



County of St. Joseph, Indiana
MAINTENANCE DEPARTMENT

COUNTY-CITY BUILDING
SOUTH BEND INDIANA 46601
Telephone 284-9720

BOARD OF COMMISSIONERS
RICHARD L. LARRISON
Chairman
RICHARD D. JASINSKI
Deputy
JOSEPH D. ZAPPA
Deputy
JOHN P. EMBRICKSON
Building Engineer

October 4, 1993

Steve Duerkop
Johnson Controls World Services Inc.
2000 Spring Rd.
Suite 110
Oak Brook IL 60521

Dear Steve:

I would be happy to share with you the County-City Building's positive experience with Therm-O-Lite.

Before the Therm-O-Lite installation, we were only able to maintain a comfortable climate by running our heating and cooling equipment at full capacity 24 hours a day, seven days a week. In the winter months, we were forced to set both of our steam coils to deliver between 120 and 140 degree heated air. In the summer months, we ran two 350 ton chillers. Even with both chillers operating, we often would lose our ability to cool in the afternoons on hot humid days. Employees were forced to close east drapes in the morning and west drapes in the afternoon in order to remain comfortable.

After the Therm-O-Lite windows were installed in October of 1981, we are able to maintain our set points without running our equipment at full capacity 24 hours a day. Our steam coils are now set to deliver 95 degree heated air. Even at this lower setting, we sometimes end up overheating some areas. What is even more impressive is, we can attain this performance with only one boiler! We now rotate our boilers monthly. In the spring of 1982, we lost our #1 chiller. Because of Therm-O-Lite, we are still able to maintain comfort levels with only one chiller. We found that one chiller, operating at 90% of full load, could now handle the entire complex. In fact, we had to cut down some of our cold decks because we were over cooling. We now can shut off cooling equipment at night and on weekends, and utilize night set back during the heating season. This has resulted in a significant reduction in energy consumption, equipment maintenance and equipment wear and tear. Annual energy savings alone were estimated at \$58,000.00 This was not possible before Therm-O-Lite windows were installed.

We were so impressed with Therm-O-Lite that we had the entire complex reglazed with the Low "E" option. We have noticed a further reduction in the energy use, cold draft complaints and a reduced amount of fading in our furnishings.

I strongly endorse the use of Therm-O-Lite, We had no other alterations to our building or its mechanical systems and we received amazing results. We are also very pleased that Therm-O-Lite paid for itself well within three years of installation. In the 11 years that we have had it installed, it has been trouble free and it still looks great to this day. If you ever need someone to personally verify the success we have had with Therm-O-Lite please have them contact me.

Sincerely,


John P. Embrickson
Building Engineer