



Case Study:

A BUILDER PERSPECTIVE

Builders' Top Choice for a Reason

It's the insulation used in 90% of current U.S. homes.¹ Fiber glass is trusted to achieve maximum long-term value, flexibility and energy efficiency in any type of home. Read why two respected builders choose fiber glass insulation for their homes.

Business Profiles

Wayne Homes is an award-winning regional builder with a presence in Ohio, Pennsylvania, Indiana, Michigan and West Virginia – producing between 500-1200 homes per year. Tom Benedict is the vice president of purchasing and notes the company generally pairs fiber glass in cavities with rigid foam on the exterior.

Decker Homes builds high-end custom homes across southeast Michigan and northwest Ohio, constructing between 5-10 homes per year. It has been an early adopter, implementing the latest energy-efficient solutions for their customers. Bill Decker Sr. is the president. He says Decker uses fiber glass for all homes, including its high-performance, net zero projects.



“No matter the energy usage guarantee or insulation package the homebuyer chooses, our answer is always fiber glass with a standard sealing package.”

– **Tom Benedict**
Vice President of Purchasing
Wayne Homes



A Proven, Versatile Performer

Fiber glass insulation is a proven performer among insulation products. It provides exceptional thermal performance, moisture and mold resistance and fire protection. It also creates opportunities for whole-home acoustical control.

The builders noted that fiber glass is their top choice for insulating homes. Since it offers a comprehensive range of products and some very high thermal values, they find it can provide the right performance and comfort for every project.

“As a builder, we are selling an energy system. And fiber glass is the answer in all my levels of energy efficiency,” said Bill Decker Sr.

The builders noted they have successfully utilized fiber glass for even the highest-performing net zero homes – achieving both ENERGY STAR® requirements and their own self-branded energy efficiency standards.

RESNET Grade 1 – Technique Matters

Fiber glass can achieve a RESNET Grade 1 wall when properly installed with a complete air sealing solution.² No matter what the insulation choice, the builders shared a perspective that focusing on proper technique is critical to achieving the highest level of performance.

Decker said he sees continual attention to detail as essential, and even leverages it as a point of differentiation. “Fiber glass is a great insulator at any code level when installed properly,” he said. “We do things other local builders don’t do to ensure insulation is properly installed.”

By using professionalism and care in addressing installation issues such as batt compression, vapor retarder facings, insulating around other components like pipes and wires within the cavity and intricate framing areas, it is possible to use fiber glass to cost-effectively build homes that are among the highest performing.

Visit InsulationInstitute.org and see how to achieve a RESNET Grade 1 wall with fiber glass. **Watch now»**



THE COST OF DOWNTIME

INSULATION	INSTALL	DRY/CURE	COST
WET SPRAY CELLULOSE	1 DAY	2 DAYS	\$873
SPRAY FOAM	1 DAY	1 DAY	\$580
FIBER GLASS AND MINERAL WOOL	1 DAY	0 DAYS	\$291

CYCLE TIME SAVINGS WITH FIBER GLASS AND MINERAL WOOL MEANS TREMENDOUS COST SAVINGS.

(Assumes average builder operating cost of \$291 per day, based on NAHB data.³)

A Real-World Experience with Spray Polyurethane Foam

In 2010, Decker Homes explored the true performance difference between fiber glass and spray polyurethane foam (SPF) insulation in two similar homes. One used 100% SPF in the walls and attic, and the other used SPF only in the headers and joists and fiber glass everywhere else (R15 walls). When comparing the two homes' utility bills, there was a negligible difference in energy costs, notes Decker, who added that SPF was also considerably more expensive and time consuming.

"SPF was dramatically more costly to install and required more work before, during and after installation, adding a few days to construction time," Decker said.

Fiber glass requires virtually no downtime, compared to SPF and cellulose, which are applied wet and require at least 1–2 days to dry or cure before gypsum board installation can begin. In some cases, SPF takes as long as a week or more to completely dry out.⁴

That's a significant time and cost issue, considering the average builder's jobsite operating cost per day is \$291 (NAHB estimate), with some builders saying that figure can run up to \$500.⁵ When every construction hour counts, choosing insulation options that maximize time and money savings is essential to improving profit.

A Commercially Viable Option

Considering the roughly equal performance, along with the significant differences of cost and installation time between fiber glass and SPF, the builders noted that fiber glass is a cost effective way to reach any requirement.

"Our goal is the most cost effective way to get to net zero. Fiber glass insulation with a complete sealing package is a key part of this."

– **Bill Decker Sr.**
President
Decker Homes

"From a cost/benefit ratio, we don't see the benefit in spending an extreme amount more on SPF to get the same thermal or air infiltration benefits as a standard sealing package with fiber glass."

– **Tom Benedict**
Vice President of Purchasing
Wayne Homes



Making Energy Efficiency A Profitable Business Model

The advantage of fiber glass for maximizing energy efficiency and profits is clear — as is its potential to support profitable insulation upgrade opportunities.

That's an upgrade to which homeowners are increasingly receptive, especially with a new generation of millennial homebuyers who seem especially cognizant of energy efficiency and sustainability issues. Not to mention, fiber glass makes it easy and cost-effective to upgrade interior walls to optimize room-to-room acoustical control.

However, some builders have pointed out that the key challenge to getting homeowners fully on board and willing to pay for the upgrade is demonstrating all the benefits and payback they will enjoy — beyond sustainability. Communicating this full spectrum of tangible benefits is essential to profitable upgrades that can grow a builder's business.

INSTALLED COST

FIBER GLASS ACHIEVES AN R13 AT UP TO \$1.42 LESS PER SQ. FT. THAN OTHER INSULATION TYPES¹

FIBER GLASS
\$0.48 sq. ft.

PROFIT OPPORTUNITY

CELLULOSE
\$0.85 sq. ft.

SPRAY FOAM
\$1.90 sq. ft.

UPGRADE YOUR INSULATION SELLING PROCESS

To help you more successfully sell the benefits of insulation, we have created a free, powerful selling toolkit that you can use to show homeowners the true value of a more comfortable, energy efficient home – all so you achieve greater conversion.

Access the free download at www.insulationinstitute.org/builder-kit



Discover more insulation knowledge at InsulationInstitute.org

NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

¹ "Since the development of fiber glass insulation in the 1930s it has been used in 90% of homes in the U.S. that contain insulation." Glen Wilkinson, "Beyond R-Value: Insulating for the Environment," Environmental Design and Construction Magazine (January–February 1999):28

² "Achieving Grade 1 Insulation With Fiber Glass Batts," prepared by Advanced Energy for Owens Corning. www.owenscorning.com/literature/pdfs/GradeOneWithFiberGlassBatts.pdf

³ "Cycle Time, What is a day worth?," NAHB Research Center, 1997

⁴ Sarfraz A. Siddiqui, A Handbook on Cellulose Insulation (Malabar, Florida: Robert E. Krieger, 1989), p. 34

⁵ Cost per ft. installed at 3.5" thickness based on NAHB report "Air Infiltration of Wood Frame Walls," NAHB Research Center, p. 10. May 2009

The color PINK is a registered trademark of Owens Corning.