

PR FOR PLANET EARTH™

A REPORT ADVOCATING FOR SOCIALLY
RESPONSIBLE SUSTAINABLE DEVELOPMENT

AS A STANDARD FEATURE IN BUILDER HOME DESIGNS, **SKYLIGHTS INCREASE ROI**

ENEREF INSTITUTE EXAMINES THE RETURN ON INVESTMENT FOR PRODUCTION HOME BUILDERS TO INCLUDE SKYLIGHTS IN THEIR HOME DESIGNS.

Recent findings demonstrating substantial health benefits of natural interior daylight, combined with its efficiency, necessitate that all home designs include skylights as a standard feature: that is, new homes should be planned, designed and built with

dependable skylights at the forefront. Only skylights—which provide twice the light of vertical windows—deliver daylight to the core of a room. Certainly, every master bath, every sun-room and every kitchen with access to the roof should incorporate skylights.



NEWSTYLE COMMUNITIES, INC. CHARLOTTE, NC.

 **Nicole Fankhauser**
Designer

NewStyle buyers report, “*Skylights are a no-brainer that add light, without sacrificing valuable wall space.*” Natural daylight, fresh air and energy efficiency “*are the main reasons our buyers choose skylights,*” they declared.

HOMES WITH SKYLIGHTS SELL FASTER, ACCORDING TO RESEARCH BY ENEREF INSTITUTE.

Eneref Institute interviewed builders and homeowners who installed VELUX skylights and found that production builders who differentiate themselves from competitors by accentuating certain rooms with skylights can expect to sell homes faster. Consumers who visited model homes

with properly demonstrated skylights were more likely to buy homes with skylights.

“We truly believe that the use of skylights in our homes helps our homes sell faster and differentiates us from other builders in our market,” said Jeff Loughhead of BDC Development Corporation.

Yet the majority of residential skylight sales come from the remodel market segment rather than the production builder segment. Aftermarket skylight sales are robust proof that homeowners desire skylights—and that production builders are sacrificing revenue and profits to remodelers.

Homebuyers subconsciously prefer an atmosphere filled with daylight. Daylight distributes the full spectrum of light in a way that enhances interior spaces, even if

we are not fully conscious of it.

Eneref also found that homeowners with older existing skylights were significantly more likely to upgrade their skylights—sometimes even to a more expensive operable venting skylight—than to cover up the opening.

Even builders themselves were convinced by floor plan renderings when their original designs were rendered to include skylights. The rendered images they saw accurately illustrated the unique characteristics and quality of light coming through a skylight. Eneref found that around 50% of production builders chose to include skylights in floor plans after comparing their own designs without skylights to the rendered imagery with skylights.

Regional and national builders would sell homes faster, and at

higher margins, if they incorporated skylights as enthusiastically as remodelers and custom builders.

MARKET OBSTACLES

One obstacle to skylight sales is a concern of leaks. Today, however, properly installed skylight technology renders leaks virtually unheard of. Condensation, which was sometimes misinterpreted as evidence of leaks, has been eliminated with thermally-resistant Low-e glass and coatings. In fact, VELUX, a leading residential skylight manufacturer, offers 10-year product and installation warranties against leaks.

The larger obstacle to the implementation of natural interior daylight as a primary light source in residential homes is that builders too often perceive the installation

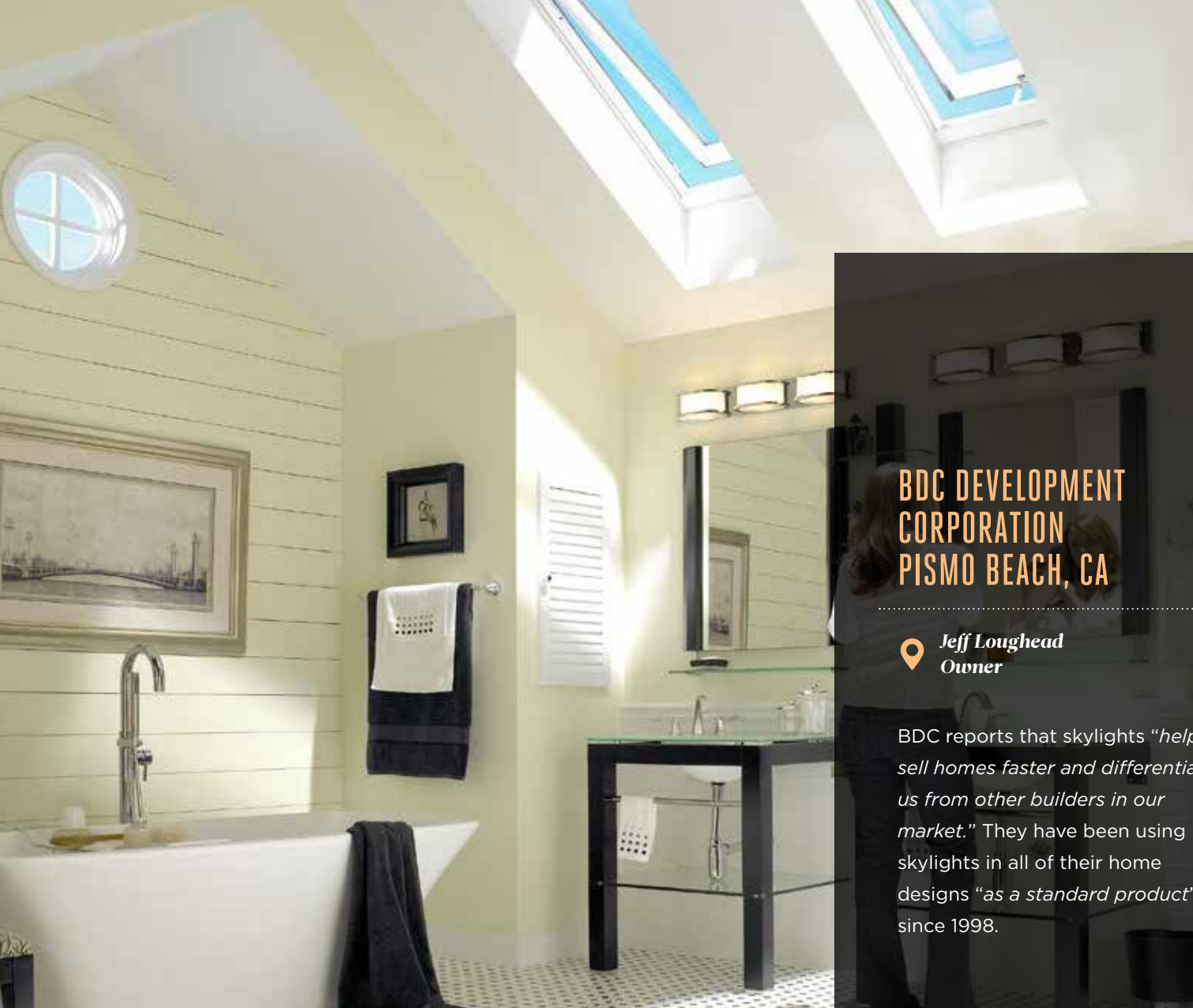
of skylights as an interruption to their production process, rather than an opportunity to grow their margins with better home design. Although 20% of homebuilders do include skylights in their homes, the majority of production builders are leaving money on the table for aftermarket companies.

Because of consumer preferences, human health benefits, and our urgent need to reduce energy, the home market must accept the challenge of implementing natural interior daylight. According to an IBISWorld report, 2018 revenue for the US housing developer market is estimated to reach \$164bn—about equal to the GDP of the entire state of Kansas—with a \$10.5bn profit and an annual growth of 7.7%. Given these robust market conditions, there is no

DAYLIGHT SIMULATION *in* BEDROOM

ST. LOUIS, MO | • June • 12:00pm • Intermittent Clouds





BDC DEVELOPMENT CORPORATION PISMO BEACH, CA

 **Jeff Loughead**
Owner

BDC reports that skylights “help us sell homes faster and differentiates us from other builders in our market.” They have been using skylights in all of their home designs “as a standard product” since 1998.

valid argument not to make natural interior daylight a primary light source in home design.

LIGHTING BENEFIT

Electric lights simply can’t provide a full dynamic color range equal to daylight because they emit an irregular spectrum, which prevents them from correctly rendering natural colors. Whereas artificial electric lighting often dulls the appeal of features such as granite countertops or hardwood floors, top-down skylights

make these details more captivating. In fact, in a recent *Eneref* report, a Subaru auto dealer found that their automobiles sold more quickly with the inclusion of skylights in their showroom (*Eneref Institute, “Daylighting Reinforces Sustainability Achievements for Subaru of America”*).

OPERABLE SKYLIGHTS

Operable skylights, which open to the outdoors, can significantly improve indoor air quality, as air-venting creates a chimney effect

with a soft natural breeze. Fresh air is especially crucial to reduce humidity, toxins and pathogens inside homes. Contaminants such as carbon monoxide, radon, volatile organic compounds (VOCs), elemental particles, smoke and manmade fibers can be found in every part of a home. Living pathogens—found naturally in the environment—include molds, mildew, dust mites, spores, pollens, bacteria, microbes and viruses. Introducing fresh air results in healthier indoor air quality and

fewer airborne pathogens.

Since bathrooms and kitchens naturally generate the most hot and humid air, these rooms are the most popular locations for skylights. A venting skylight allows moisture to escape.

ROOM SOLUTIONS

Skylights, essentially windows angled towards the sun, can deliver daylight to the center of a space. In fact, installing one skylight—instead of two windows—is cost-neutral because skylights generate twice the light of vertical windows. For example, a 2x4 skylight costs less but provides the same, or even greater, amount of light as a 4x4 picture window. Moreover, because the skylight is

just half the size of the window, it has less glazing and more wall surface insulation, thus resisting heat flow while providing better room ventilation.

Kitchens

Skylights can have a huge impact on the kitchen area. Natural daylight increases the aesthetic appeal of interior design features such as countertops and cabinets. Additionally, skylights as a passive ventilation system mitigate the accumulation of odors, smoke and moisture. Installing skylights can also free up wall space that would otherwise be used for windows, offering more room for cabinets.

Bathrooms

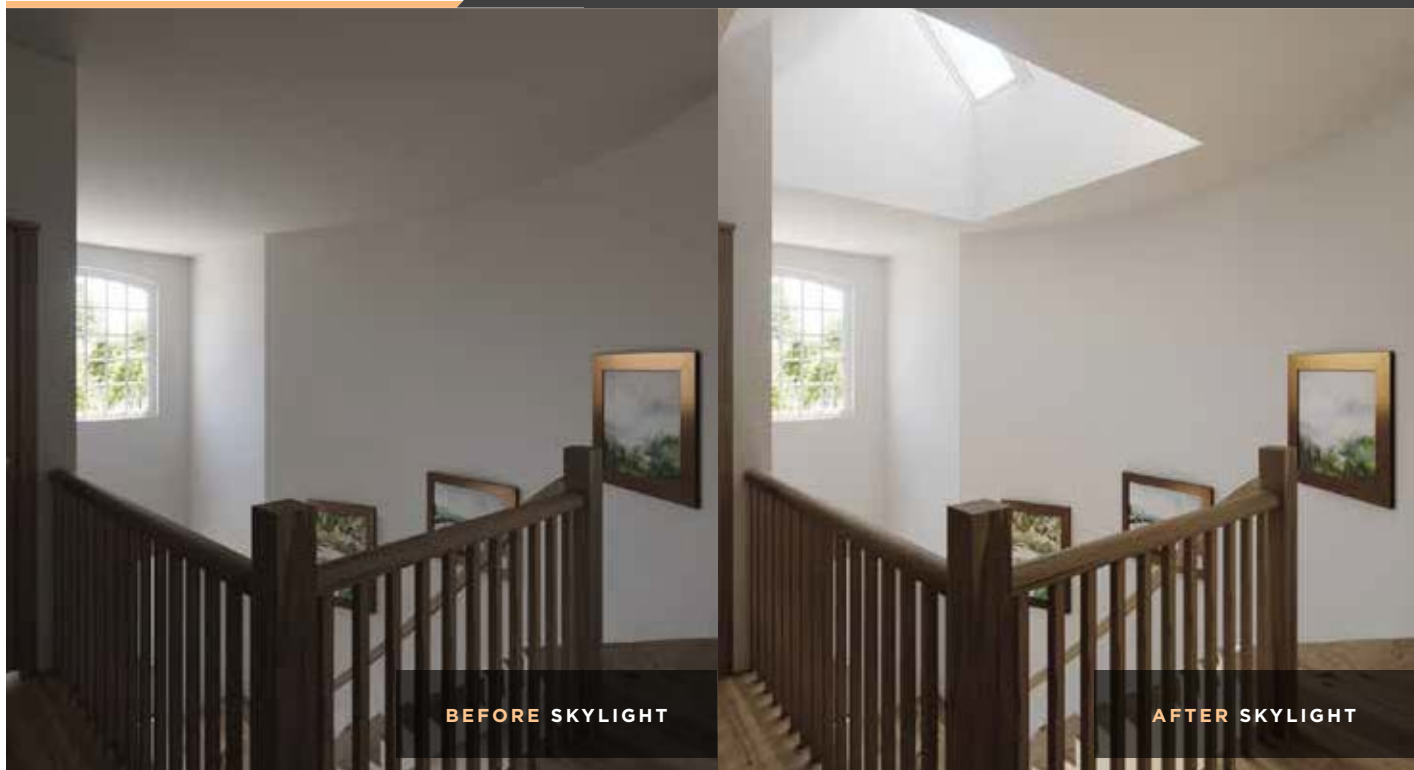
Bathroom windows are the least functional windows in a home due to the need for privacy. Rarely opened and often covered up, they provide minimal natural light and don't prevent odors and steam from accumulating. Venting skylights, on the other hand, allow for ventilation as well as natural light without sacrificing privacy. They're especially important for seniors, as they can greatly increase the illumination of walk-in showers.

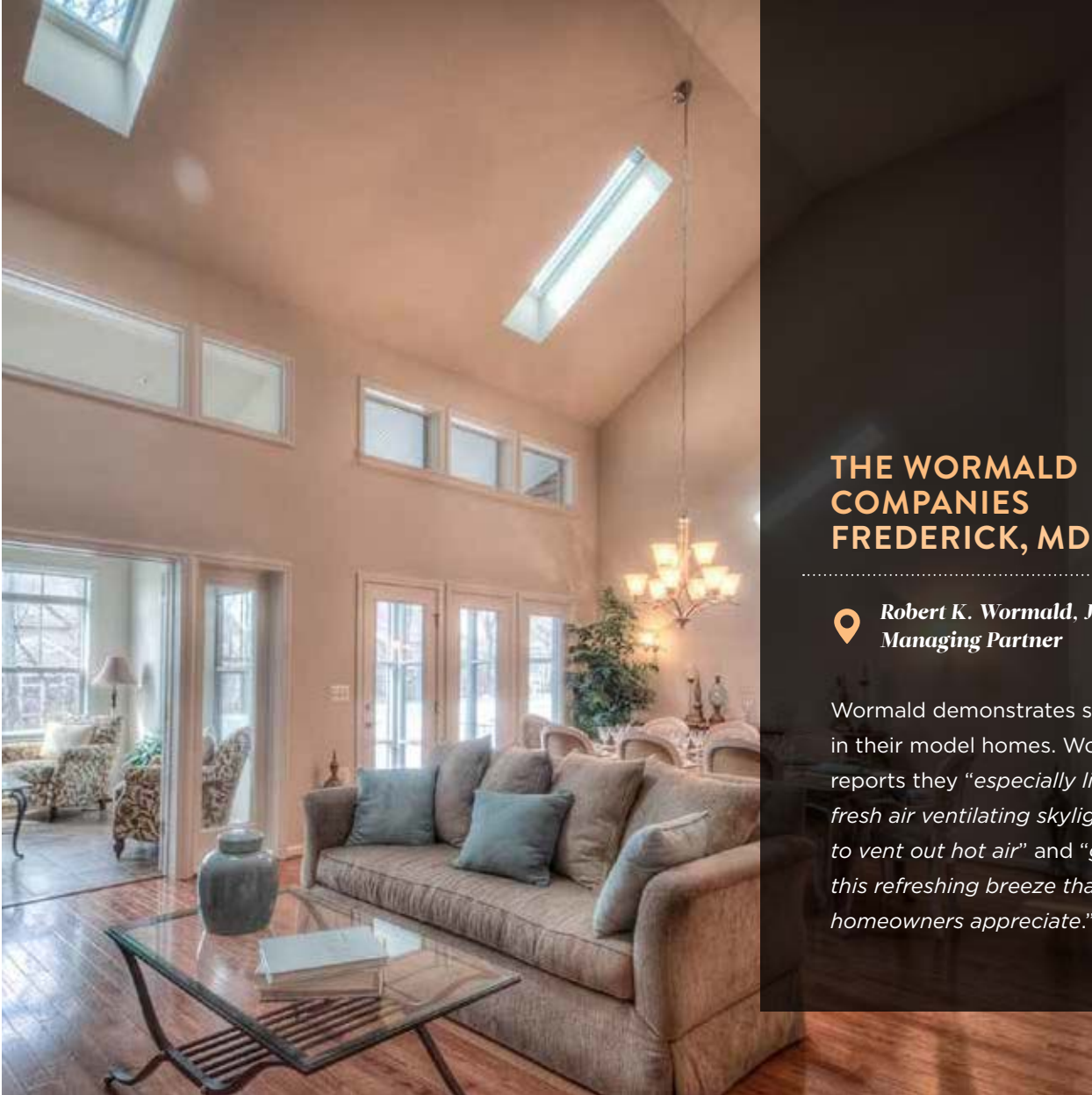
Stairways and Hallways

Stairways are a prime opportunity to funnel natural light and ventilation into the middle of the home.

DAYLIGHT SIMULATION *in* STAIRWELL

RENO, NEVADA | • June • 11:00am • Sunny





THE WORMALD COMPANIES FREDERICK, MD

 **Robert K. Wormald, Jr.**
Managing Partner

Wormald demonstrates skylights in their model homes. Wormald reports they “especially like the fresh air ventilating skylights to vent out hot air” and “get this refreshing breeze that homeowners appreciate.”

It's no surprise that homeowners prefer a well-lit stairwell to a dark, accident-prone shaft. Even a small 2x4 fixed skylight will significantly brighten the confined space of a stairway or hallway.

Sunrooms

In sunrooms, skylights eliminate the need for triple wide windows around the facade. Because skylights bring in twice the light of vertical windows, sunrooms can be built more affordably with less glass square footage.

Bonus Rooms and Loft Area

Skylights can illuminate bonus rooms or lofts, which are often oddly shaped. In fact, by installing a skylight, a section of the home that was not functional before can become an additional, purposeful room—and marketed as such. The extra area can be used as a bedroom, office or recreational space depending upon the pitch of the roof. If builders were to include skylights as a standard feature in their home designs, the trusses

could be positioned and spaced accordingly from the very beginning to give this space maximum versatility. Skylights can also satisfy building code requirements for egress points, thus achieving double functionality.

Closets and Laundry Rooms

In closets, skylights provide much-needed daylight to open up a space that is otherwise small, dark and dim. Skylights diminish the possibility of leaving the light on accidentally, and in

master walk-in closets, they also intensify clothing colors in a way that makes outfit coordination easier. Similarly, in laundry rooms, skylights allow homeowners to better perceive the true colors of clothing under daylight.

Living Rooms and Bedrooms

Skylights create the illusion of a larger living room because daylight gives the space an open and airy feeling. A small living room can also feel more comfortable with the addition of operable venting skylights. Operable skylights in the bedroom offer privacy and give homeowners control over ventilation.

HOMEOWNER COMMENTS

To produce this report and receive end-user comments, Enerref Institute surveyed builders and homeowners who had installed VELUX skylights. Ninety-one homeowners responded, and many expressed sincere enjoyment with their investment. Comments included “immense satisfaction,” a “dramatic change in light” inside the home, and that “rooms now appear to be bigger.” Skylights, they said, made their “home lives more gratifying,” and many appreciated the “high energy efficiency.” Of the VELUX skylights specifically, homeowners cheered the “intelligent design,” “stellar features” and “ease of operation.”

Skylights’ return on investment makes them profitable for builders (and even lucrative for after-market suppliers) because homes with skylights sell faster—and sometimes at higher margins. By including skylights early as a standard feature in home floor plans, homebuilders can ease any perceived impediments to installation and capture the additional revenue that homeowners are clearly willing to spend on natural interior daylight.

Beyond a higher profit margin, skylights also save energy, provide superior ventilation and make homeowners happier in their own homes. For industry, society, and planet, natural daylight should be compulsory.

DAYLIGHT SIMULATION *in* BATHROOM

DALLAS, TX | • June • 11:00am • Sunny





Enerref Institute

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