Total Cost	\$13.6 Million
Cost Per Square Foot	
	\$86
Substantial Completion/	
Occupancy	1957
Occupancy	100%

200,000 Uncataloged Maps and 8,600 Serial Titles. The library employs a staff of 46, consisting of: one Dean, 18 Faculty members, and 27 employees

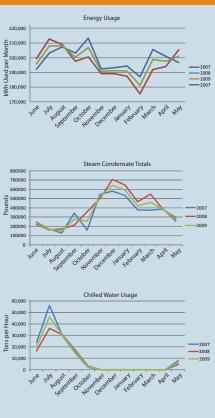
> TEXT TO BE FILLED ABOUT THE LIBRARY

4th Floor Study: Existing Conditions

While the north walkway is lit adequately by natural light, the southern walkway and the stack areas located deeper into the space require additional lighting to meet the ASME Standards for lighting, which require at least 15 foot candles when visual tasks only occasionally performed, or the reading of print of small size. In addition, the current conditions in the southern walkway and the stack areas do not meet the ASME Foot Candle recommendation that lighting should be reduced by 50% for predominantly people under 40. As seen on these images the area on the left would have sufficient light during the day without electric lights turned on, as adequate light is provided from the windows in the North facing wall. There is adequate day lighting along northern walkway area.

However there is a noticeable falloff of natural lighting after entering the stack: the area to the right there is sufficient light only when are with electric lighting is turned on during daytime. Inadequate day lighting along south walkway area behind stacks with lights off. In this Day lighting Plan the colored lines indicate quality of levels of natural light penetration. At the red line there is sufficient amount of daylight. At the orange line level the amount of daylight starts to become insufficient. At the red line level there is no longer adequate daylight.

ENERGY USAGE DATA



plan shows our proposed skylight patterns. It consists of 2' x 18' areas of skylights, with two rows of skylights located on either side of the 4th bay of electric lights. The size and spacing would be based on building structure. The skylights would prevent direct southern light but allow diffuse northern light.

Recommendations

Our hypothesis was that natural day lighting could be used to light the stack area on the top floor of the University of Idaho Library throughout daylight hours without supplemental lighting. We proposed adding 13 skylights to supply the additional day light. This

Conclusion

The natural lighting falloff on the ceiling from the north facing windows would be supplemented by the light from the skylights. The skylights would even out the natural lighting of the space and make electric lighting during the day unnecessary. This would create significant reductions in energy consumption. The north and southern walkways would now receive an adequate amount of daylight from the windows and the skylights

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