



a neighborly company

*New Garage Door*

# BUYER'S GUIDE





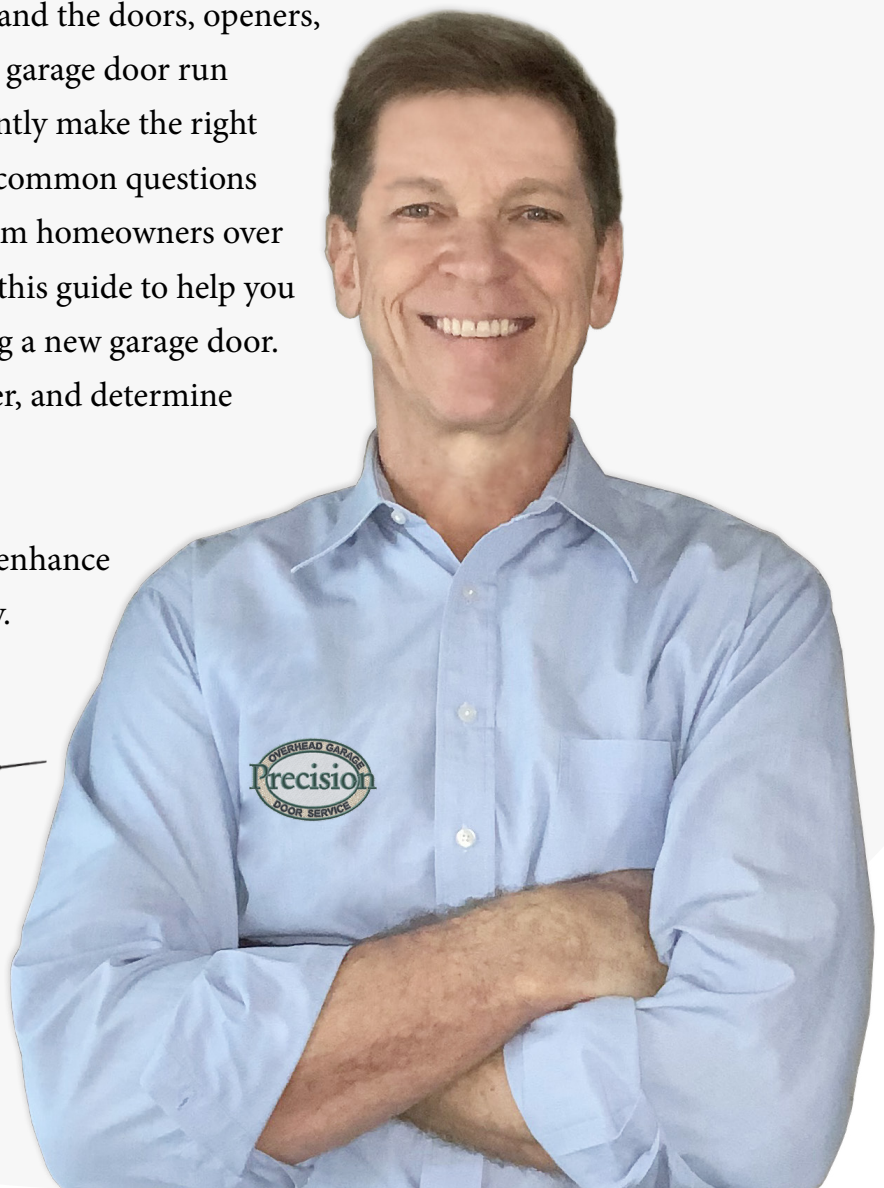
## *A Note from the Owner*

As the owner of ***Precision Garage Door*** with 20 years in the garage door industry, I've never seen as many options for a new garage door as there are today. From materials to design and garage door openers, homeowners can truly create a door that is unique to their style, home, and lifestyle.

A garage door is an investment in your home and we believe that it's important for you to understand the doors, openers, and the parts that make your garage door run smoothly so you can confidently make the right decision. Based on the most common questions and concerns we've heard from homeowners over the past 20 years, we created this guide to help you through the process of buying a new garage door. Take some time to read it over, and determine what's important to you.

Thank you for trusting us to enhance your home's value and beauty.

*Douglas Beresko*



# THE GARAGE DOOR BUYING PROCESS

*Perfection doesn't happen overnight! Below is a brief outline of what you can expect when buying a garage door with Precision. You should plan on this process taking 3-9 weeks from the initial consultation to final installation.*

1

## *Read our Garage Door Buyer's Guide*

Our Garage Door Buyer's Guide can help get you started on your journey to designing and ordering your new garage door. Learn about different style options, top of the line openers, and garage door basics that will help you choose the perfect garage door for your home.

2

## *Meet with a Door Designer at Your Home*

One of our professional Door Designers will come to your home with samples and guidance on garage door styles, materials, construction, and mechanics. Meetings typically take about an hour. The Designer will also measure your garage to ensure the perfect fit and make sure they can get you the exact door you want. Not every door fits in every garage!

3

## *Order Your New Garage Door*

Once your garage door is ordered, it typically will take between 2 and 8 weeks for your door to arrive in our warehouse, depending on the manufacturer and door customization you choose. You may also be asked to approve manufacturer's drawings to ensure everything is to your specifications.

4

## *Schedule Installation*

Once your garage door arrives at our warehouse, our door team will call to schedule an installation—typically installation occurs within a week of our call.

5

## *Installation Day*

On the big day, a specially trained team will come to your home, remove and dispose of your old door, and install your new beautiful garage door along with any openers and accessories you have selected.

# WHAT IS MOST IMPORTANT TO YOU?

*Garage doors are not a “one size fits all” investment. We suggest focusing on the 3 elements that are most important to you to help find the perfect garage door. As the largest moving object in your home, these elements are intertwined with one another and reading through the categories can help guide you toward the right door for you. Review the topics prior to meeting with your Door Designer so that you’re ready to make the most of your time together.*





# STYLE

*The style of a garage door can greatly transform your home. Think outside the box and explore those that enhance your home's architecture.*

## *Trends*

When it comes to trends, it's about making your garage door the center of attention, rather than just blending it in with your home. Over the last few years we've seen the following trends emerge and they are here to stay.

### Modern Carriage House



Originally considered a more rustic design, a shift toward clean horizontal and vertical planking and elimination of decorative hardware turns a classic into modern. This is one of the most frequently selected styles.

### Full View Glass Doors



A sleek and upscale design, full view glass doors turn your garage door into a statement piece.

### Mosaic Windows



Emergence of more simplistic flush and plank garage doors in the last few years have allowed windows to become the new focal point. Dispersing windows in a random mosaic pattern or along the sides of the door can create an engaging feature on your home.

### Unique Colors



Opting for one of a kind color choices started in Canada and is now taking the US by storm. Homeowners are more frequently moving away from the standard white door and making bold color selections like evergreen or black to add a wow factor to their home's exterior.

### Ultra Custom Doors



Wood, wood composite, and vinyl composite are ideal garage door materials for homeowners who want to be able to customize their doors, from start to finish. From exotic species of wood to "made for outdoor" wood composites, custom wood and wood composite door manufacturers have heeded the calls for more unique designs, allowing you to create a true work of art. New technology has also paved the way for custom vinyl composite doors. Similar to wood, they can be created to your specifications, from a one of a kind family crest or ultra-custom window design—but with the benefit of virtually no maintenance.

# STYLE

## *Designs*

Step outside and take a look at your home's exterior. Are there more curves or right angles? Do you have square windows or are they arched? Take in the architectural elements of your home's design, from the roof lines to the window shape. Consider having your doors and windows reflect those elements. It can create a cohesive and uniform look for your home's style.



### ◦ Carriage House

Carriage house garage doors come in two distinct styles: *rustic* and *modern*. The **rustic carriage house** design includes the traditional hardware, such as handles and straps, which mimic the look of original carriage house doors. This style, combined with the convenience of an overhead garage door, offers the old world look with the sophistication of modern technology.

**Modern carriage house** garage doors are simple, but still add a wow factor to many homes. The clean design of the modern version creates a timeless look that will never go out of style. Rather than the focal point being the hardware or wood grain, the actual design of the door catches your eye, allowing it to effortlessly add beauty to any home's exterior.





# STYLE

## *Contemporary* ◦

Contemporary garage doors are quickly becoming a popular option for more modern homes. This style is recognized by its clean, crisp lines and unique material combinations. From copper and rich redwood to glass and charred wood, there is a contemporary option for every garage door material. The experimentation of designs and materials have given homeowners the opportunity to turn their garage door into a focal point and add a unique flair.



## ◦ *Traditional*

The traditional garage door, defined by a raised or recessed panel, remains popular year after year. Homeowners continue to choose this design for its simplicity and ability to match the exterior of many homes. Many garages currently have traditional doors, so when replacing the door, this particular style feels safe because it's what was already there.

*On a time crunch for your garage door project?*  
Consider a traditional stamped steel door which may be in stock at your local dealer.

## *Custom* ◦

Custom garage doors allow homeowners to create a garage door that is truly all their own. Designed by you to match your home's style, with unique panel and window designs, a custom door brings a homeowner's garage door dreams to life. Manufacturers of vinyl composite, wood, and wood composite are especially adept at creating one of a kind doors that make a home stand out.

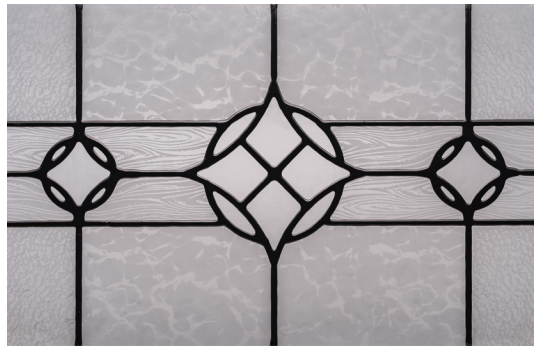




# STYLE

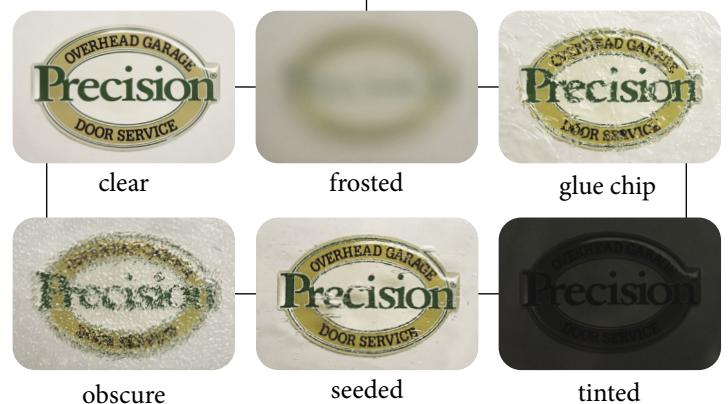
## Windows & Glass

Now more than ever, there are so many different choices when it comes to choosing window and glass options for your garage door. The ability to personalize the window sections of your door means you can add to your home's existing style or completely create a one of a kind focal point.



- **Consider your home's architectural style:** From colonial to craftsman or mid-century modern, each home style is known for its unique features and design. By matching your garage door windows to your home's architecture and existing windows, you create a sophisticated look.

- **Explore glass options:** Different glass options allow homeowners to have both private and elegant garage doors. While clear glass is often most popular, tinted, frosted or obscure glass can provide privacy without skimping on style. Many homeowners choose seeded, hammered, or glue chip as the inclusions in the glass lend a twinkling appearance when the garage is lit from within for a higher end look. These glass types are available for nearly all door types regardless of manufacturer.



- **Try a unique layout:** Contemporary garage door buyers are opting to explore the placement of windows in mosaic patterns, randomly throughout the door, or in a more uniform design that strays away from the classic top panel style.
- **Choose larger windows:** The classic top section window design is getting a makeover. Many homeowners are designing garage doors with larger windows in the top panel, adding more natural light and an increased curb appeal.

# STYLE

- **Personalize your grilles:** There are **three** different types of grilles you can select for your window panes: *window inserts*, *simulated divided lite* and *true divided lite*.

- 1) **Window inserts** are used on basic steel doors to create the appearance of individual windows. The plastic is snapped into place over a single window and can be removed if you need to clean the glass.
- 2) **Simulated divided lites** are the most common construction for any door beyond a basic steel. The window section is constructed as one large window pane with a grille of the same material as the door placed on the front of the glass portion to resemble individual window panes.
- 3) **True divided lite** means there are individual panes of glass within the window section. Each piece of glass is cut individually for each pane of the window. These are only available on high end wood and vinyl doors and the design is rarely used, as it dramatically increases the cost of a door and gives the same look as a simulated divided lite from outside the garage.



## *...Do you need insulated glass?*

Homeowners know of insulated glass as argon gas sealed between two panes of glass to prevent heat loss from your home. In the garage door industry, insulated glass is two panes with air between them to create that same effect. Manufacturers of garage doors do not use argon, as the constant movement of the doors, would cause the argon to leak and become ineffective quite quickly. If your garage is not insulated, and you do not have any appliances that create heat such as a fridge or dryer, you most likely do not need insulated glass.

## *Decorative Hardware*

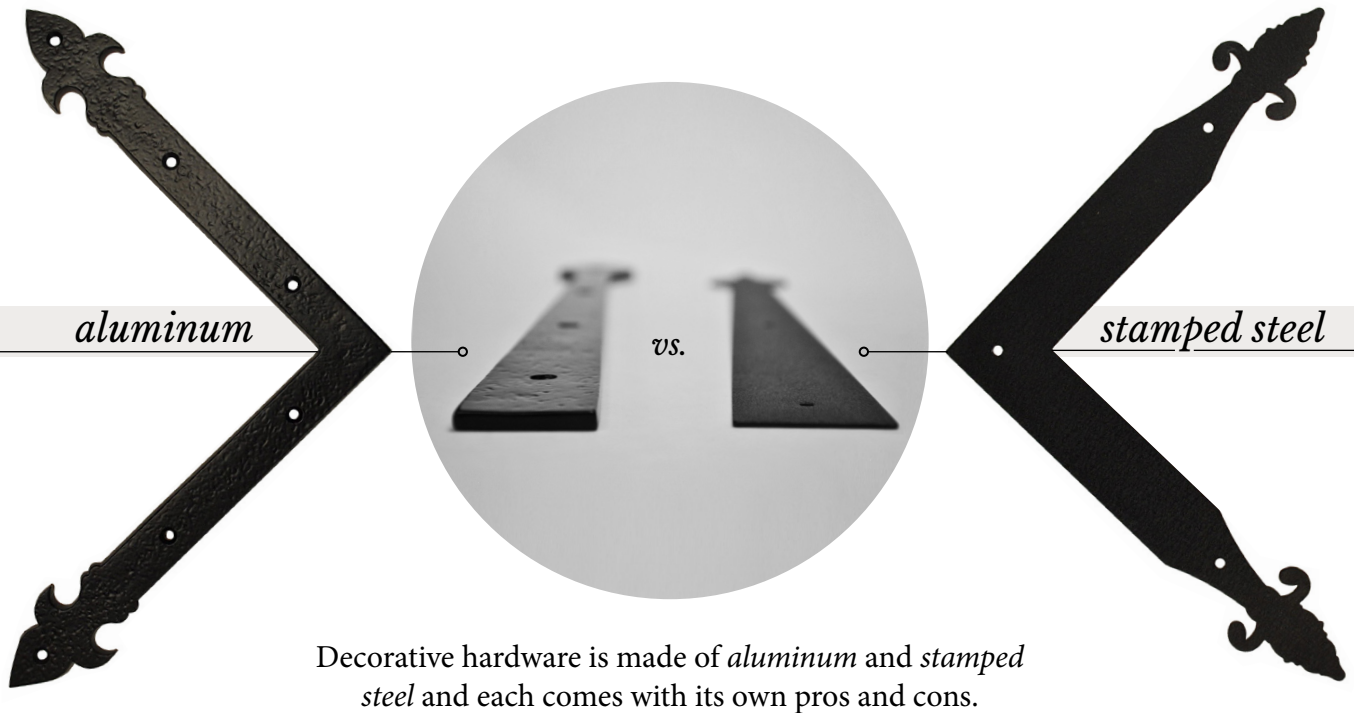
Depending on the garage door design you choose, decorative hardware can add a regal or rustic appearance to your garage door. The variety of finishes on the hinges, knockers, handles and more will accentuate not only your garage door, but the style of your home's exterior. Decorative hardware is added at the discretion of the homeowner as every home is different.



Decorative hardware is typically used on carriage house and custom doors, while traditional and modern doors tend to go “hardware free.” *Clavos* give your door a medieval feel while handles on a carriage house door will enhance the overall rustic design. Many choose to leave it off of their carriage house door if they are going towards a more modern carriage house style.

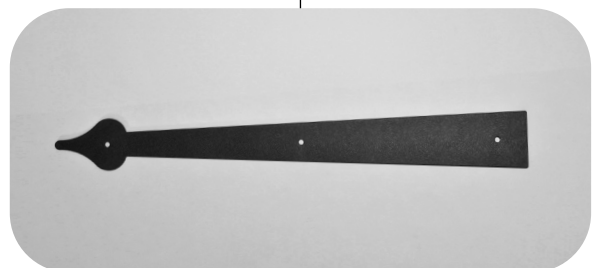
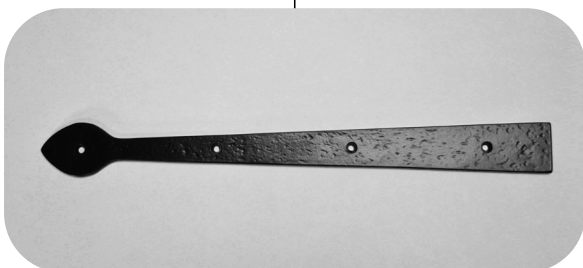
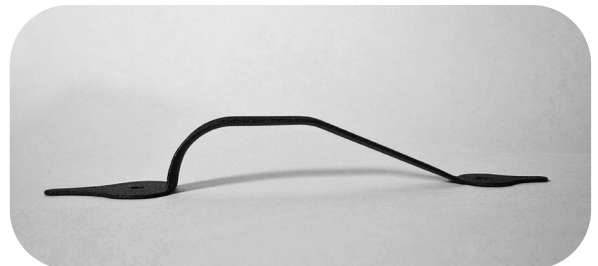


# STYLE



***Aluminum*** is typically more expensive, but has more designs to choose from and is typically thicker with a three dimensional appearance. It's the best choice in coastal areas because it's essentially rust resistant. The addition of aluminum decorative hardware usually costs between \$150–\$250.

***Stamped steel*** decorative hardware can be found on most standard carriage house doors and is typically included in the cost of the door. Both aluminum and stamped steel decorative hardware are essentially maintenance-free as long as you choose the correct door material for your area.





# MATERIALS

*Garage doors are constructed of many materials, from exotic wood species to composite materials and the classic steel. It's important that the material you choose aligns with the look of your home and your lifestyle.*

	Steel	Vinyl	Fiberglass	Full View Glass	Wood Composite	Wood	Vinyl Composite
Durability	● ● ●	● ● ● ● ●	●	● ● ● ●	● ● ● ●	● ● ● ● ●	● ● ● ● ●
Ease of Repair	● ● ●	● ● ● ● ●	●	● ● ● ●	● ● ● ●	● ● ● ● ●	● ● ● ● ●
Range of Styles & Colors	● ● ● ● ●	● ●	● ● ● ●	● ● ● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●
Customization	● ● ●	● ●	● ● ● ●	● ●	● ● ● ● ●	● ● ● ● ●	● ● ● ● ●
Corrosion & Fade Resistant	● ● ● ●	● ● ● ●	● ● ●	● ● ● ● ●	● ● ● ●	● ● ● ● ●	● ● ● ● ●
Low Maintenance	● ● ● ●	● ● ● ● ●	● ● ● ●	● ● ● ●	● ● ●	● ● ●	● ● ● ● ●
Price	\$\$	\$\$\$	\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$	\$\$\$\$\$\$	\$\$\$\$\$\$



## Steel

Steel is one of the most traditional garage door materials. Large rolls of steel travel through machines that emboss a wood grain onto the door then stamp one of the various designs into the steel. The wood grain actually adds stability to the door. However, the manufacturing process of stamping does limit the design choices of those looking for a standout door.

Steel is a low maintenance material aside from routine inspection. It's durable in that it is fade-resistant. However, it is susceptible to rust and dents, so you'll need to take that into consideration when shopping materials.

# MATERIALS

## Vinyl

Vinyl garage doors are typically used when a homeowner wants the simplicity of a traditional garage door, but lives near the shore where having a steel door will lead to rust within the first year. They are easy to maintain as a wipe down a few times a year can keep them looking and working great. For many homeowners, vinyl is a top choice for garage door materials because it is incredibly durable and can withstand dents, the elements, and everyday wear.



When choosing a vinyl garage door, customization options are limited. There are fewer color and design options than a steel and vinyl composite. But for the homeowner who is less concerned with unique elements and more interested in durability, this is the right door for you.

## Fiberglass

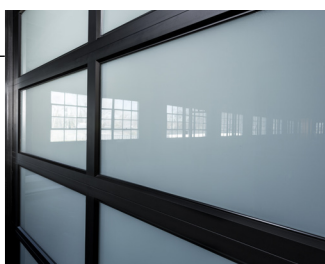
Fiberglass is known for its ability to mimic wood, from the look to the stain. It has limited customization options and is offered in common designs and styles, but it makes up for it in durability.

This material is very resistant to insects, warping, dents, moisture, and changes in humidity, which make this garage door material a great choice for homes on the coast or in salty environments. However, it can fade over time after long exposure to the sun. Fiberglass is low maintenance, but it can be difficult to repair if a section is damaged.



## Full View Glass

Full view glass garage doors offer a “wow” factor that is hard to beat. With a variety of glass options and frame choices that range from aluminum to vinyl composite, full glass can really make the garage door a focal point. Glass isn’t a very durable material, so though it’s relatively easy to replace a broken glass section, it can become costly. Aside from keeping the glass clean, it doesn’t require much maintenance to keep it looking pristine. Due to the construction of full view glass doors being nearly all glass, there is no insulation with this material.





# MATERIALS



## ◦ Wood Composite

Wood composites are a combination of resin and wood fillers which give them many of the qualities of wood without the headache. These specific types of composite, such as Extrira and Tricoya, are manufactured to be used outside, and will vary by door manufacturer. Wood composites can be cut, routed, milled, stained or painted just like wood. This material offers total customization and can truly match any homeowner's exterior design.

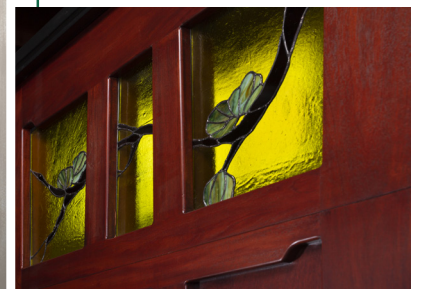
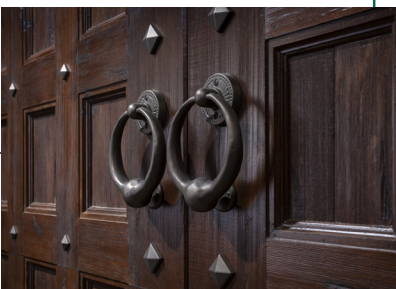
Wood composites are moisture resistant, which leads to less warping and cracking. This material can absorb heat better than others, so it's often better for garage doors that face south and have harsh sun exposure as they can resist fading. It can resist termite damage, as well as swelling and shrinking.



## ◦ Wood

Wood allows you to completely customize your garage door. You can choose from popular *Wood Species* such as mahogany and cedar or make even more unique choices with *Douglas fir* and reclaimed barn wood. Create a standout design, choose your finish, and you'll have a custom one of a kind door made of high quality material. Wood can be cut, routed, and milled to meet any homeowner's specifications and truly adds beauty to your home.

Wood garage doors come in **stain grade** or **paint grade**. *Stain grade* doors offer more rich, natural colors across the wood to maintain continuity as it's stained. *Paint grade* doors usually have more knots and dark spots which won't be visible once they are painted. Stain grade doors need to be refinished every 1-3 years depending on sun exposure while paint grade doors last about 5-10 years between refinishing.





# MATERIALS



If your door is not factory finished, it's important they are stained or painted within 10 days to maintain a fresh appearance. It's strongly suggested that you have your garage door stained by a reputable professional prior to installation. You can also opt to paint your wood garage door, depending on the wood species you choose.

Homeowners who desire wood doors, but need a lower price tag than a full custom wood door, might consider a wood overlay. In this case, unfinished wood planks are adhered directly to a steel door. Styles are limited and the boards will need to be maintained and finished in the same manner of a full wood door.



If you're interested in the look, feel, and customizability of a wood garage door without the maintenance, you might want to consider a wood composite or vinyl composite garage door which can be stained to mimic wood grain.

## *Vinyl Composite*

Vinyl composite doors are created by routing and milling cellular PVC, a malleable and more workable form of traditional PVC. It can be customized to create a one of a kind door that is durable and virtually maintenance free. A simple cleaning with your garden hose is enough to keep it looking great. Vinyl composite is rust-resistant, which makes it a great choice for seaside locations, as well as salt-, insect-, rot-, moisture-, and fungus-resistant.



Vinyl composite garage doors allow homeowners the opportunity to create a completely unique door which makes vinyl composite so versatile and popular. It can be factory finished with a stain to look like wood or painted a variety of colors. However, vinyl composite does absorb heat quickly which restricts paint colors. Homes with southern facing garage doors are limited to lighter paint colors. If your garage door is painted, it shouldn't have to be repainted or refinished unless it's a darker color or gets a large amount of sun exposure (and it may not fade for over a decade or more!) Depending on the color of your door, you may be required to use a specially made paint by the manufacturer which is made to have Light Reflective Values.



# CONSTRUCTION

*You know what they say: it's what's on the inside that counts. And that applies to garage doors too! A well-constructed garage door can help with security, insulation, and more.*

When it comes to garage door construction, there are 1-, 2-, and 3-layer doors. Each layer of construction adds stability and durability to your door.



Steel

**1 layer construction** is uninsulated and consists of a single sheet of steel. This is best used in detached garages when you are not storing valuable items inside or concerned about climate control in your space.

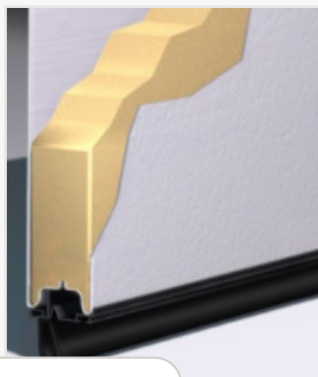


Steel

**2-layer construction** consists of a steel front and a layer of polystyrene insulation backed by a thin layer of vinyl. This is best used in fairly inactive driveways as the door can become dented.



Steel, Fiberglass, Vinyl, Wood,  
Wood Composite, Vinyl Composite



**3-layer construction** is a complete sandwich: one layer of material, a layer of insulation (polystyrene or polyurethane), and a backing layer that matches the front material. This is the most durable construction, offers the most insulation and heat loss protection, and is the only construction used by all\* material types.

\*Due to the construction of *Full View* doors being nearly all glass, there is no insulation with this material.

# CONSTRUCTION

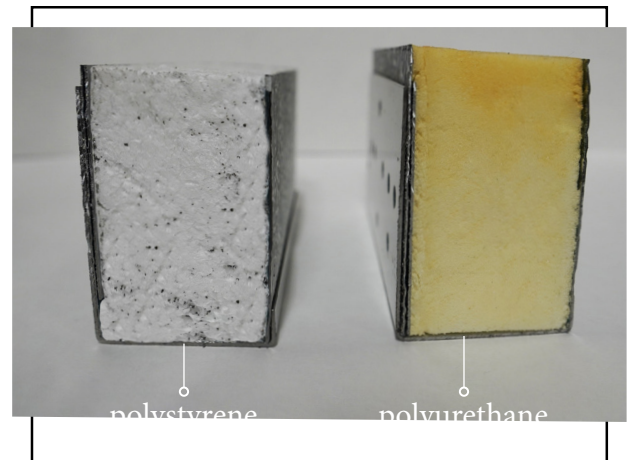
## *Insulation*

Insulation isn't just about keeping your garage warm or cool. It is also an important factor in the durability and security of your door.

### ◦ Types of Insulation

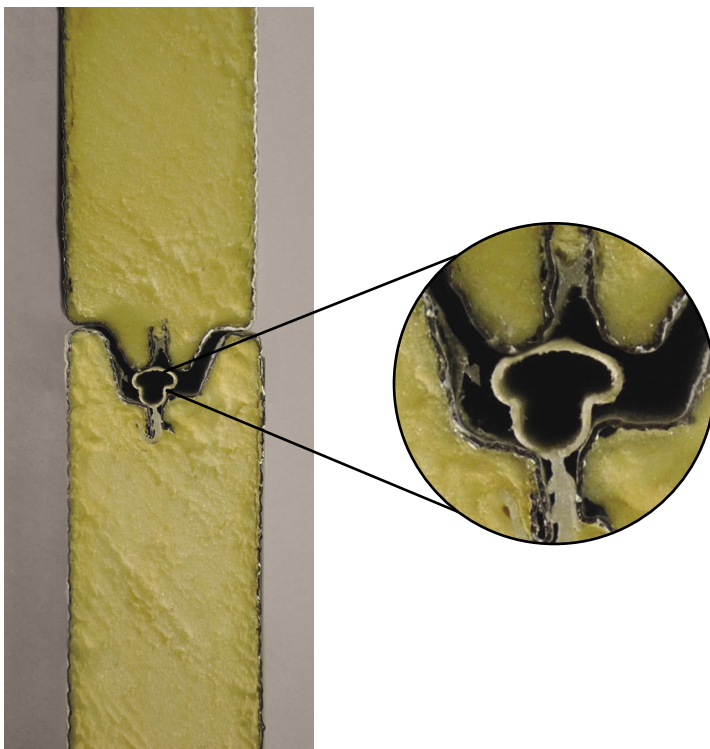
There are **two** different types of insulation used in garage doors: *polystyrene* and *polyurethane*. *Polystyrene* is the same material used for a foam cooler and is cut to size and then placed within a garage door panel. If it is part of a 2 layer steel door, it will have an additional vinyl backing to make it easier to clean—but is susceptible to damage from inside the garage. It adds rigidity to the door and typically has an R-value between R6–R10.

*Polyurethane* is a spray injected, expanding foam insulation. As it is sprayed in the door from both sides, it expands to fill every nook and cranny inside the door which adds rigidity. Polyurethane has an R-value of R12–R19, on average.



### ◦ R-value

R-value is the measure of resistance to heat flow through a material. Insulation is meant to stop the movement and transfer of heat, however, heat can enter and leave your home in two ways: *conduction*, which R-value measures, and *air infiltration*, which it does not.



- **Conduction** is the transfer of heat through a surface by direct contact. For garage doors, conduction is eliminated through *thermal breaks*. Most often used in 3 layer steel doors with polyurethane insulation, thermal breaks help eliminate the transfer of heat by breaking the continuity of the steel between the front and back of the door.

A small strip of rubber, like in the image to the left, is placed between the steel on the front of the door and the steel on the back of the door. This makes it so that the front and back no longer touch and the heat/cold can't transfer between the two sides.



# CONSTRUCTION

**Air Infiltration** - If your garage door is not properly sealed around your door frame, air infiltration can result in heat loss and ultimately eliminate the R-value of your garage door.



- *Weather seal* is the vinyl flap that is placed around the outside frame of a garage door. It helps to stop the air infiltration around the opening of the garage door. This strip should be both nailed and then back caulked to ensure air does not penetrate the door opening. Previously, strips of wood were placed around the edge of the opening to keep air and pests out. So if you currently have just a wood strip, you'll find that the addition of new weather stripping with a vinyl flap will greatly reduce air flow.

- *Bottom rubber* is applied to the bottom of a garage door to stop air, dirt, bugs, and pests from entering the garage. The bottom rubber is not designed to keep water out of your garage. This issue needs to be addressed through grade issues on your driveway.

## *More Than a Garage Door*

While R-value is an important factor when it comes to your garage door's insulation, it shouldn't be the only determining factor in the door you choose. You need to consider your garage as a whole.

The windows, walls, floor, ceiling, the garage door and even the company installing the garage door all work together to impact your garage door's insulation.

### ◦ *Insulation of Your Garage*

You should match the R-value of your garage door to your garage. Most homes in the Northeast are constructed using 2x4 construction, sheetrock, and fiberglass insulation, which would put the R-value of your walls at about an R10–R12, and you should try to match that in your garage door. If your garage is constructed of concrete blocks, your garage is considered uninsulated. Choosing a door with a higher or lower R-value than your garage currently has will have a limited effect in stopping heat transfer (but you will still want to consider an insulated door for security and durability purposes).

### ◦ *Quality of the Installation*

The installation of your garage door can affect the overall efficiency of your garage door. If your door has air gaps, faulty bottom rubber, and isn't properly weathersealed, you can experience heat loss. You should talk to your garage door company about their installation standards around weather sealing, track selection and how they ensure your installation is completed to your satisfaction.

# CONSTRUCTION

## *How Construction Affects...*

- *Security*

A vulnerability of a single layer garage door is that it can be kicked and knocked off the track, allowing thieves to enter your garage. A door constructed with insulation is ultimately stronger and more secure than a single layer garage door. It helps keep the door firm and solid which can keep your home more safe.

- *Noise*

A door with insulation is more rigid, preventing the door from rattling as it moves up and down the track. A properly installed 3-layer garage door will be virtually silent in its function. Additionally, a garage door with insulation can help block out the noise from outside your home and add another layer of sound barrier.

- *Durability*

When considering garage door durability, the 3-layer sandwich style door offers the most resistance to dents, noise, and rattling. Insulation gives the door added rigidity, but depending on how busy your driveway is with kids running around and playing games, you'll want to opt for the polyurethane insulation. Because it's a spray foam insulation, it fills in all the nooks and crannies.

You'll also need to consider the material you choose if you're intent on having a durable garage door. Vinyl is the most durable garage door material, but is limited in designs. If you're interested in customization and durability, you should opt for vinyl composite or wood composite materials. It's also important to note that small knicks and scratches in vinyl or vinyl composite won't be as apparent because it's the same color underneath.

3-layer garage doors are also less resistant to cracking. 1-layer and 2-layer garage doors have been known to crack at the top of the door from the pull of the motor.

### *...Did You Know?*

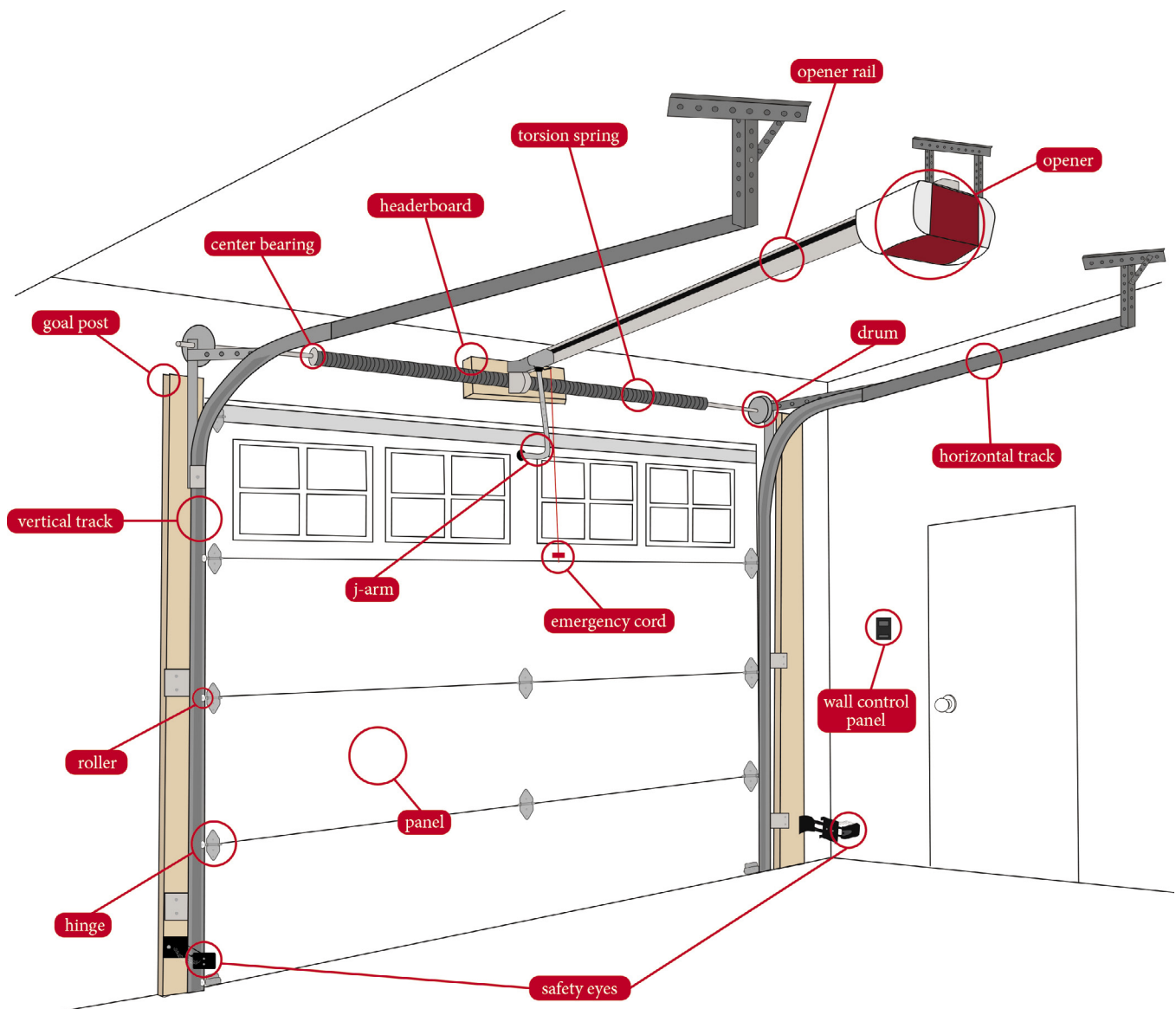
In areas that get snow, you'll want to be knowledgeable about the garage door material you're choosing and how the elements can affect your door. In the Northeast where we get a lot of snow, the salt that is used to melt the snow can cause damage to steel or wood garage doors. As the salt mixes with the melting snow, it rots and rusts the materials.

# MECHANICS

*The inner workings of a garage door are just as important as the door itself. Ensuring the use of the appropriate spring, high quality rollers, hinges and tracks and maintaining those parts will greatly prolong the life of your door. Some elements may come as part of your door, while others may be upgrades.*

## *The Interior*

Below is what the interior of an average garage looks like with a torsion spring system. You will notice the different elements that make up the complete garage door system and help your door work and function properly.





# MECHANICS

## *Spring Systems*

There are two types of garage door spring systems: *extension* and *torsion*. The spring system allows your garage door to move up and down, making it an important component of the overall garage door mechanics. The right spring system can depend on several factors, but ultimately your *Door Designer* will help you choose the best spring system for your door.

### *Extension Spring System*

Extension spring systems use springs that stretch and retract to close and open your garage door. They extend along both horizontal tracks and are secured with a safety cable through the center.

While extension springs are less expensive than torsion systems, they require more parts and usually more maintenance. One advantage to this type of system is that each side of a spring system works independently so it can compensate for an uneven ground.

Older homes typically use extension systems because they have limited head room in the garage. Garage door openers were invented in 1926, but didn't become popular until the 60s, so many garages weren't built with them in mind. If you currently have an extension system, it's recommended that you stick with that rather than reworking your whole garage spring system.

### *Torsion Spring System*

Torsion springs are mounted on a torsion tube above your garage door horizontally and are wound up to create torque, or tension. As the door closes, cables attached to the bottom corners force the springs to wind up. When the door opens, the springs unwind and the tension transfers to lift the door open.

Torsion springs are generally safer than extension springs in terms of operation because they're contained on a torsion tube. However, you should never try to wind, repair or replace a torsion spring by yourself. Because they are under such extreme tension, they can cause serious injury so always call a professional. They do tend to be a little more expensive.

Torsion systems work best if the ground in the garage door opening is completely level. You also need 12 inches above the door to mount the spring, so many times there is not room for a torsion system on an older home. Torsion systems are often recommended for heavier doors, but are required for all doors over 8 feet tall.

# MECHANICS

## *Tracks*

Garage door tracks are located on both sides of the garage door and guide the door as it opens and closes. There are several different elements of the overall track system and what you need will depend on the type of door you choose and the dimensions of your existing garage.

### *Radius*

The track radius is the curved part of your track that transfers the door from the vertical position to the horizontal position, or vice versa. The distance between the top of your door opening and the lowest point on your ceiling determines the maximum size of the radius for your track. Typically, the larger the radius, the smoother and more quietly your door will travel from open to close. Similar to a long winding road versus a road with a sharp switchback, the angle is approached more gradually and can be more easily managed.

The maximum size of your radius also defines how many horizontal panels that you can have in a door—which is especially important if you are interested in a 3 panel door which allows for larger windows.

What's more, by choosing the largest possible radius, or upgrading to a high lift track, your door will be closer to the ceiling, giving you maximum headroom in the garage. Not sure which is right for you? Your Door Designer will give you guidance if this is something you are interested in.

The radius of your garage door track can impact everyday situations in your garage. If you have an elevated entryway door to your home in your garage, a radius that is too small could cause the track to run through the eye-line and be an eyesore, as well as potentially dangerous. You'll also want to consider the radius if you use your garage for everyday car parking. A radius that is too small for the height of your vehicle could cause your trunk or car door to hit the track, motor rail or open garage resulting in damage.





# MECHANICS

Your *Door Designer* will do a proper measurement while at your home for a consultation but if you want to get a sense if a different radius is a possibility in your garage, you can try it yourself. Stand one foot back from the opening of your garage. While there, measure the vertical distance from the top opening of your garage door to the lowest point in your garage.

The minimum headroom necessary is noted at the end of each *track description* below.

- **Low Headroom Track:** This is designed for manual doors or doors that have a garage door opener. It has a little bit of a turn at the front of the track to allow the top panel of the door to shut completely. Low headroom tracks can tend to be a little noisier than the other tracks because the top panel can slam as it's closing. (Minimum difference: 3-5 inches)
- **10R:** This is a better option than low headroom in terms of track, however it doesn't work as smoothly as tracks with longer radiuses because it turns quicker and also limits the size of your panels. For this track to work properly, you don't want to have a garage door with panels larger 21". (Minimum difference: 9 inches)
- **12R:** This is the most common size track we see in the Northeast. It offers decent headroom and the garage door functions well on a 12R track. For this track to operate properly, the door panels must be smaller than 32". (Minimum difference: 11 inches)
- **15R:** This radius size is the minimum required for a 3 panel garage door which supports larger windows. This type of track runs smooth because of the longer radius. (Minimum difference: 14 inches)
- **20R:** This radius is more custom and can be more costly. The garage feels larger because the doors are up higher, however it requires a lot of headroom and the goalposts may have to be extended. Even with the extended headroom this radius offers, you can still use a regular garage door opener. (Minimum difference: 19 inches)
- **32R:** This radius often makes the most sense if there is an elevated doorway in the garage used to enter the home. Standard track would run right through that doorway, creating an eyesore and possible safety hazard. A jackshaft opener and torsion spring system is required for this radius. If you have space to go higher, consider this radius. (Minimum difference: 31 inches)
- **High Lift:** High lift track is an extension between your vertical track and your horizontal track. If you use your garage as car storage with a car lift, you will most likely require a high lift track. This requires at least 12 feet of headroom in order to work. High lift track is constructed by extending the vertical track until it meets the horizontal track.
- **Extra Feature - Powder Coated Track:** Tracks, hinges, and brackets can be powder coated in virtually any color to blend into your garage ceiling and door. For those that have just built a home or take particular pride in their garage - this is a great enhancement to consider.

# MECHANICS

## Woodwork

Woodwork refers to different elements of wood in your garage that can affect your garage door installation. Below we discuss two of the main sections in the interior of the garage that should be inspected before installation.



### Goal Posts

This term describes the wood around your garage door frame inside your garage. The track and other garage door parts are mounted to the goal posts to keep the track secure and steady. It's important that the woodwork around the garage door is in good condition and has no damage. If the bottom of the goal posts have rotted due to water damage, or the boards have split because the mounting holes for your current track were not pre-drilled, you will need to replace them.

Spending a small amount now to have your garage door installer replace the woodwork can help maintain the lifespan and safety of your door. Faulty woodwork can endanger the quality of your garage door materials and potentially any people, pets, or objects in the garage.

### Headerboard

The header is the section of wall above your garage door opening that maintains the structural integrity of the opening, while a headerboard is a specific piece of lumber that creates a solid surface in the absence of a strong header area. Both are a mounting area for the motor rail and in some cases, torsion tube. The headerboard is far less likely to need to be replaced than a goal post as it isn't exposed to water, however if it is cracked or not mounted securely, it may need to be replaced to ensure your garage door runs smoothly.





# MECHANICS

## *Good - Better - Best*

Not all garage door parts are created equal. Below we lay out the different garage door parts in a Good, Better, Best comparison so you can make informed decisions about garage door mechanics.

### Pulleys

Pulleys work together with the extension springs to lift the weight of the door. There are **three** different types of pulleys that homeowners will find in their garage.

- **GOOD:** A *press fit pulley* is two pieces of metal pressed together to form the working piece. It is likely to split over time due to the pressure from the cables.
- **BETTER:** A *riveted steel pulley* is similar to a press fit pulley with the addition of rivets for additional strength. Because it's not one solid piece of equipment, the pulley can eventually split. It has bearings inside which will also eventually wear.
- **BEST:** A *solid cast iron pulley* has a sealed bearing and often lasts twice as long as a riveted pulley and won't split as it is made from a single piece of iron.



### Rollers

The rollers of your garage door move along the track as the door opens or closes. They can impact a door's operational smoothness or noise level.

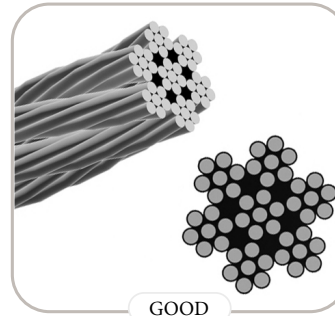
- **GOOD:** *Steel rollers* create a loud garage door because of the metal on metal contact with the track.
- **BETTER:** *Plastic rollers* are not as loud, but there is no bearing so there's nothing to lubricate to help the door operate smoothly.
- **BEST:** *Nylon rollers* are quiet as they roll along the track. They have sealed bearings so they'll never need lubrication.

# MECHANICS

## Operating Cables

The placement of operating cables differs for extension systems and torsion systems, however the functions are the same: to provide the counterbalance strength to open and close the door. *Extension operating cables* run vertically on each side of the door, and horizontally to connect to the extension spring. *Torsion operating cables* run vertically down the length of the door. The weight and frequency of use of your door as well as the type of pulley used can shorten the lifespan of your cables.

- **GOOD:** *Standard operating cables* have 7 wires per strand and 7 strands per cable.
- **BEST:** *Aircraft quality cables* have almost 3x the amount of wires with 7 wires per strand and 19 strands per cable, increasing the durability and strength of the cables.



## Center Bearings

Center bearings are the component of a torsion system that support the center of the torsion tube as it turns the torsion spring.

- **GOOD:** *Plastic center bearings* are a single donut-shaped component through which the torsion tube is placed. Because it is a fixed unit, the torsion tube may rub on the plastic center bearing and cause wear.
- **BEST:** *Sealed steel center bearings* are the same donut shaped piece of steel with a second piece of steel placed within the donut, supported by small sealed bearings for independent movement. The fluid movement of the second piece of steel eliminates friction on the tube for smoother operation.



# MECHANICS

## Extension Springs

An extension spring system uses springs that stretch and retract to close and open your garage door. In an extension spring system, there are *two* different types of springs: double loop and shackle clip.

- **GOOD:** *Double loop springs* have a 2-layer loop at each end that connect to the eye hook and pulley.
- **BEST:** The *shackle clip spring* isn't part of the coil as the clip is bent around the end of the spring, meaning it won't be as susceptible to wear and tear and ultimately break off, as is possible with a double loop spring.



## Torsion Springs

Torsion springs are mounted on a torsion tube above your garage door horizontally and are wound up to create torque, or tension. There are *three* different types of torsion springs: oil tempered, galvanized, and powder coated.

- **GOOD:** *Oil tempered springs* have the tendency to rust over time and can be noisy as the spring winds and unwinds.
- **BETTER:** *Galvanized springs* don't rust but can corrode which leads to squeaking as the spring ages.
- **BEST:** *Powdercoated springs* will not rust or corrode because of the coating that protects them, leading to a longer lasting, quieter system.

# MECHANICS

## Extension System Parts vs. Torsion System Parts

Extension System			
<i>Product</i>	<i>Contractor Grade</i>	<i>Precision Standard</i>	<i>Whisper Tec Upgrade</i>
Pulleys	Press Fit	Riveted Steel	Solid Cast Iron
Rollers	Plastic	Steel	Nylon
Operating Cables	Standard	Aircraft Quality	
Springs	Double Loop		Shackle Clip

Torsion System			
<i>Product</i>	<i>Contractor Grade</i>	<i>Precision Standard</i>	<i>Whisper Tec Upgrade</i>
Center Bearing	Plastic	Sealed Steel	
Rollers	Plastic	Steel	Nylon
Operating Cables	Standard	Aircraft Quality	
Springs	Oil Tempered	Galvanized	Powdercoated



# OPENERS

*No two openers are the same. From enhanced features to safety security, choosing the right garage door opener can sometimes be just as important as choosing the right garage door.*



## LiftMaster

**8165W**

**8365W**

**84501**

**8587W**

**87504-267**

**8500W**

AC/DC Soft Open/Close	AC	AC	DC Soft Open/Close	AC	DC Soft Open/Close	DC Soft Open/Close
Drive	Chain	Chain	Belt	Chain	Belt	Wall Mount
Battery Backup	—	—	—	—	✓	✓
Warranty: Motor/Belt/Parts	Motor: 4 Years Chain: 1 Year Parts: 1 Year	Motor: Lifetime Chain: 1 Year Parts: 1 Year	Motor: Lifetime Belt: Lifetime Parts: 1 Year	Motor: Lifetime Chain: 5 Years Parts: 5 Years	Motor: Lifetime belt: 5 Years Parts: 5 Years	Motor: Lifetime Parts: 5 Years
Capacity	Single Door	Single Door	Single Door	Double Door	Double Door	Double Door
myQ Enabled	✓	✓	✓	✓	✓	✓
Motion Detection Light Activation	—	—	—	✓	✓	✓
Time-to-Close	—	—	—	✓	✓	✓
LCD Display Panel	—	—	—	✓	✓	✓
Lighting	Incandescent	Incandescent	Side to Side LED	Incandescent	360° LED	External LED
Camera	Optional External Camera	Optional External Camera	Optional External Camera	Optional External Camera	Built-in HD Camera	Optional External Camera

WALL CONTROL

# OPENERS

## Noise Concerns of Openers

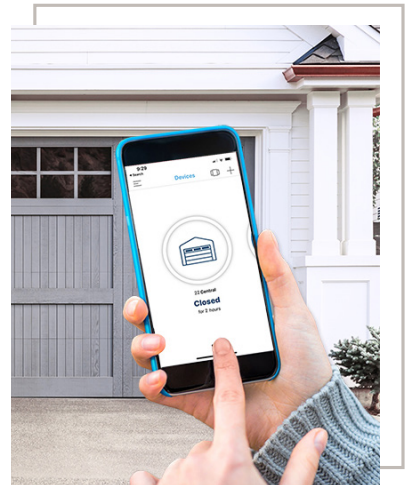
Noise generated from a properly functioning opener primarily comes from the chain or belt. When addressing noise concerns related to openers, you'll want to factor in whether your garage is attached to your home or not.

- **Chain drive openers** run on a steel chain and are very durable, but tend to be a bit noisy. They are often less expensive than a belt drive opener, and are a great option for a detached garage or home that does not have an adjacent living space.
  - **Belt drive openers** run on a steel reinforced belt and are virtually silent. Just as reliable as chain drive openers, belt drives are recommended for homes where there is a living space attached to the garage, as they will not disturb any occupants.
  - **Jackshaft openers** are mounted on the wall to the right or left of your door and connect directly to the torsion bar to raise and lower your garage door. Because they do not have a belt or chain, the opener itself is essentially silent. Jackshaft openers really gained popularity when people began putting car lifts in their garages to store their vehicles, as the absence of a motor rail and ceiling mounted opener gives you additional floor to ceiling height. It's also a common opener when there is an obstruction such as a beam in the ceiling limiting the space where an overhead opener could be placed.
- AC vs. DC motors:** AC motors run the door at a consistent speed throughout the track while
- DC motors have a soft open/close feature. Essentially, DC motors slow down right before the open or close is complete. As a result, DC motors are slightly quieter as they simply touch the floor or motor rail to stop rather than banging into them to stop.

## Technology Features of Openers

Garage door openers of today are equipped with technology that allows you to monitor and control your garage, no matter where you are, increasing functionality and accessibility.

- **Smart Phone Control:** This technology is meant to connect you with your garage door, no matter your location. This means you can open/close your door, get real time notifications, preset scheduled garage door openings/closings and more!
- **In-Garage Package Delivery:** Pairing your *myQ* technology with *Key by Amazon* allows secure in-garage deliveries of your packages.
- **Built-in Camera:** Currently only available on the *LiftMaster 85503*, the camera allows you to know, see, and hear what's going on in your garage.
- **LED Lighting:** Gone are the days of the incandescent bulb. Light up your entire garage with just your opener.



# OPENERS

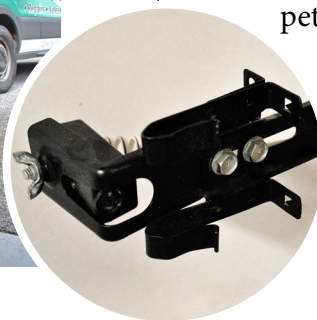
## *Safety Features of Openers*

Garage door openers offer many features to keep people, pets, and objects safe when the garage door is opening or closing.

- **Remote Closing Signal:** This feature triggers the lights on your garage door opener to flash, notifying anyone in the garage that the door is being closed remotely using *myQ* technology.



◦ **Safety Eyes:** Garage doors are equipped with safety eyes that are mounted on the bottom of the track near the opening. If the garage door is closing and there is a person, pet or object beneath the door in the opening of the garage door, the safety eyes send a signal to the opener to reverse and return to the open position to avoid injury.



## *Security Features of Openers*

Garage door openers are readied with various features to help keep your home and family secure from outside intruders.

- **Trolley Shield:** A Trolley Shield can prevent break-ins to your garage by thieves. This helps protect the trolley and emergency release cord from becoming disengaged from the opener and the door to be opened manually.
- **Closed Position Lock:** This feature monitors your garage door when it's in the closed position and helps prevent a forced opening. If an intruder tries to open your garage door by pushing it to the open position, Posi-Lock automatically activates the garage door opener to keep the door closed.
- **Rolling Code for Remotes:** This feature sends a new opening code to your garage door opener with every click of the remote so your code can not be copied by others remotely and used to open your door.
- **Timed Garage Close:** Program the garage door to close automatically after a set amount of time.
- **Automatic Garage Door Deadbolt:** Every time the garage door is closed, this feature automatically deadbolts the garage door so it's virtually inaccessible.
- **Motion Detecting Lights:** The opener's lights will be activated when there is movement in the garage.





# COST

*The overall cost of a garage door can vary based on a number of elements. But the value it adds to your home, both in your long term enjoyment and ROI, should be strongly considered.*

## ***Return on Investment***

The return on investment (ROI) that a garage door offers is higher than any home renovation project for the Middle Atlantic region of the United States. A complete garage door replacement is valued at 106% ROI. That means, you'd get more than what you paid for the door in the first place. It can be hard to imagine that something as simple as a garage door replacement can add so much value to your home. But with so many materials, styles, and high end products, garage doors can really improve your home's exterior, increase the energy efficiency, and keep your home safe and secure.

## ***Elements That Impact Cost***

- ***Standard Design vs. Custom Design***

Creating a completely custom design with scroll-work, intricate window grilles or replicating a door you saw on vacation in Europe will greatly increase your cost. Choosing a standard design such as carriage house or raised panel while still selecting to use overlays or larger windows may be a more cost effective way to create a door your neighbors will envy.

- ***Windows***

Doors without windows are typically less expensive, but you may be losing the wow factor windows can add. For standard doors, windows are 8-10% of the cost of the door.

- ***Special Finishing***

Special finishings include a rich stain on a mahogany door or a stain-like paint finish on a high end vinyl door. These options add to the overall value and elegance of your home's exterior. Depending on the type of customization you choose could increase the cost of your door by 10%-90%.

- ***Material***

The material you choose for your garage door depends on your needs and wants as a homeowner. If you have an active driveway where children are playing, you may opt for a more durable material which will save you money in the long run.

- ***Woodwork Replacement***

Your garage door track is mounted to the goal posts inside of your garage. It's important that the woodwork is strong and not damaged so it can securely and safely hold your garage door. Any reputable garage door company will inspect your woodwork prior to installation and make appropriate recommendations. Basic woodwork replacement starts at about \$150, however depending on the extent of damage from water or the installation of your current doors, this can increase.

# COST

- **Opener Replacement**

In some instances, garage door openers can be reused, but with so many functions and features built into garage door openers, about 66% of homeowners choose to purchase a new one. This can cost between \$399–\$999 depending on the opener you choose and its unique features. It's also important to note that an unbalanced door puts more strain on the gears and motor of your opener. Installing a new door that is well balanced with an opener that is already worn can ultimately cost you slightly more. Should your opener fail, it will require an additional appointment and service fee for the replacement visit.

- **Insulation**

Insulation helps stop heat loss from your garage, but may not be necessary depending on what your garage is used for. If it's detached, does not have an opener installed, and is used to store tools and equipment, you may not want to pay for the addition of insulation. However, if your garage is attached to your home, serves as a main entryway, or is used as a workshop where you entertain your hobbies, insulation may be a really important feature and the cost of \$150–\$500 can ultimately lower the energy bills in your home from lost heat or cooling through your garage.

- **Door Type Changes**

If you are converting from a swing out, sliding or one piece garage door, there may be additional labor charges for retrofitting your current space to work with a modern day overhead door.

- **Company Installing Your Garage Door**

The garage door you choose is only as good as the company you choose to install it. A garage door is truly an investment in your home, and you'll want to protect it, before it's even on your home.

Selecting a company that is trustworthy, accountable for their work, has a variety of reviews online, and written installation standards will ensure a quality installation process. While it may cost a little more money upfront, a high quality company will ultimately save you money in the long run because you won't have to keep calling for garage door services and repairs. Not to mention, should an issue arise, you'll know exactly who to call!

*Ready to make a change to your home but not sure about cost?*

We offer financing options available from GreenSky®!

PLAN  
#4068      **0%**      *if paid  
in full in*      **6**  
INTEREST      MONTHS

PLAN  
#4123      **0%**      *if paid  
in full in*      **12**  
INTEREST      MONTHS

PLAN      **9.99%**      *for*      **96**  
#2786      INTEREST      MONTHS

Project Cost	First Payment	Amortized Payments
\$ 5,000	\$ 114.85	\$ 75.85
\$ 10,000	\$ 190.69	\$ 151.69
\$ 15,000	\$ 266.54	\$ 227.54
\$ 20,000	\$ 342.38	\$ 303.38

\*Subject to credit approval. If under plan #4068 or #4123, interest is billed during the promotional period but all interest is waived if the purchase amount is paid in full within the 6-12 months. If plan #2786, fixed interest rate of 9.99% for 96 months. Payment example assumes one time \$10,000 purchase on approval date (APR 10.10%) with 1 payment of \$190.68 followed by 95 amortized payments of \$151.68. Payments assume Account Activation charge of \$39 applies and is due with first required payment.

# WHAT SHOULD YOU LOOK FOR IN A GARAGE DOOR COMPANY?

*You have chosen the perfect door- but who you choose to install the door can have a bigger impact on your long term investment.*

## 1 **Licensed & Insured**

Precision is licensed and insured at all of our locations. All companies that visit your home should be licensed and insured, with up to date policies and coverage. Ultimately, a company that isn't licensed and insured could cost you big time should any accidents or issues arise on your property. Be sure to request these documents upon arrival to protect the physical and financial safety of yourself and the company.

## 4 **Reputable & Reliable**

When choosing the company to install your garage door, you'll want to be sure other people have had positive experiences with them. Reviews from satisfied customers help determine if the employees were knowledgeable and courteous, they kept their word, and if there were any issues, they were solved.

## 7 **Fully-Stocked Trucks**

Whether it's samples of doors for a consultation, the proper tools for a service call, or the brand new opener you need to get your door running, each of our employees have fully stocked vehicles for added convenience. This limits the amount of visits they have to make and helps solve your garage door issues or answer your garage door questions. Additionally, depending on the door you need and the urgency with which you need it, you may be able to choose from a traditional stamped steel garage door we have in stock at our warehouse.

## 2 **Trustworthy Employees**

Allowing anyone to come into your home requires trust and you should feel that trust from the moment you book an appointment. You'll want to ensure that all employees are drug and background checked. Additionally, you'll know exactly which Precision technician, installer or Door Designer is coming to your home before your appointment, as you'll be sent a picture and bio of the employee.

## 5 **Quality Training**

Our Door Designers, technicians, and installers are all individually trained in their specific role. They receive written and on the job training with an extensive team of professionals to back them if they have any questions. As a result of this training, you can be sure that the job will be done right the first time and eliminate the need for any additional service calls and costs.

## 3 **No Subcontractors**

When working with a company that hires subcontractors, it can be difficult to reach the right person should an issue arise with your garage door. Everyone's pointing fingers and you wind up with a headache and an issue that still hasn't been solved. When buying a new garage door, it's important to choose a company that has its own employees. You'll know you can trust their work and if there are eventually any issues, you'll know who to call and be confident that you'll get in touch with someone the first time.

## 6 **Installation Standards**

Having a written list of Installation Standards allows you, as the homeowner, to know what to expect from your garage door company come installation day. We have a thorough outline of what should be included in an installation and ensure it's done properly.



# LET'S MAKE SOME CHOICES

*Fill out the form below to help us guide you towards the perfect door(s).*

## *Style*

### **Design:**

Carriage House   Contemporary  
Traditional   Custom

### **Color:**

Neutral   Bold   Wood-tones

### **Grille Type:**

Window Insert   Divided Lite

### **Glass Type:**

Clear   Frosted   Glue Chip   Obscure  
Seeded   Tinted   None

### **If glass, do you want it insulated?**

Yes   No

### **Do you want decorative hardware?**

Yes   No

## *Construction*

### **Do you have an insulated garage?**

Yes   No

### **Preferred Door Construction:**

1-layer   2-layer   3-layer

### **Do you want an insulated garage door?**

Yes   No

### **Does the garage have an adjacent living space?**

Yes   No

## *Materials*

### **Door Material:**

Steel   Vinyl   Fiberglass   Glass  
Wood Composite   Vinyl Composite  
Wood

### **Maintenance:**

Low   Routine

## *Mechanics*

### **Existing Spring System:**

Extension   Torsion

### **Preferred Spring System:**

Extension   Torsion

### **Existing Track Radius:**

Low Headroom   10R   12R   15R  
20R   32R   Highlift Track

### **Preferred Track Radius:**

Low Headroom   10R   12R   15R  
20R   32R   Highlift Track

### **Whispertec Upgrade?**

Yes   No

## *Openers*

### **Preferred Garage Door Opener:**

8165W   8365W   8355W   8587W  
8550WLB   WLED   85503   8500W

## *Cost*

Number of Doors: \_\_\_\_\_ Number of Openers: \_\_\_\_\_

Budget: \_\_\_\_\_

# THANK YOU

**T**hank you for taking the time to review our **New Garage Door Buyer's Guide**. We hope that you were able to learn about the different garage door elements that are important to you and get started on the process of finding the perfect door for your home.

Buying a new garage door is truly an investment in your home, and it's one that should be done with knowledge and consideration. Finding a garage door you love and a company you trust are a recipe for success for years to come.

After many years in the garage door industry, we take pride in our ability to help homeowners design the right door for their home, lifestyle, and preferences. With knowledgeable employees, a high end reputation, and the assurance of a quality installation, we will prove why **Precision Garage Door** is *a name you can trust*.

## *Get in Touch With Us*

 833-215-0070     [hello@pdstristate.com](mailto:hello@pdstristate.com)

## *Learn More*

[Precision Garage Door Learning Center](#)

# GLOSSARY

## ***Bottom Rubber***

Bottom rubber attaches to the bottom of your garage door to help stop air, dirt, bugs, and pests from entering the garage.

## ***Emergency Release***

A cord attached to the trolley that can be pulled to detach the garage door from the opener.

## ***Extension Spring***

One method to lift the garage door that is mounted on each side of the garage door track horizontally; the extension spring stretches and retracts to close and open our garage door.

## ***Goal Posts***

The wood around your garage door frame inside your garage. The track and other garage door parts are mounted to the goal posts to keep the track secure and steady.

## ***Header***

The structure above the garage door opening that maintains the structural integrity of the opening.

## ***Headerboard***

A specific piece of lumber that creates a solid surface in the absence of a strong header area.

## ***Hinges***

Hardware applied to the interior of the garage door to secure each section of the door together, while still allowing it to move independently over the radius.

## ***Horizontal track***

Supports the door in its open position; works with the vertical track to guide the door up and down.

## ***Jackshaft Opener***

Garage door opener that is mounted to the wall, rather than the ceiling of the garage.

## ***Keypad***

A panel placed outside of the garage, used to open the garage door with a code that is set by the homeowner.

## ***Liners***

This word describes the wood that makes up the frame of your garage door, on either side and across the top. The weather seal attaches to the liner and rests on the garage door for an airtight seal.

## ***Motor***

Just like in a car, the motor (which is inside the opener) moves the opener parts to open and close the garage door.

## ***Motor Rail***

An extension of the opener on which the trolley runs to guide the door open and closed. This is also where the chain or belt runs to move the garage door.

## ***Opener***

The machine that houses the parts that open your garage door mechanically.

## ***Radius***

The garage door radius is the curved part of your track that transfers the door from the vertical position to the horizontal position.

## ***R-value***

The measure of resistance to heat flow through a material.



# GLOSSARY

***Remote***

A handheld device that can open and close your garage door from afar with the click of a button.

***Safety Eyes***

Safety system that alerts the opener to reverse to the open position if there is a person, pet, or object in the opening of the door as it's moving down.

***Sections***

The horizontal panels of a garage door, connected with hinges.

***Torsion Spring***

One method used to lift the garage door that is mounted parallel to the door on the header of the garage; the tension of the spring winds up as it closes and unwinds as it opens.

***Trolley***

A part of the opener system; connects to the center of the garage door to enable the motor to open and close the garage door.

***Vertical Track***

Supports the door in its closed position; works with the horizontal track to guide the door up and down.

***Wall Control Panel***

Located inside the garage near an entry door, 5 feet off the ground. Depending on the model of the garage door opener, it will have a light button, an open/close button, and a screen that allows you to set features and functions to meet your preferences.

***Weather Seal***

Vinyl flap placed around the outside frame of a garage door to help eliminate air infiltration around the opening of the garage door.

***Woodwork***

An all encompassing term used to describe the different elements of wood in your garage that can affect your garage door installation.