Home Insulation: What are R-Values?

Stay Safe at Home

When selecting insulation for your home, delving into all the options and terms can be intimidating. 9 out of 10 homes in the U.S. are under-insulated.



The type of insulation you choose will depend on two factors: where you'll be installing it and what resistance value, or **"R-value"**, you desire. The insulation R-value varies by type

of home, how it's built, and the insulation used. The R-value measures a material's resistance to conductive heat flow. The higher the number, the more resistance and the greater the efficiency it has.

The value rating depends on the type of insulation, the thickness, and its density. Two different types of insulation can have the same R-value but vary in thickness because of how they are made and their respective densities.

Because the R-value that best suits your home will depend on your climate and other variables, Energy.gov and Energystar.gov publish U.S. maps outlining recommended home insulation R-values.

A professional home energy auditor can make recommendations on whether more insulation is needed and how to make your home more energy efficient.

Source: SafeElectricity.org

Electricity is a major cause of home fires. As each year goes by, Americans continue to use more energy in their homes. At the same time, the electrical systems in many existing homes have become outdated, and are unable to handle the demands of today's electrical appliances and devices. The statistics are staggering, and fire is not the only danger. If you're renovating your home, make sure to have the following electrical safety devices installed to maintain an electrically safe home.

SAFETY DEVICES Arc-Fault Circuit Interrupters (AFCI):

AFCIs protect against electrical fires caused by equipment malfunctions. The Consumer Product Safety Commission estimates that 50% of home electrical fires can be prevented by proper AFCI protection.

Surge Protective Devices (SPD):

Surge Protective Devices protect against surges that can damage or reduce the lifespan of your electrical system and devices.

Ground-Fault Circuit Interrupters (GFCI):

GFCIs protect against electric shock and are required in areas where water and electricity may come in contact.



Tamper Resistant Receptacles function like normal receptacles but they include an internal shutter system to prevent foreign objects from being inserted into the outlets.

Source: esfi.org

ATTENTION - Please Confirm & Update Your BLP Contact Information

Review the bottom left corner of your BLP electric bill to verify your contact information is up to date.

Submit changes by:

- 1. Write changes on your bill stub and return to GHBLP
- 2. Email customerservice@ghblp.org
- 3. Call us at **616-846-6250**



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PLUGGED / IN



Reducing Risk from Global Energy Markets

October 2022



Reducing Risk from Global Energy Markets

The unreliability of goods and services during the pandemic revealed to consumers just how interconnected the global economy is. Whether it was computer chips or toilet paper, disruptions to the "supply chain" affected nearly everyone. The impact of global events like the war in Ukraine and the pandemic have also had an impact on energy markets, both in the availability of fuels and in components for new installations.

How BLP Buys Energy for the Community

Like Grand Haven BLP, many utilities do not produce electricity locally and need to buy power from regional markets. Just like you do not want to put all of your retirement money into a single stock, these utilities follow a practice of diversifying their power supply portfolios to stabilize costs.

"We avoid market speculation by diversifying our power supply to minimize risks to our

power

future

customers," said Erik Booth. BLP's 300,000 operations and supply 250,000 "We manager. continuously 200,000 evaluate our power 150,000 supply mix and we use "hedges" to progressively 100.000 plan for future years for both 50.000 energy and capacity.' 2026 2022 2023 2027 2024 2025 Calendar Year Bilateral Energy Contracted Bilateral Energy Proposed Landfill Gas Contracted Solar/Wind Contracted

Global Markets Have Local Impact

Even with a hedged purchasing strategy, global markets can still affect cost and forecasting for electric utilities like the BLP.

"The energy markets are currently in a period of flux caused by both national and international events, and while our hedging practices minimize the impact, these market conditions still have some effect." said Booth.

Natural gas prices have been particularly volatile in 2022 due to reasons both foreign and domestic. As Europe is reeling from the impact of sanctions, pipeline closures and uncertainty in the midst of the Russian Invasion of Ukraine, imports from the United States to Europe have increased dramatically. EU energy regulators are even restarting or delaying planned retirements of coal and nuclear plants because of the high costs. Energy Wire, an energy trade publication, reported in July that "exports are up as the [US] tries to ship more liquefied natural gas to allied countries in Europe while a heat wave boosted demand for gas to generate electricity domestically." Domestically, energy demand in the United States is faced with natural gas storage levels much lower than historical averages while also contending with a generating fleet that is increasingly more dependent on natural gas as baseload coal fired power plants continue to be retired.

With the EU willing to pay much more for natural gas, US suppliers have been exporting more, which is increasing the cost of natural gas to US power producers.

"As we're going to the market for the remainder of our balancing energy in 2023, we're seeing higher prices," said Booth. "Fortunately, we secured lower rates for the bulk of our energy needs in 2022 and 2023 prior to these increases, which will reduce but not completely eliminate the impact on rates."

Supply Chain Restrictions

Many of Michigan's power supply developments have recently focused on solar. Global supply chain disruptions are delaying even those projects that were already approved and in construction.

The Solar Energy Industries Association recently cut new solar development forecasts for 2022 and 2023 by 46%. In March, PV Magazine reported that a combination of factors including human section 201 tariffs, and general pandemicrelated disruptions were to blame.

MPPA recently purchased two large scale solar projects in Calhoun County. Both were expected to go into commercial operation by the end of 2022. However, with the recent developments outlined previously, the costs have increased and the delivery date for commercial operation is now expected to be in early 2023 if the project is able to procure the solar panels.

"The solar investments made by the BLP represent a clear illustration of the need to diversify our power supply portfolio," commented Booth. "The BLP remains committed to expanding our renewables dramatically from 8% up to 22% over the last five years and includes a diversity of projects. Had we gone all-in on any one of these projects, we would have increased our risk and exposure to more volatile impacts from the global supply chain and short-term energy markets to compensate for the delays in launch."

Learn more about the BLP's power supply planning at ghblp.org.



Our community uses approximately 300.000

MWh/vear. The BLP has signed contracts for

longer term power purchase agreements for

renewables including wind and solar (shown

in vellow on the chart below) and landfill gas

(green) many years in advance. The energy

in blue represents agreements contracted

needs a

of

prior to 2022

few years in advance is important to reducing the risk of having to purchase large amounts of energy in short-term markets.

represents purchases that m a this spring. Hedging