



## Ken Field

Owner of Slate  
Belt Energy  
Services

*Exclusively in the Blue Valley Times*

### Insulation Frustration

My training is in all aspects of energy usage and conservation so I tend to look at the big picture whenever I'm discussing a project. It is safe to say that nobody ever uses too much insulation. It is much more common for builders to use less than they should. It is also far too common for it to be installed incorrectly. Neither of these shortcuts violates the building code but they both doom the structure to excessive energy usage. When I run a load calculation on a building I always assume those shortcuts unless I have some reason to believe that every detail of the insulation will be done correctly. There is a grading system for insulation and I learned it at HERS (home energy rating system) training. It is not a requirement of the building code but it makes a huge difference when insulation is installed properly. Energy moves in 3 ways; conduction, convection, and radiation. Fiberglass is the most prevalent type of insulation used and it needs air to do its job. That air **MUST** be dead still or the insulation is nearly worthless. A convective current in a wall where fiberglass is installed wrong destroys the insulation value. Wires inside walls make it very difficult to install fiberglass correctly and that's probably the biggest reason why it never happens. In ceilings it is much the same. The top side of the insulation is exposed and moving air erodes the dead space for an inch or two. That reduces the actual insulation value by 10%. Before you know it you have lost 20 to 30% of the energy you should be saving. It is impossible to achieve a tight well insulated home with a low bidder process for selecting contractors. Everyone needs to cut as much time off a job as possible and still have it pass the inspection. The inspection does not begin to address the shortcomings of a bad insulation job so it's a race to the bottom.

Conduction is much harder to stop as an energy reduction practice. The new green board sheathing is probably the best option there. Thermal bridging is a necessary evil in building a strong home.

Radiation can only be slowed by using good windows. A home with no windows would be much more energy efficient but nobody wants to save energy that badly.

Oversized furnaces and air conditioners affect the indoor comfort and humidity year round but most contractors won't risk using the right size equipment even if they know what that is because of the lack of effective insulation.

Ken Field is the owner of Slate Belt Energy and Field's Service, Inc. As a certified energy rater and contractor, he is qualified to assess every aspect of energy usage and prescribe solutions to save energy. He can be reached at 610-759-6306 or email Ken@FieldsService.com

COMPUTER  
NETWORKING &  
REPAIR

## MICROSOFT WINDOWS 10 UPGRADE

"OVER 25  
YEARS OF  
EXPERIENCE"  
James Albanese

HOME - BUSINESS - GOV'T - EDUCATION  
NON-PROFIT - SENIOR CITIZEN  
SALES \* SERVICE \* SUPPORT



INFORMATION TECHNOLOGY  
SPECIALIST

**\* Microsoft Windows 7 Support/  
Updates ENDS January 14th, 2020**  
**\* Upgrade your existing Windows 7  
or 8 Computer For UNDER \$200**

**Call to Schedule your Windows 10 Upgrade  
Today!**

**WINDOWS COMPUTER SALES, SETUP,  
INSTALLATION, DATA TRANSFER & TRAINING**

**[www.compnr.com/service@compnr.com](http://www.compnr.com/service@compnr.com)**

368 Blue Valley Drive Bangor **610-588-8700**

## James Gloria Fine Arts Studio

Now offering studio classes for artists of all levels  
beginner to experienced — teen through adults.



Private classes tailored to your personal goals and abilities. Paint for fun or hone your skills and experiment with new techniques

- ◆ Essential drawing and perspective lessons
- ◆ Portfolio prep classes for art majors applying to college
- ◆ Hone skills of observation and perception
- ◆ Explore new media: watercolor, oils, sculpture and more

(570)236-1466  
[art@JamesGloria.com](mailto:art@JamesGloria.com)

Slate Belt Energy Services

# SBE

## 610-599-8832

**We service and Install  
all brands and types  
of heating systems.**

**24 hour emergency service**

Low Interest financing. Credit cards accepted.  
Certified in all aspects of energy conservation.

**[www.SlateBeltEnergy.com](http://www.SlateBeltEnergy.com)**

**ENROLL  
NOW!**



**FUSIA DANCE CENTER**

*Lead. Create. Inspire*

Join FuSia Dance Center in their 8th season of dancing! FuSia's positive learning environment and nurturing staff provide dance education to both recreational & pre-professional students! With over 100 classes to choose from including acro, ballet, creative dance, contemporary, dance basics, hip hop, jazz, jumps & turns, modern, mommy & me, and tap, there is truly something for everyone!

New families can bring this flyer for \$15 off your first month's tuition!

**2123 WEST MAIN STREET, STROUDSBURG, PA**  
**570-421-7895 ~ [INFO@FUSIADANCE.ORG](mailto:INFO@FUSIADANCE.ORG)**  
**[WWW.FUSIADANCE.ORG](http://WWW.FUSIADANCE.ORG)**