

Comfort & Light

Interfaith Coalition on
Energy
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Melrose Park, PA 19027
(215) 635-1122

A NEWSLETTER FROM THE INTERFAITH COALITION ON ENERGY

An ICE Client's Words...



The Archdiocese of
Philadelphia



The Board of Rabbis of
Greater Philadelphia



The Metropolitan
Christian Council of
Philadelphia



The American Jewish
Committee Philadelphia
Chapter

UPPER
MERION
BAPTIST CHURCH
585 General Steuben Road • King of Prussia, PA 19406 Phone (610) 2651814

September 27, 1995

Dear ICE,

What would we do without the ICE program? Over the last five years we have made great strides in energy conservation, saving money, and making our building far more comfortable because of your expertise and commitment to helping religious groups.

Some of your recommendations cost us nothing, but saved us precious dollars. Others required an investment, but paid off handsomely in comfort as well as savings. Frankly, I don't understand why a lot more churches, synagogues and mosques don't beat down your door for similar help! Is God honored by waste and inefficiency in His name?

For too long we endured a cold sanctuary, even though it was just built in 1982 and have put up with other rooms that were too hot. This year those and a lot of other complaints are being addressed by ICE and the experts you recommended. Local heating people couldn't resolve those issues, but you pointed out flaws in design, missing components and mismatched equipment – all of which wasted God's money and made the buildings less than comfortable.

Thank you ICE.

Sincerely,

Richard T. Purchase
Pastor

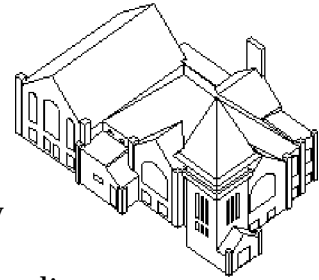
Through a Glaze Darkly...

Congregations Don't See Many Savings

Surrounded by towering stained glass windows and haunted by escalating fuel and maintenance costs, congregations often choose to install a protective glazing over the windows. A group of stained glass experts is discovering that this is not a good idea.

An examination of more than 100 installations in various parts of the country reveal that the secondary glazing is usually acrylic or polycarbonate, which becomes cloudy within a few years. Also, the stained glass and the protective glazing trap heat and humidity that can damage the frames holding the windows. To prevent this damage, the glazings must be vented.

When asked whether the energy savings justified the installation of secondary glazing, ICE suggested that a computer model of a typical church be made. An Evanston, IL church was chosen. Several years ago, the congregation paid **\$7,544** for glazing over five large, stained glass windows. Once the computerized energy model of the church was refined, various weather data were tested, essentially “moving” the church from city to city, climate to climate.



How Much You Save Each Year &
How Many Years Before The Investment Would Pay Off

Location	UNVENTED GLAZING		VENTED GLAZING	
	Savings/Yr.	Payback in Yrs.	Savings/Yr.	Payback in Yrs.
Evanston	\$183	41	\$97	78
Seattle	\$136	55	\$73	103
Toronto	\$209	36	\$112	67
Phoenix	\$5	1511	\$8	944
Savannah	\$23	328	\$13	581

The savings in Evanston was \$97. Maximum savings even in the coldest city (Toronto, Canada) were \$112 if they vent the glazing. If the church were in Phoenix, AZ, the glazing would pay for itself only over 1,500 years. By contrast, installing a clock thermostat set at 52° F during unoccupied periods would save almost \$900 per year. In comparison to the double glazing, the clock thermostat for the Evanston church would be one hundredth the cost but would save five times as much.

So, the next time someone tries to sell you protective coverings by mentioning saving energy dollars, ask them to prove it. Better still, have them contact us. ☐

STOP Your Congregation's Dollars

From Making an Unwanted



Look around your building. How many EXIT signs do you have? If those signs are lit by two 20-watt incandescent lamps, **each one is costing your congregation about \$50 a year** (current costs in Philadelphia). The lamp wattage is low, but continuous burning uses about 350 kilowatt-hours (kWh) per year per sign.

CFLs Offered First Chance to Save

Just a few years ago, it seemed that every lighting vendor was urging the replacement of incandescent lamps with compact fluorescent lamps (CFLs). One 7-watt CFL (if codes allow only one lamp to replace two) reduces consumption to about 80 kWh. The CFL insert costs about \$13 and saves about twice that amount—a 200% rate of return which beats the pants off most other investments.

Now, LEDs Lead the Way to Bigger Savings

More recently, another type of exit sign insert was introduced which uses groups of light emitting diodes (LEDs). Right now, there are at least three different types of LED inserts:

- one type uses two bars of red LEDs that stick onto the inside sides of the exit sign and shine at each other
- another type sticks to the inside back of the exit sign and shines through its face
- a third type has the LEDs built into an enclosure with the same tubular shape of the incandescent lamps they replace.

The LED inserts have two big advantages. First, they last for many years. Some are guaranteed to last over 200,000 hours (23+ years!) outlasting several dozen incandescent lamps or about one dozen CFLs. The other advantage is that they use only a couple of watts. An LED insert costs between \$30 and \$40. You'll save the cost of the LED insert in one year, and may not have to climb a ladder to replace it for the rest of your life.

LED exit sign inserts are becoming commonly available through electrical wholesalers. Try one before you buy dozens. ☐

Comparing Energy Used by
British and Philadelphia
Elementary Schools

In March 1994 Great Britain's Energy Efficiency Office published energy data on primary and middle schools. In comparison to 60 parochial schools in and around Philadelphia on which ICE has similar data, the British schools use about 50% more electricity and 40% more fuel annually per square foot. Our congratulations go to the thrifty operators of our parochial schools here.

ICE WORKSHOP

COME WITH YOUR QUESTIONS &
PICK UP SOME FREE POINTERS

Tuesday, November 7, 1995

1 – 4 PM

Holy Cross Catholic Church

Parish Center

154 E. Mt. Airy Avenue

Philadelphia, PA

Workshop is free, but space is limited.

Please call 215-635-1122 to register.

Interfaith Coalition on Energy c/o AJC
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Philadelphia, PA 19103

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PLEASE ROUTE TO:

- Building and Grounds Chairperson
- Congregation President
- Treasurer
- Clergy

