# Innovative Building Materials That Are Now Being Used in New Construction



When speaking in terms of building materials, there are a few products, such as brick, <u>cedar lumber</u>, and hardwood flooring, that immediately come to mind. However, just because a material is "classic" does not necessarily mean it is the only choice in a rapidly evolving building materials industry. With this in mind, the following breakdown looks at a handful of innovative new building materials that are giving contractors more options in addition to the classics.

#### Fiber Cement Siding



Vinyl siding became a prevalent choice in commercial subdivisions because it is affordable, lightweight, and can mimic the appearance of wood from a distance. Furthermore, as a plastic, vinyl is nonporous--a fact that builders leveraged to the max in marketing vinyl as a weather-resistant siding option that is lower maintenance than wood planks. However, vinyl is no longer the only inorganic siding solution available to home builders.

While there are a number of <u>alternatives to vinyl siding</u>, one of the most innovative products on the market in 2022 is fiber cement. Fabricated from a combination of sand, water, cement, and cellulose fibers, fiber cement siding is an environmentally friendly option that will protect your house for many years. With elite moisture, fire, and insect resistance, fiber cement siding will maintain its appearance without cracking, chipping, or fading.

### Insulated Concrete Forms (ICF) Framing



Most homes have traditionally been framed using oriented strand boards to form structural wood panels. Although there are definitely benefits to this classic framing material, observation over the years has revealed a couple of things to keep in mind with structural wood panels. First, they can be vulnerable to moisture, shrinking, and swelling as water is introduced. In addition, there are usually some small imperfections in the prefabrication process, creating small openings for air, moisture, and insects to enter the building.

To help combat some of these concerns, it may be worthwhile to look into pairing your wood-framed home with a cutting-edge Zip Homewrap system. By pairing a wood-framed home with a quality housewrap, builders can ensure that a continuous air and moisture barrier protects the framing and fortifies the energy efficiency of the home.

However, if a combination of wood framing panels and housewrap is not a combination you are keen on, there are still other options. For example, insulated concrete forms (ICF) framing is becoming a popular choice for builders looking to create an airtight frame. Used widely to help rebuild neighborhoods ravaged by natural disasters, ICF framing is poured on site and creates an airtight structure that is extremely resistant to mold, insect, and fire damage. It also has an extremely high thermal mass, allowing the building to maintain a more stable interior temperature without relying too heavily on HVAC.

# **Composite Roofing Shingles**

Many homeowners covet <u>cedar shake shingles</u> thanks to the rustic appearance of natural wood that can give a home a bit more character than basic asphalt roofing tiles. Although there is no denying the classic, homey appearance of a house topped with wood shingles, just remember that you need to regularly clean and treat it so that it absorbs as little moisture as possible and does not become brittle and crack due to extended UV exposure.

If maintaining a wood roof is a bit more work than you have in mind, a great option is composite roofing tiles. Fabricated with the "split texture" appearance of natural wood, this environmentally friendly roofing option comes with the highest impact and fire ratings in the industry. With a 50-year limited warranty, composite shingles will very likely last the lifetime of the house.

## Aluminum Soffit



Quality soffit is essential in protecting the overhangs and awnings of a roof. Degraded soffit can allow moisture to damage the roof joists and attic, which will ultimately create a domino effect of structural issues within the home.

This is why many roofing professionals are turning to aluminum soffit as a durable soffit solution. In addition to being highly malleable to fit into tight spots and weather-resistant

to fend off moisture, aluminum soffit is fabricated with optimal breathability to ensure ventilation within the attic. While some people may be scared off by the higher <u>soffit</u> <u>replacement costs</u> when switching to aluminum, the initial investment should easily be recouped in the form of lower maintenance and replacement costs over time.

# Final Thoughts: Innovative Building Materials for New Construction Projects

There are many building materials that continue to be staples in the building materials industry throughout the years. While most of these products have stood the test of time for a reason, understand that there are a plethora of new products--such as fiber cement siding, ICF framing, composite roofing shingles, and aluminum soffit panels--that can provide excellent options for those builders looking to modernize their properties. By considering the advice listed above, you can ensure that your house is ahead of the latest trends in safety, comfort, and functionality.

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