



ERIN M. FAULDS
MECHANICAL OPTION
TRY STREET TERMINAL BUILDING
TECHNICAL ASSIGNMENT 2

EXECUTIVE SUMMARY

The Try Street Terminal Building project involves renovations to the 10 story, 230,000 square foot building originally constructed in 1910. Although the main function is to provide apartments for the Art Institute of Pittsburgh, other features include: an atrium, exercise room, first-floor retail space and possibly a convenience store and casual dining restaurant.

In this document, the building was evaluated using the LEED-NC Version 2.2 Green Building Rating System and ASHRAE Standard 90.1. The lost rentable space and mechanical system first cost was also evaluated.

The LEED rating system is applicable to the Try Street Terminal Building because the building is a major renovation project. The six major categories of the rating system include: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation and Design Process. Of all the categories combined only a handful of points were awarded for the project. Thus, no LEED certification was achieved.

Next, a Standard 90.1 energy assessment was completed. This energy standard applies to the building envelope, as well as the HVAC, service water heating, lighting, and power systems and equipment. However, due to limited documentation, the main focus of this analysis was the building's envelope and lighting compliance. As can be seen from the tables below the building envelope complies with the standard, while the lighting does not.

BUILDING ENVELOPE SUMMARY		
ELEMENT	ASSESSMENT	COMPLIES?
WINDOW	%AREA	YES
SKYLIGHT	%AREA	YES
EXTERIOR WALL	U-Value	YES
	R-Value	YES
LIGHTWELL WALL	U-Value	YES
	R-Value	YES
ROOF	U-Value	YES
	R-Value	YES
WINDOW	U-Value	YES
	SHGC	YES

LIGHTING COMPLIANCE	
SPACE TYPE	COMPLIES?
CORRIDORS	NO
ELECTRICAL/MECHANICAL	YES
EXERCISE ROOM	YES
LAUNDRY	NO
LIVING AREAS - DORMATORY	YES
RESTROOMS	NO
STAIRS - ACTIVE	NO
STORAGE - INACTIVE	YES

Mechanical system lost rentable space amounted to 2.82% and the HVAC first cost was \$2,014,00.00. After speaking with the mechanical design engineer, it was found that an energy analysis was not performed for the Try Street Terminal Building because first cost was the primary concern.