

MYTHBUSTERS



"It costs less than brick."

If initial cost is the sole criterion for material selection, then vinyl siding beats brick. That's why it is such a popular choice for mobile homes, manufactured housing and low-to-moderate priced housing. However, the presence of vinyl on your home can adversely affect the long-term value of your home. Curb appeal, dramatically enhanced with brick, can literally add to the bottom line when selling or refinancing.

"Many of the homes in my neighborhood have vinyl siding."

Unless there are architectural controls in the development, a homeowner is free to select any code-approved siding material, including brick. Brick is a time-honored material that blends well in any neighborhood setting. The neighbors will probably wish they had done the same.

"It's durable and maintenance free."

Brick wrote the book on durability, longevity and low maintenance. Vinyl siding can be durable, but it also can dent (think hailstones and golf balls), be scratched by yard tools and trees, and be damaged by heat (think grills!)



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THE FACTS: BRICK VS. VINYL SIDING

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THE PLASTIC CLADDING ALTERNATIVE: VINYL SIDING

It's cheap, it's no friend to the environment, and it's been around longer than Archie Bunker. When vinyl siding was introduced in 1957, it answered the need for an inexpensive option to wood. There's no denying its budget appeal: today, vinyl siding is the most prominent siding material on low- to moderate-priced housing in the United States.

Modern siding comes in many profiles and finishes, most of which mimic wood lap siding. There are options for various "board" profiles, vertical panels, and products that resemble wood shingle siding patterns. In order to provide a complete exterior enclosure, manufacturers offer a variety of accessories, including corners, trim, soffits and fascia.

While it may be everywhere, vinyl siding is not a watertight covering. Rather, it is a "supplemental rain

screen" that reduces the amount of water reaching the underlying water resistant barrier — typically a housewrap or building paper installed on sheathing on wood studs. Builders use nails, screws or staples to fasten siding to the wood framing. Siding panels must be fully locked into the bottom of the previous panel before attaching.

The primary component of most vinyl siding is polyvinyl chloride (PVC), a derivative of petroleum and salt. Environmental concerns about the use of products made with PVC primarily focus on two materials: chlorine, used as a raw material in PVC production, and dioxin, a toxic by-product of manufacturing processes involving chlorine. Government regulations now control factory emissions, and the vinyl industry asserts that its health and environmental problems are a thing of the past.

MEASURING SUSTAINABILITY

Both brick and vinyl siding can contribute points to green building rating systems, such as Leadership in Environmental and Energy Design from the U.S. Green Building Council and the National Green Building Standard™, which aim to measure the extent of green performance or sustainability attained by a building. However, true sustainability encompasses more than points for a rating system. The chart below demonstrates the major differences between brick and vinyl siding when it comes to green performance.

	Brick	Vinyl Siding
Longevity	- 100-year life span - No annual cleaning required	- 25- to 50-year life span - Annual cleaning recommended
Built-in safety	- Provides minimum one-hour fire resistance rating - Noncombustible - Resists penetration of wind-blown 2x4 up to 80 mph	- Cannot provide one-hour fire resistance rating by itself - When burned, potentially harmful fumes released - Wind-blown 2x4 penetrates siding when traveling at 34 mph
Energy efficiency	- Homes clad with brick use 1 to 2 percent less energy than homes clad with vinyl siding	- Homes clad with vinyl siding use more energy
Regional sourcing	- Raw material is on average 15 miles away from the brick plant - Brick manufacturing facilities are located in 38 states and within 500 miles of 49 of the top 50 metro areas in the U.S.	- Polyvinyl chloride, the chief raw material in vinyl siding, is primarily made at facilities near coastal refineries
Recycled content	- Many materials can be incorporated as recycled content	- Some recycled content is used but in varying degrees
Waste management	- Minimal packaging required — banding and possibly wood or cardboard strips — all of it recyclable - Unused brick can be recycled or used as site infill	- While some vinyl siding construction waste is recycled, the Association of Post Consumer Plastic Recyclers labeled the vinyl siding recycling program as a failure in 2000
Recyclability/reusability	- Brick buildings can be refurbished, and reuse is allowed by the International Building Code - Can be crushed and recycled	- No buildings with vinyl siding are known to have been refurbished - Cannot be reused and difficult to recycle, since high levels of contaminant remain in vinyl siding at the end of its service life



VINYL SIDING: YOU GET WHAT YOU PAY FOR.

The choice is yours: you can save upfront with a low-cost material like vinyl siding, but you'll regret it for the time you own the home. And especially when you come to sell it. Vinyl siding and curb appeal just don't go together. Sure it's less expensive than brick, but it generally looks cheaper as well. For goodness sakes—it's vinyl siding!

Here's something to consider: with current low mortgage rates and a large variety of financing terms and options, your monthly payments may not increase much for the additional expense of an all brick-sided house. For very little a month, you won't have to worry about dents during hailstorms or about the various fire issues surrounding vinyl siding (i.e., PVC vinyl siding will melt or burn when exposed to a "significant heat source" like a barbecue grill). Brick, of course, simply does not burn.

And then there is the environmentalist in you. All materials made of PVC, including vinyl siding, are subject to environmental concerns. Wrapping your house in PVC just isn't a green way to build your home.

VINYL SIDING STRENGTHS:

Initial Cost

Generally, vinyl siding costs less than most other siding options.

Low Maintenance

Annual washing is required to keep vinyl siding clean. Damaged sections can be replaced, but color matching may not be exact. Some stains can be removed with the correct treatment.

Easy Installation

Installing vinyl siding, while not as easy as it looks at first glance, is fairly straightforward.

New Products

A large variety of shapes and profiles are offered. Trim pieces for doors, windows, edges, soffit boards and more are available. Several siding profiles simulate the look of wood shingle siding. Some of the newest products are PVC-free.

VINYL SIDING WEAKNESSES:

Aesthetics

Consumers in focus groups routinely use words like "cheap" and "flimsy" when asked to describe vinyl siding. They further point out its waviness, storm damage, curling seams and uninspired basic lapping.

Environmental Concerns

The manufacturing process for PVC produces hazardous materials, which the vinyl industry insists are no longer the issue they once were due to compliance with government regulations. While some vinyl siding is recycled, the high levels of contaminant at the end of its service life make it difficult to do so.

Flammability Concerns

When vinyl siding burns, it releases toxic fumes. Further, the material tends to smolder for extended periods of time before flaming. This can result in the release of noticeable toxins before discovery of the fire. Tests at the National Institute for Standards and Technology show that vinyl siding may ignite as a result of a fire inside an adjacent dwelling only six feet away.

Dents, Scratches and Stains

Vinyl siding can be dented by hail, golf balls or just kids playing. The surface can be scratched by lawn tools, shrubbery or trees. Staining from insecticide, herbicide and other household products is possible.

Wavy Siding and Visible Seams

Since vinyl siding is attached to the framing and is flexible, framing imperfections can result in a wavy appearance. Heat distortion can occur in the vinyl siding from heat reflected or radiated from windows, roofing or pavement. Seams between lengths of vinyl siding are visible. If seams become loose or are poorly installed, then they are unsightly and may permit moisture into the wall.

Precise Nailing Required

Proper installation of vinyl siding requires that the heads of the nails not be driven tight to the siding. Doing so will result in structural and aesthetic problems associated with thermal expansion and contraction, such as buckling. Unfortunately, the loose nailing allows vinyl siding to "rattle" in the wind.

Wind Damage

Vinyl siding is vulnerable to wind-blown objects. Tests at the Wind Science and Engineering Research Center of Texas Tech University show that a 9-pound 2x4 traveling at 34 miles per hour (the minimum speed for hurricane protection) can puncture a typical residential vinyl siding wall and extend more than 5 feet into the interior.