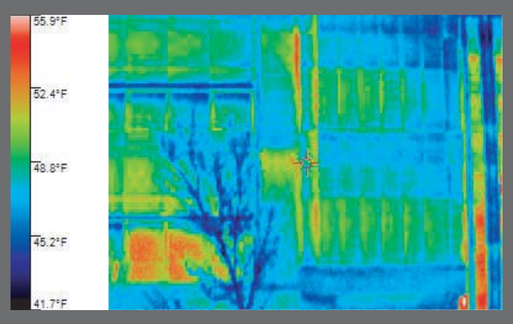
Loyola University

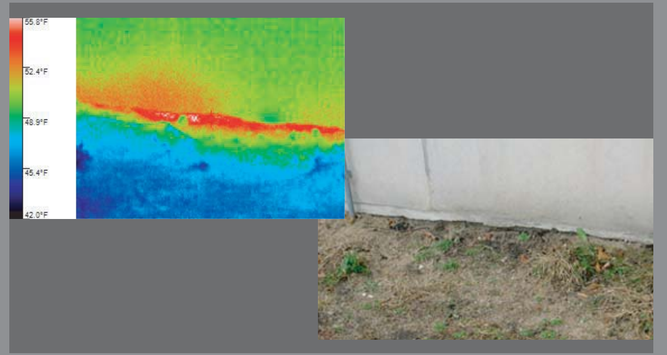
IPRO 320 Sustainability of IIT Buildings

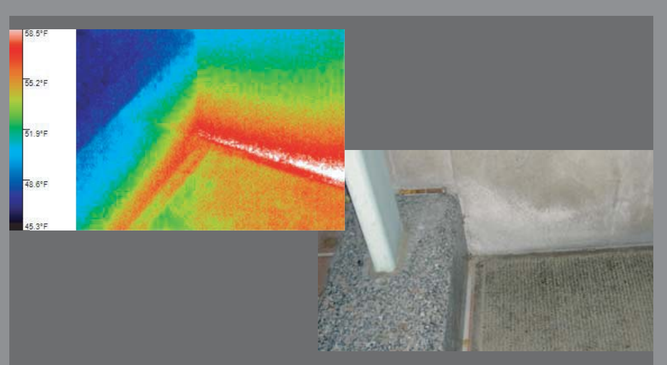
Mundelein Center

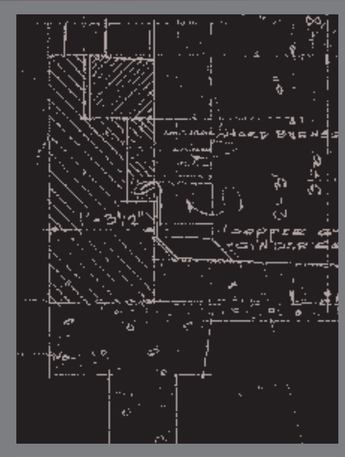


Thermal Images displaying the majority of the heat loss through windows which will be replaced as well as the foundation walls.

Mundelein Center was built in 1928. It was built in authentic art deco architecture. Made of stone this building, has severe HVAC problems as well as outdated electrical and plumbing infrastructures, which are currently in the process of being updated.

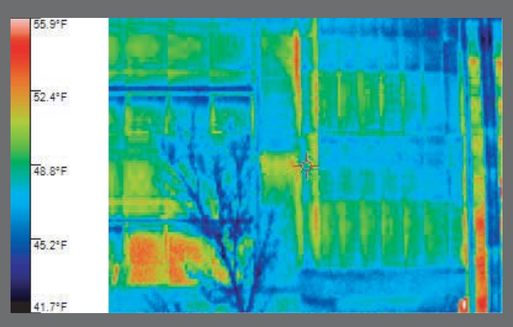






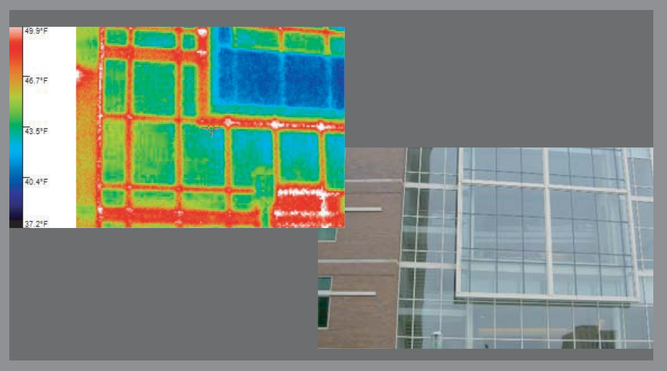
The R- value was calculated to be **2.5 ft²/(°F)* (hours/BTU)**.

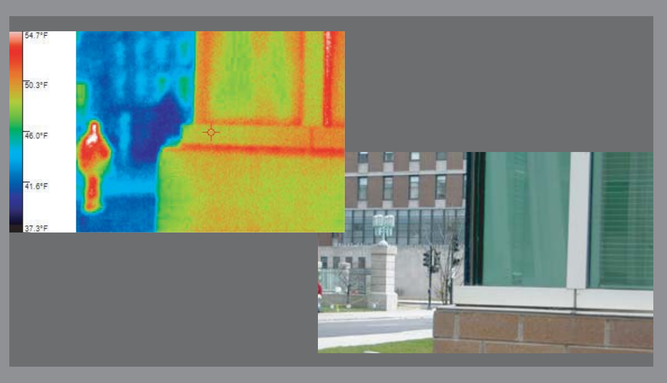
Quinlan Life & Science Center

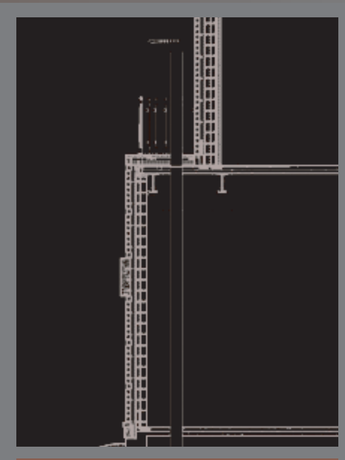


Thermal Images displaying the majority of heat loss through the windows and the difference in temperature where there was a double glazing system.

Quinlan Life & Science Center is one of the newest buildings on campus finished in 2004. It is made from concrete and masonry. There are five floors which total square feet. This is the schools biology department.

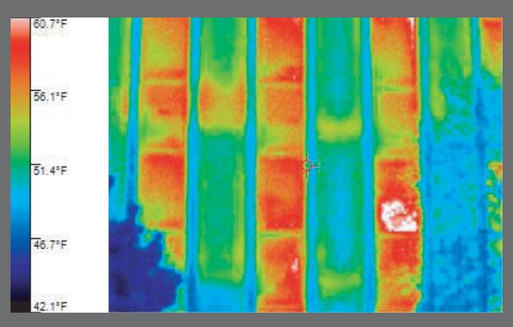






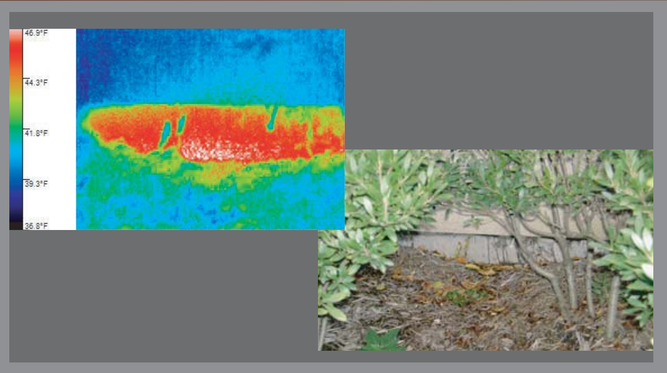
The R- value was calculated to be **20 ft²/(°F)* (hours/BTU)**.

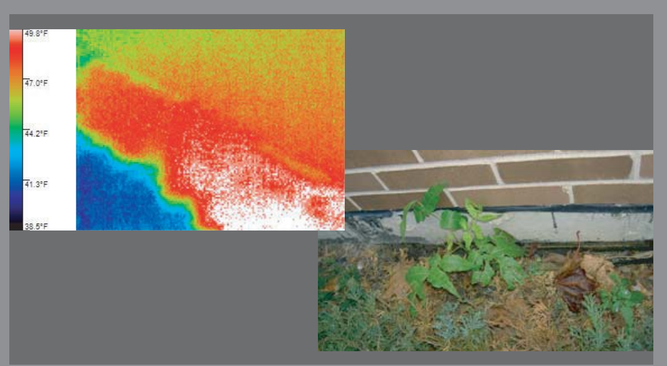
Flanner Hall

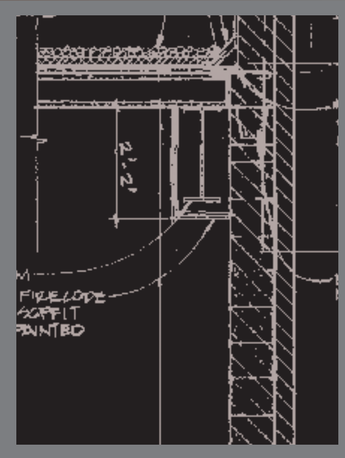


Thermal Images displaying the majority of the heat loss the foundation walls of the building, due to the fact that there is only a small percentage glazing.

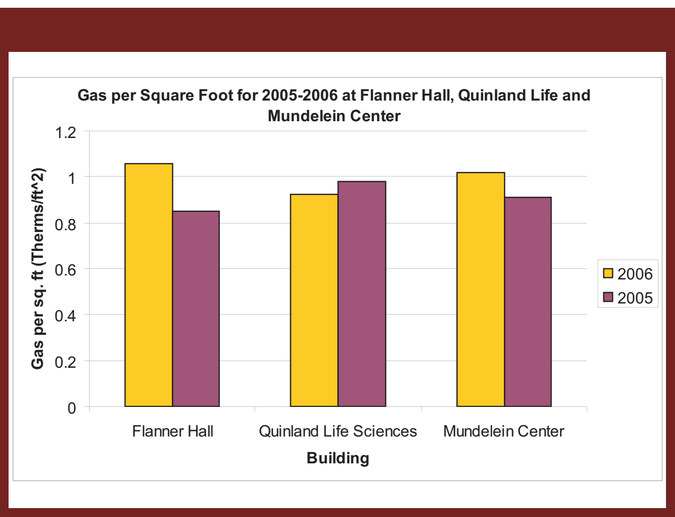
Flanner Hall was built in 1976. It is undergoing a complete interior renovation dealing with furniture as well as electrical equipment. No renovations have been done to the building since it had been built. The function of the building is mainly laboratories therefore the HVAC system is very important.

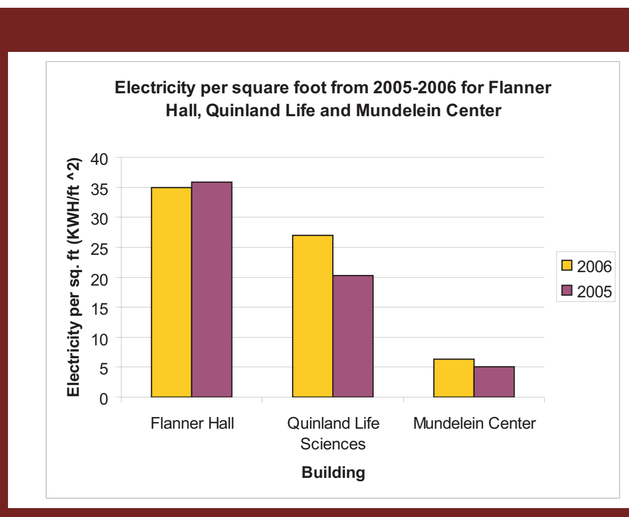


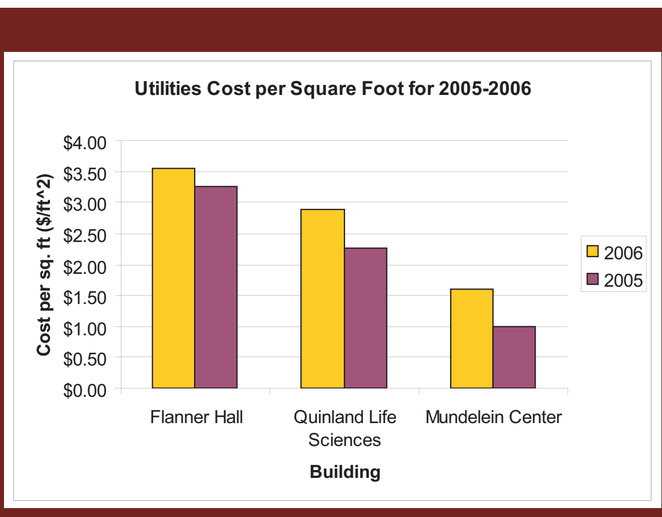




The R- value was calculated to be **3 ft²/(°F)* (hours/BTU)**.



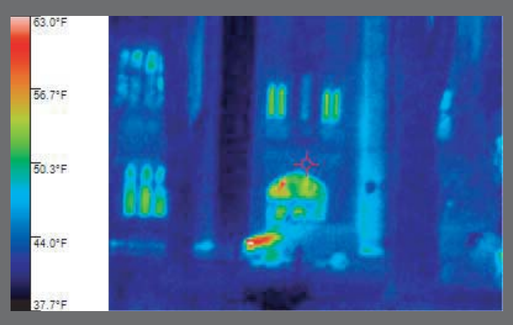




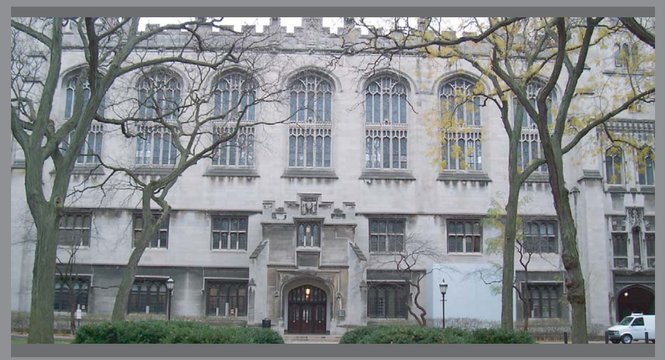
University of Chicago

IPRO 320 Sustainability of IIT Buildings

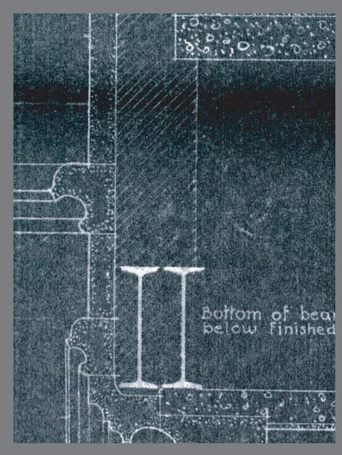
Harper Library



Thermal Images displaying the majority of the heat loss through windows and door entrance of the building.

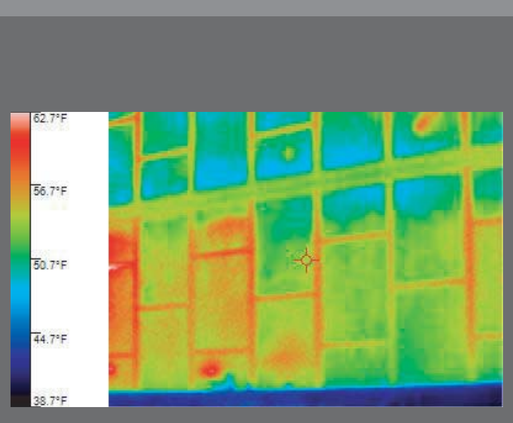


Harper Library was built in 1910. It is a gothic building located on the U of C quadrangles. It is made of brick, lime-stone, and leaded glass windows. It is 114,318 square feet.



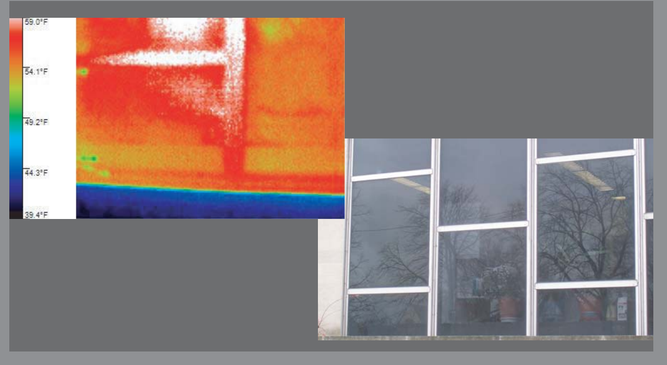
The R- value was calculated to be **5.27 ft²/(°F)*(hours/BTU).**

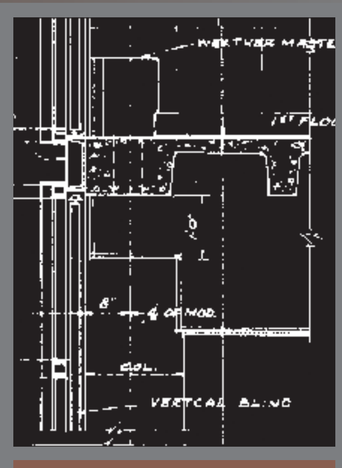
Charles Stewart Mott Building



Thermal Images displaying the majority of the heat loss through the curtain wall of the building.

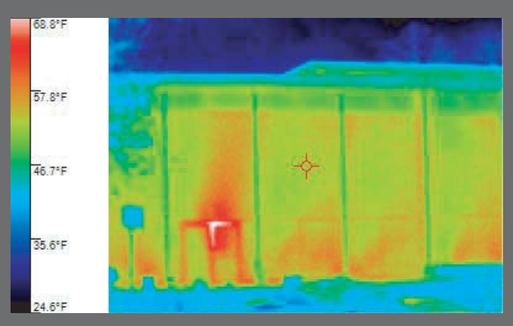
Charles Stewart Mott Building was built in 1958 by Schmidt, Garden, and Erikson. It is a glass and concrete building with 36,072 square feet. It houses administration offices on three floors. The university has encountered the most heating and cooling problems with this building than any other on campus.





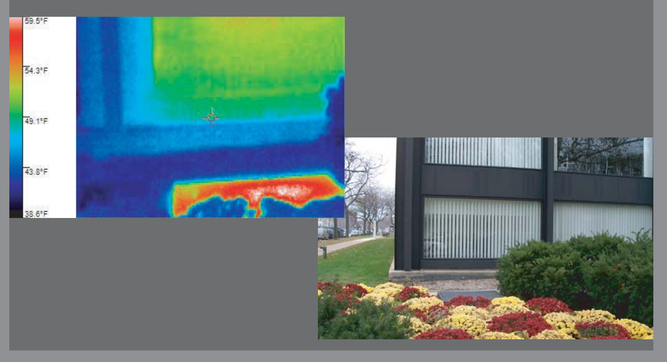
The R- value was calculated to be **1.1 ft²/(°F)*(hours/BTU).**

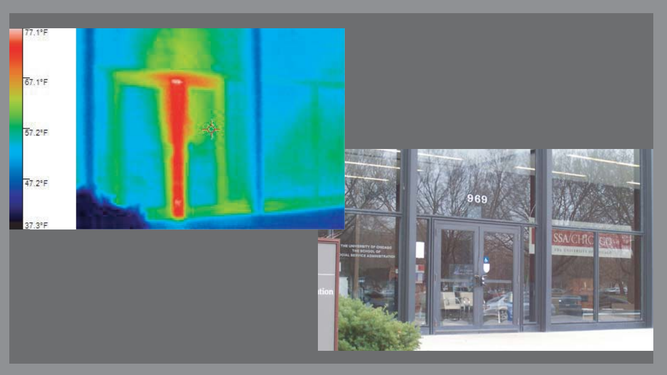
School of Social Service Administration

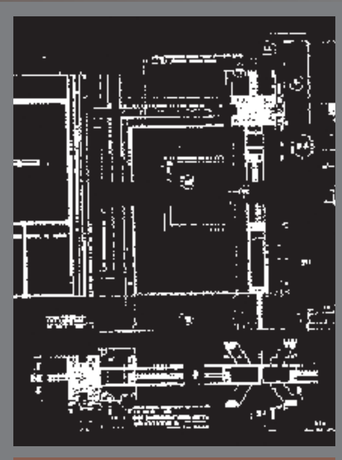


Thermal Images displaying the majority of the heat loss through windows as well as the door entrance.

The School of Social Service Administration (SSA) was built in 1964 by Ludwig Mies Van Der Rohe. It is a steel and glass building with 52,007 square feet with one story. It







The R- value was calculated to be **1.48 ft²/(°F)*(hours/BTU).**