

THE GARAGE DOOR OF THE FUTURE

What will garage doors be like in 10 years?

By Jean-Francois Morin, Garaga

The garage door of 2028 will likely be determined by how homeowners use their garage space. Will the garage still be mainly used to park cars? Or will it become an extension of the home, such as a game room or a workshop space?

A chief advantage of garages for those of us in colder climates is to keep our vehicles out of the elements. In warmer climates, maintaining a cool refuge is equally attractive. Since regional weather is not likely to change much, the thermal efficiency of garages will likely continue to be a concern. So for garage doors, reducing heat transfer — and thus, energy costs — will remain important.

The non-garage door

Garage doors should not be limited to garages. The market for glass garage doors in kitchens, family rooms, and even bedrooms has skyrocketed. Glass doors open the home to nature or to extended living spaces. Therefore, a variety of materials, colors, and styles should be available, as the door must complement the home's decor.¹

And will tomorrow's garage door systems be similar to today's? Mobile apps can already operate our garage doors and connect to smart home control systems such as Google Home, Amazon Echo, and Apple's HomeKit. Google

and Tesla are on our doorsteps with self-driving cars that, when beckoned, will pull out of the garage and patiently wait for us. What are the other trends for using garage doors in new ways?

More storage space

In recent years, lot sizes have been getting smaller. This forces homeowners to maximize the use of their interior space. As people acquire more stuff, the garage becomes even more important as a space for the safe storage of our goods as well as our vehicles.

The future may bring garages with higher ceilings to maximize storage space. To make the overhead space more accessible, we could also see an increase in European-style side-sliding garage doors that open laterally.

More security

Since 9/11, security has become more important. Alarm systems are being integrated more often into home automation. To prevent break-ins, we may see garage doors made of thicker steel that is impenetrable even with a circular saw.

Continued security concerns may increase the use of fences and locked gates for residential properties, creating a potential new product line for door dealers. These perimeter

barriers (garage doors, fences, and gates) may include facial recognition technology that allows access for family members and denies access to intruders. Such technology may also recognize our cars, allowing us to open the garage door without pressing any buttons.

More elaborate door designs

We all dream of hiring an architect who can design a house that perfectly corresponds to our taste and reflects our personality. We all want something unique. Will the garage doors of the future be made by a 3D printer?² Will manufacturers produce more garage doors and front doors with matching finishes and colors?

A door that produces energy

Most U.S. homes have garage doors that cover two or three car spaces. All that square footage is important. Tesla realized the power that the square footage of roofs could have when they introduced their Solar Roof³ tiles and the related Powerwall to capture and store energy. By wisely using that square footage, our dream of Net Zero homes — houses that produce as much energy as they use — can become reality.

The future garage door may include photovoltaic cells in its panels and glass.⁴

SOLAR ROOF, SOLAR DOOR?: If roofs can generate power, why not garage doors? Photo courtesy of Tesla.



NON-GARAGE DOOR:
The new Arm-R-Lite Malibu.
Photo courtesy of Arm-R-Lite.

This could allow the door to be a large solar thermal collector. By combining the stored energy from roofs and garage doors, homes may even be able to feed surplus energy back to the grid.

A different door every day

Can you foresee a time when the exterior surface of the door will be like a giant tablet where we project whatever image we want — even our favorite Hollywood movie? Major advancements and innovations from Corning⁵ have resulted in interactive architectural surface glass that puts technology at consumers' fingertips on the inside and outside of the home.

The hologram garage door

And finally, while we're dreaming of future garage trends, what about a door that is a simple light beam as seen in Star Trek? The garage door could open for just a few seconds to let you in while still protecting your garage against intruders.

The future technician

With smartphone-operated garage door openers, we've already seen an increase in digital technology usage in garage door systems. What does this mean for the garage door technician of the future? It seems likely that installers and technicians will need more expertise in information technology and electronics in addition to their mechanical knowledge.

A last word

The future is almost here. Almost all of the technology mentioned here has already been invented. It only needs to be implemented in an affordable manner. And the next new idea is on someone's drawing board right now!

Are you ready? ■

Jean-Francois Morin has been with Garaga since 1986. He holds a bachelor's degree, and he served as Garaga's sales and marketing director for 23 years. He is now semi-retired.



THE FUTURE IS HERE



¹ **See:** A dozen photos of glass garage doors in non-garage settings in "Sectional glass garage doors used in modern designs" at www.homedit.com.



² **Read:** "Builders imagine homes of the future — but some of their dreams are available today," Oct. 5, 2017, by Michele Lerner, at www.washingtonpost.com.



³ **See:** Tesla's solar roof tiles at www.tesla.com.



⁴ **Read:** "Solar windows could meet 'nearly all' of America's electricity demand," by Niamh McIntyre, Oct. 24, 2017, at www.independent.co.uk.



⁵ **Watch:** Corning's futuristic "A day made of glass" videos at www.corning.com.