

# Trends in Home Building Technology

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Following the trends in construction technology is a smart way to make educated decisions in the future.

When buyers know what's available, they can ask better questions so they end up with the home they want.

[New construction](#) hasn't embraced technology as much as other industries have, but they're catching up in some very notable ways. Learn more about how different technology is being used to benefit both the builders and the owners of the property.

## Scouting Technology

Scouting technology today saves developers time when they need to choose suitable locations for their new structures. In the past, scouts may have needed to visit multiple sites, spending days measuring potential impediments on the land. Now, developers can use advanced devices to find a space that fits their needs:

- **Drones:** This invention is extremely popular in real estate today because drones can accurately show the scope and conditions of potential building sites. If a large plot of land has been overrun with massive tree roots or was illegally used as a dumping ground, developers and investors can decide its viability without ever having to visit the site.
- **3D Scanners:** 3D scanners show builders the exact measurements of potential obstructions on the property within an error rate of just 2 mm. If a drone shows there are bushes or stockpiles on the property, the 3D scanner will relay the dimensions back to the developer so they can plan ahead.

## VR/AR to the Rescue

Some construction companies are now using virtual and augmented reality programs to help train their workers. With a focus on both safety and accuracy, workers can learn and make mistakes while wearing a headset rather than on top of the scaffolding.

Working on a job site comes with its own inherent set of risks, but VR and AR give workers the opportunity to learn the specific layout and dangers of each job site in hopes of cutting down on the number of accidents a job site may have. It gives workers advance notice about the potential perils and allows them to build their confidence before stepping on the site.

## New Building Materials

Most homeowners will perform a certain amount of maintenance on their home in order to keep the structure up to code, but manufacturers of building materials are looking to reduce the efforts of the average homeowner. For example, self-healing concrete is a revolutionary product that can help foundations stand the test of time. The concrete can actually revert to its original shape in the case of general shifting or trauma.

Builders may opt for nanoparticle paint because it's engineered to resist both stains and water damage. By experimenting with new elements, such as titanium dioxide and shape memory polymers, manufacturers are trying to give people quality materials that will last longer than the length of the mortgage.

## Robotics in Construction

Robotic brick layers can lay bricks about [five times faster](#) than that of a construction worker making them a potential solution for developers who are struggling to find labor. Not only can robots help investors hit project deadlines faster, they can also work on a variety of different layouts.

Robot manufacturers are currently hard at work finding ways to improve the robots' flexibility when met with anomalies on the job. From complex blueprints to unexpected holes in the ground, robots may be able to work on complex custom homes in the near future. As the shortage of workers in the construction industry continues, this trend could potentially push costs down for homeowners without compromising durability or quality.

## 3D Printing

A 3D printer for most people is nothing more than a strange phenomenon. Most people don't own one or even need to own one. However, many companies are making the most of 3D technology by experimenting with different designs and capabilities—including 3D homes.

Companies such as Apis Cor are already 'printing' [fully habitable homes in mere hours](#). The best part is that these homes only cost a few thousand dollars to make, which could provide a solution to many of the country's affordable housing questions. This technology may not be quite ready for a mainstream audience, especially when the machines themselves cost so much to produce, but it may only be a matter of time before we see 3D printers take center stage.

## How New Building Technology Counteracts The Construction Labor Shortage In America

The 2008 recession caused the U.S. construction industry to shrink significantly, resulting in many skilled workers

switching to other careers. Now that the economy's recovered and home building is at previous levels, there's a serious labor shortage that is driving up both construction costs and delays. However, new technology is helping the industry build houses quickly and affordably despite the labor shortage. Some of these helpful tools include:

- Pre-fabricated building components that allow for entire rooms or structures to be set up rapidly so the crew can move on to the finishing steps,
- Automated construction equipment for handling everything from clearing the site to hanging drywall,
- Advanced tracking software to make the most of every worker on the job site for faster construction without any quality loss,
- Online recruitment and training programs to help attract new laborers that would have never otherwise considered a job in construction,
- New design techniques that minimize unnecessary framing work, resulting in a stronger structure that takes less time to build,
- Faster [spray-on application methods](#) for time consuming processes like applying house wrap or covering a roof deck.

## Learn More About How New Building Technology Can be Utilized

Building technology can take a variety of different forms, but it's clear that [Sitka builders](#), for example, investors, and workers are beginning to see the practical benefits of technology rather than just the complex instruction manual and hefty price tag. Future buyers may or may not see these methods employed on their dream homes, but it helps to have an idea before searching.

