4) Can I match the color of my doors and windows with my Garaga garage door? (Color codes)

We are providing the following Sico, Benjamin Moore, National-Laurentide and Sherwin-Williams color codes to help you to match the color on your Garaga garage door as closely as possible. The final color can vary depending on the sheen of the paint (flat, satin, semi gloss and gloss), and the surface being painted (wood, steel, aluminum, fiberglass, etc.), as well as the application method (spray, brush, etc.). Therefore you should not expect a perfect color match to your Garaga garage door. You or your painter may have to experiment with the sheen and application to obtain a color match that is satisfactory.

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	Wood surfaces:	**Metal surfaces:**
Sico	Series 811 (exterior matte latex)	Series 817 (exterior semi-gloss alkyde)
National / Laurentide	2311-xx	545-OXY
Benjamin Moore	Series N096 or 632	Series N096 or 632
Sherwin-Williams	A100 (Series A82)	(Series A43)

5) Commercial - How much headroom is required above the garage door ?

There are different lift types for commercial or industrial doors. When we talk about a "Standard" lift movement, here are headroom requirements:

Type	**Radius: 12 in.**	**Radius: 15 in.**
2 in. Commercial Door widths: 8 to 12 ft.	12 in.	n.a.
2 in. Commercial Door widths over than 12 ft.	13.5 in.	15 in.
3 in. Industrial	n.d.	15 in.

Note : if you use a Trolley type operator, add 2.5 in.

IMPORTANT: do not use a "Standard" lift movement if you have 2 ft. headroom & over. Use a "High Lift" movement.

For Low Headroom applications, the minimum headroom requirement is this following:

Type	Low Headroom Rear installation	Low Headroom Front installation
2 in. Commercial Door widths: 8 to 12 ft.	4 in.	8 in.
2 in. Commercial Door widths over than 12 ft.	4 in.	10 in.
3 in Industrial	11 in.	13 in.

Note : if you use a Trolley type operator, add 2.5 in.

6) CONDENSATION... A FACT

Here are a few facts:

The accumulation of condensation will occur when water comes into contact with a colder surface than the surrounding temperature. The water may take the form of actual drops of water or frost.

It is important to first realize that a garage door cannot be as watertight as an entry door, and that it is faced with different situations:

- A garage door must be disengaged on all 4 sides in order to open.
- A garage door is made up of 4 panels, thus 5 areas as well as the sides of the door will allow air to enter.
- The size of a garage door (108”-192” wide) does not compare to that of entry door (34”). The surface area can easily be 4 to 5 times that of an entry door, and therefore offers a larger surface to cooling.
- A garage holds more humidity than the entry-way of a house: snow and ice stuck to a car, fire wood being stored, poor or no ventilation, etc.

Traces of condensation may appear in different locations, on the warm side of the door:

- where panels intersect;
- at the end of each panel, behind the weatherstripping;
- on the aluminium U-bar, on the bottom panel.

The Garaga solution:

The source of condensation (cold-hot contact) cannot be eliminated completely, however GARAGA has designed their doors to minimize the effects:

- A high-efficiency joint between the panel, coupled with a thermal-break (the interior and exterior skins do not touch).

- Rubber weatherstripping on the bottom section that is flexible enough to adapt to the unevenness of the floor. The aluminium U-bar to which the weatherstripping is attached is a heat-conductor, that can cause condensation if the air in the garage is filled with humidity.

- A large piece of weatherstripping is attached on the top of the door to compensate for any deficiencies in the exterior weatherstripping. (H-Tech)

- Exterior double weatherstripping, higher efficiency than regular weatherstripping, is recommended to stop the air infiltration.

  Excess humidity in your garage can be eliminated by leaving the door open for a few minutes; cold air will quickly fill the garage, thus lowering humidity.

  Garaga garage doors are products of very high quality. Please do not hesitate to contact your salesperson or installer for solutions to any problem that may occur or if you have any general questions.

  WARNING: It is not recommended to “Crush” the weather-stripping against the door as it will prevent smooth operation of the door. For a smooth operation of the weather-stripping, we recommend the use of a silicon-based lubricant. Do not use “Vaseline” or other petroleum-based oils.

Outside Temperature (°C)	Humidy Factor Maximum Tolerance (%)
-29	20
-23	25
-18	30
-12	35
-7	40

7) Do you know how Garaga sectional doors are made?

Discovery Channel's «How It's Made» aired a capsule on how Garaga sectional doors are made. We invite you to look at this extract to discover all the secrets on the best made garage doors in North America. (Duration: 1 min 30)

How it's Made is a television series, narrated by Lynn Herzeg, the segments inform viewers about fabrication methods of various products used in our everyday lives. For more info on this series visit: www.howitismade.net

8) Energy saving... you said!

The advertised R-value of a garage door means very little if the door does not have a complete thermal break system and a proper weather seal system around all four sides of the door and between the door sections.

9) How do I figure out the number of cycles for torsion springs?

The required number of cycles is calculated by determining the average number of operating cycles per day, multiplying this figure by 250 days, and then multiplying the result by 10 years (the useful life of a garage door). The choice of the torsion spring is made according to the number of cycles thus obtained. You can choose from 25,000, 50,000, 75,000, or 100,000 cycles. It is good to note, however, that door width may limit this choice.

10) How do I know if the door is well balanced?

You should be able to easily lift the door open with one hand, regardless of its size or the material it is made of. If you notice the door is harder to open, this means that its dead weight is heavier than in the ideal range of 8 to 14 lbs. (4 to 7 kg) because the springs are no longer counterbalancing the door properly. Call a GARAGA-certified installer to correct the situation.

11) How do I paint a Garaga garage door?

General information

If you decide to paint your Garaga door yourself, the following instructions outline how to do it. It is important to note that oil-based paint (alkaloid) with a matt or semi-gloss finish does not exist in the market (unless an industrial paint is used).

Therefore, it is recommended that latex paint be used to avoid highlighting imperfections in the metal. Use a brush to contour the raised panel, and a roller (1/2" (10 mm) to provide a nice finish.

If your customers want to paint their front door and/or windows, it is possible to closely reproduce the colour of their Garaga door. See the Sico, National / Laurentide and Benjamin Moore colour codes on the next page.

We have used the Sico, National - Laurentide and Benjamin Moore paint companies, but any good paint company can be used, with the stages remaining the same. Some dealers are equipped with an electronic machine to find the exact colouration. A colour sample will be necessary.

Before painting any Garaga garage doors, we invite you to read the document about the Limited lifetime warranty.

How to repaint a Garaga door:

1. Wash the surface of each panel with phosphate trisodium (Polypred 771-137) to remove grease and residue. Rinse completely with clear water and let it dry.

2. Sand the surface of each panel with sand-paper (grade #220) in order to create an adherence profile. Avoid using steel wool. Clean the panel with a tack cloth or a vacuum.

3. A primer coat is necessary only if the enamel is taken off, if the steel is visible or if there is some rust. In these particular cases, apply a phosphate coat of zinc primer: Sico(Corrostop Light Beige 635-260 or oxide red Sico 635-785), National - Laurentide (Dura-sol 545-062 (8545-91)) or Benjamin Moore primer serie 163. Let it dry a minimum of 16 hours before painting

4. Apply 2 coats of latex paint

	SICO	NATIONAL / LAURENTIDE	BENJAMIN MOORE
Wood surfaces	Series 811	2311-XX	Series N096 / AURA 632
Metal surfaces	Series 817	545-OXY	Series N096 / AURA 632

Most important: The above guidelines are only suggestions. For exact color application, we advise you seek expert advice form a colour consultant at your nearest retail paint store.

i) For the steel surface of the door

- **a.** Please read the above text

2) For PVC surfaces (overlays)

- **a.** Before painting, PVC surfaces must be prepared and cleaned of dirt, oil, chalk and /or mildew with a diluted solution of trisodium phosphate. Consult product manufacturer instructions.
- **b.** Rinse completely with clear water and allow to dry.
- **c.** Use only high-quality latex (water) or alkaloid (oil) exterior paint (flat, satin or semi gloss).

WARNING: dark colors absorb radiant heat from the sun creating extremely high surface temperatures. DO NOT PAINT the raised overlay (vinyl) on the door using paint with a light reflective value of less than 56.

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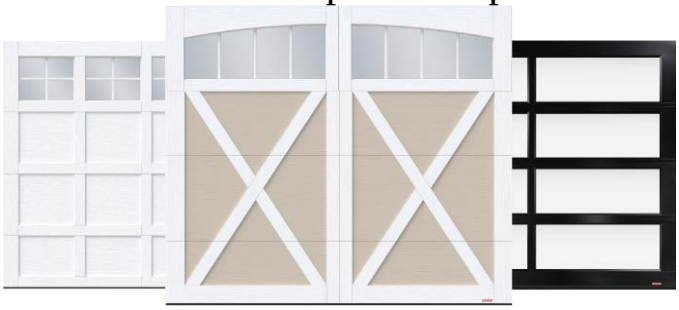
12) How much does a garage door cost?

Garaga offers many installed garage doors

for less than $1000

but be aware that several components influence the purchase price.



The factors that have an impact on the price of the door you plan to buy can be divided into 2 categories.

1- The construction

SIZE OF THE DOOR

The larger your door is, the more expensive it will be. But the rule “twice as large = twice the cost” isn’t necessarily true, since when a door is very wide, reinforcements must be added
for strength.

HARDWARE

Factors such as the quality of the rollers for a long-lasting and quieter system, the guaranteed number of spring cycles (door openings & closings), the number of reinforcement struts on the door, and the system configuration (e.g. based on available headroom) influence the cost of buying a door. Often, an investment of less than $150 will gets you the best system available.

INSULATION

The purchase of an insulated door should be considered an investment as it helps save energy. Door prices vary based on insulation value, which, in addition to the level of polyurethane or polystyrene insulation, can depend on the effectiveness of the weatherstripping system. The best quality weatherstripping from Garaga usually costs less than $75, a worthwhile investment that pays off in the winter.

STEEL OR ALUMINUM

Steel with a woodgrain finish is the most commonly used material in the construction of a door. Compared to aluminum, steel is about 10% less expensive. However, if you buy a smooth steel door, made up of thicker and heavier sheet metal, expect to pay about 50% more than a regular steel door with a woodgrain finish.

2- The look

MODEL

If you choose a model with PVC overlays, keep in mind that these usually double the price of a door. Also, if you opt for an embossed carriage house style, the cost may increase about 15%.

COLOR

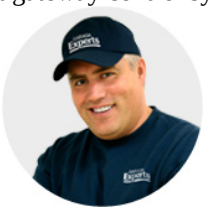
Garaga offers both standard colors and Premium colors, the latter entailing a small extra charge of about $70 to $150 for a 9’x7’ door. If the color you’ve chosen is not among the choices offered, many dealers offer the service of repainting your door for a extra charge over the initial price, calculated per square foot of the door.

WINDOWS

Besides bringing light into your garage, adding windows to your door greatly enhances the look of a door. This addition may increase the purchase price from 25% to 50%, depending not only on the quantity of windows in the door, but also their insulation value and how they are manufactured.

MANY INSTALLED GARAGE DOOR OPENERSFOR LESS THAN $500

Compared to models available in big-box stores, door openers sold by professionals are quieter, safer, and longer-lasting. Their price, including installation, ranges from $350 to $500. Adding optional accessories, such as a remote control or an Internet gateway control system, can cost $30 to $60 more.



INSTALLATION

The performance and durability of a garage door depend as much on the quality of the installation as that of the product. This is why Garaga recommends you work with a professional dealer to ensure your peace of mind and a safe installation

RENOVATION RELATED WORK

Working with a professional installer during renovations allows you to have a good idea of the expenses incurred related to changing a garage door, such as dismantling and getting rid of the existing door, rebuilding the doorframe, covering the frame with aluminum sheeting, etc.

IN CONCLUSION

Whether you are looking to compare the options or to set your budget, many elements have to be considered. For this reason, we always recommend asking for a free quote of your project. This remains the most effective way for you to know the exact price of your future purchase.

13) How much does the installation of a commercial garage door cost?

Installation costs depend on the intricacy of the project, the headroom, on whether there will be an electric motor or not, as well as other aspects particular to each project. In other words, there are many variables to consider. We recommend that you find a qualified installer. Ask him to provide you with the names of some clients so you can verify how satisfied they were with his work.

If you need an estimate of the price, please complete our online quotation request form.

14) How much does the installation of a garage door cost?

It is very difficult to give an accurate price as many different components need to be considered. Is it a replacement door or a new construction? Must we remove the existing door? Do we have to rebuild the frame and cover with aluminium? What is the headroom above the door (to determine what type of lift)? Is there a bedroom above the garage (door insulation and noise reducing mechanism)? Do you need any extra accessories with your electric operator? What use will you make of your garage? Will you park your cars in it? Or maybe store things in it? Or maybe, it will be a workshop or a recreational room for your children.

These are all questions that must be answered in order to determine your specific needs. Besides, isn't your garage door an important investment for you?

If you need an estimate of the price, please complete our online quotation request form .

15) How much horsepower does the motor need?

A motor of 1/3 HP is enough for doors in the 8 ft (2440 mm) high to 12 ft (3660 mm)wide range. Use a 1/2 HP motor for doors measuring over 12 ft. (3660 mm). Keep in mind that an electric garage door opener is only meant to work as a substitute for human strength. Therefore, the door must be well-balanced at all times in order to maintain its dead weight at 3 to 4 kilograms.

Consult : www.liftmaster.com

16) How should I prepare my garage door frame?

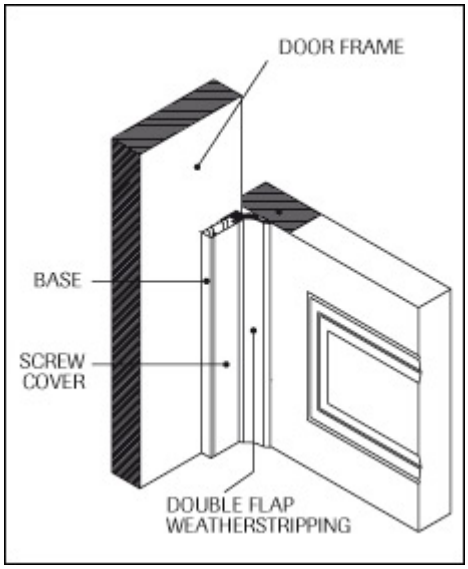
You have to get the opening ready and make sure that the size of the opening matches the size of the door.

17) How to install and upkeep your exterior door weatherstripping?

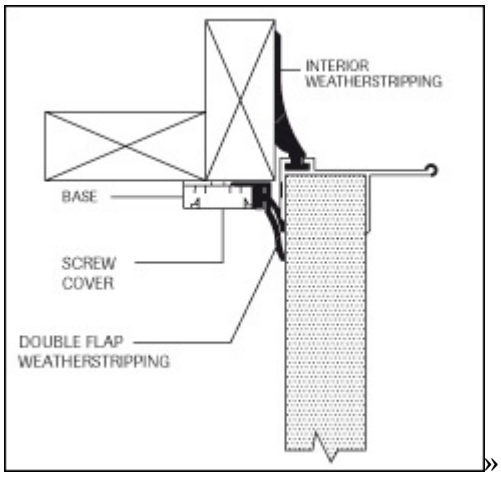
GARAGA INC. offers heavy-duty weatherstripping that feature a screw cover and a high quality double flap rubber strip which resists to low temperatures of -4F° (-30°C) and keeps its flexibility.

INSTALLATION (note: screws are not included)

- close the garage door;
- measure and cut the base and the top panel weatherstripping to the desired length;
- make sure that the end of the top panel weatherstripping is even with the end of the base;
- Start at the top of the door, and not at the sides;
- place the base of the weatherstripping flat against the door frame, slide it upward to press well against the horizontal frame; then move it towards the door until both edges of the top weatherstripping come against the door while keeping the base of the weatherstripping at around 1/2” from the door;



- screw in and tighten a screw in the first hole of the base of the weatherstripping while being careful to place the top panel weatherstripping under the base of the weatherstripping;
- make sure the weatherstripping is parallel to the door and then put in the other screws;
- fix screws in the holes of the weatherstripping retainer.
- do not tighten the screws completely, to allow the retainer to slide and adjust a little: this is the reason why there are long slots in the base. Crushing the base too hard will put too much pressure on the wall of the retainer, which could bring the screw-cover to pop out the retainer.
- put the screws at the center of the slots, to allow movement of the retainer.
- very important: leave a space of at least 1/8 inch (3 mm) at the top joint, and fill it with caulking, using the same colour as the weatherstripping. This filling will absorb the expansion or will stretch to fill the space if it contracts.
- put on the screw cover by inserting one side of the screw cover in the base and by pushing the other side firmly;
- proceed in the same way for the sides.



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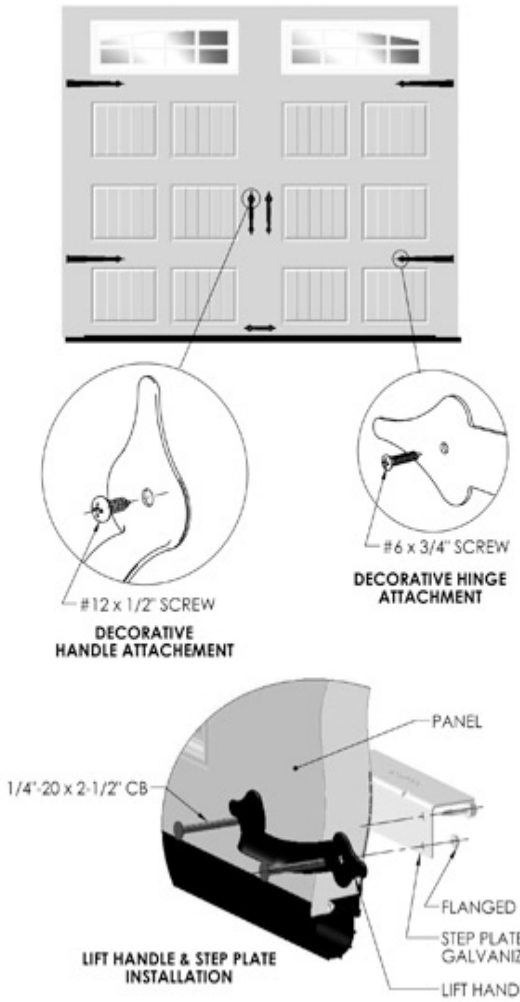
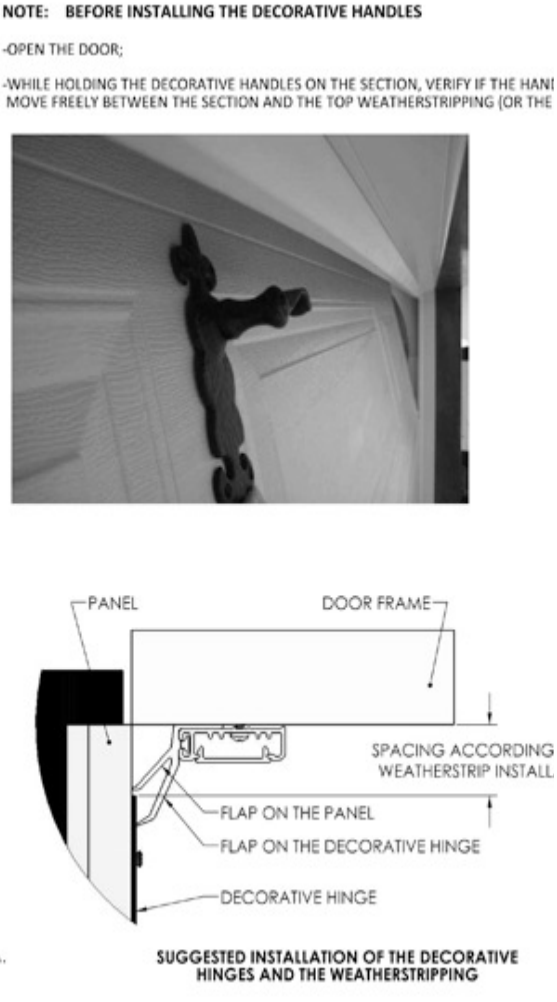
If you have chosen the weatherstripping with an aluminum base instead of a PVC base, you will have to pierce holes of 1/8” at every 12” for the screws.

To make sliding the weatherstripping on the door easier, you can lubricate them with a SILICONE-based product. **NEVER USE A PETROLEUM-BASED LUBRICANT ON WEATHERSTRIPPING.**

18) How to install the decorative hinges?





19) How to remove your old garage door?

If you are replacing an existing door, you will no doubt have to replace some other parts, might it be only screws for the hinges or worn-out rollers. You will almost certainly have to change the springs since their size and strength are based on the weight of the door. The weight of a wood door, an aluminum door, and a steel door differ greatly.

It is important to understand that the springs used in opening and closing a garage door support the entire weight of the garage door. This means that there is extreme tension in these springs and that any sudden and uncontrolled release of these springs is dangerous and could cause serious injuries.

The first and most important step in the removal of a garage door is the release of the tension in the springs.

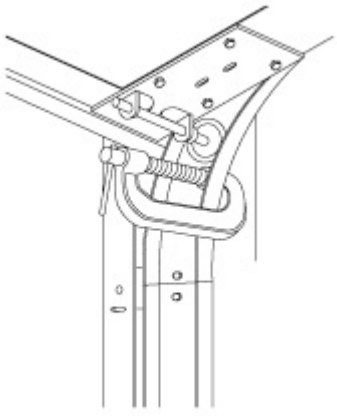


figure 1

REMOVAL OF EXTENSION SPRINGS

For extension spring hardware, the tension in the springs disappears almost completely as soon as the door is completely opened.

Open the door completely and block it in this position with clamps or locking pliers firmly tightened to the track to prevent the door from closing. (See figure 1)

You can now release the cables and take off the springs without any trouble or danger.

Then, take off the clamps or the locking pliers and slowly close the door.

WARNING! Do not execute this step alone. Remember: a garage door which is not linked to a spring weighs it's real weight and trying to handle it alone could be dangerous.

We suggest you place a wood block under the door before closing it to prevent getting your fingers caught. You can now undo the panels of your door starting by the top panel.

REMOVAL OF TORSION SPRINGS

First of all, lock the door in the CLOSED position. You can either use the locks installed on the door or use clamps or locking pliers as shown in Figure 1.

Then block the spring shaft with locking pliers leaning against the wall (header) as shown in Figures 2 and 22. Then, insert one of the winding bars into one of the holes of the winding cone, HOLD IT FIRMLY TOWARDS THE TOP, and unscrew the set screws which are found there.

WARNING! As soon as these screws are loosened, all the tension in the spring will go to the winding bar; it is really important to keep this bar very tight to avoid a sudden release of the spring.

Let the spring slowly unwind towards you and then insert the other winding bar in the hole at the top. Take out the bottom one only when the top one is well-inserted and held firmly in your hand. Continue this procedure until there is no tension at all left in the spring. Repeat the same steps on the second spring, if need be. Release the cables and then take off the clamps or locking pliers.

You can now undo the panels of your door starting by the top one.

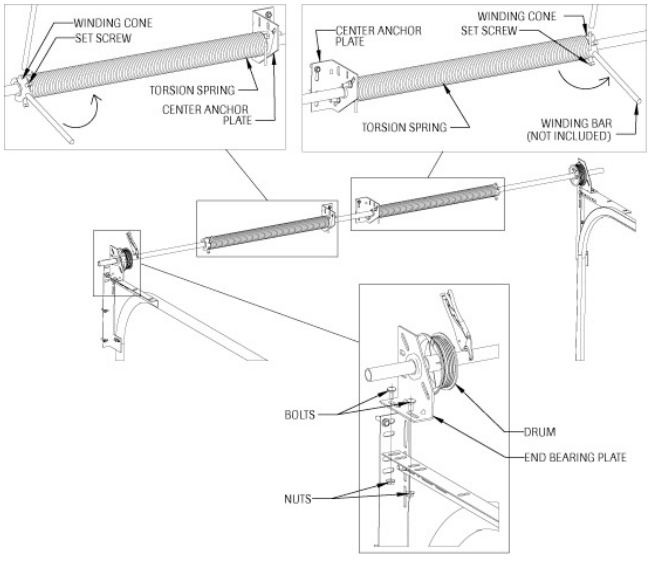


Figure2

20) Is all residential hardware the same?

Definitely not.

GARAGA recommends using 14-gauge tracks, with welded mounting brackets, rather than riveted or fastened (clips). When shopping for a garage door, make sure the rollers come with a mechanism of at least 10 ball bearings.

If you want to be sure of what you are buying, look for the GARAGA name. It is stamped on all our tracks to ensure that you get a quality product.

21) Is it better to have one double garage door (i.e. 16 ft / 4.9m wide) or to have 2 single doors?

There are a few points to consider. First, we must be practical. If for some reason the 16' door does not open (i.e.: mechanical failure), you understand that both vehicles will be stuck inside the garage. To be in that kind of predicament with two single doors is almost impossible. You will at least be able to have access to one of the vehicles.

If you live where the climate tends to get pretty cold, you must understand that opening a double door will let more cold air in than opening a single one.

Finally, the last point would have to do with "design" and "taste". When you have a double garage door and it is on the front of the house, it becomes very much part of the style setting of your house. A lot of people don't like to bring so much attention to their garage door.

For them, it is preferable to install two single doors instead. This way you can maintain a good balance between the doors and the rest of the house.

Will there be any extra costs? No, not as such. The price for two single doors is about the same price as for a double door. The difference would come from electronically operating the two single doors.

22) Is it better to open and close the door manually or electrically?

In all cases, it is best to equip the door with an electric garage door operator. There are basically two categories of such operators: trolley (central) and jackshaft (wall-mounted). When at all possible, install a three-phase motor with the highest voltage available. If you choose to manually open and close your garage door, ask for a chain hoist when the height of the door exceeds 12 ft. (3660 mm). Get in touch with a GARAGA-certified installer to find out more about safety accessories.

23) Is there anything else I should know about the hardware?

Yes, indeed.

If the door measures over 150 sq.ft. (14 square metres), we suggest using vertical tracks with a continuous angle. If door width exceeds 14 ft. (4270 mm), the use of double hinges is recommended.

24) Is there anything in particular I ought to do once the door is installed?

Ask the installer to provide you with the owner's manuals for the door and for the electric operator, if applicable. Take the time to read them to find out more about your new equipment and the maintenance it requires. Make sure you keep the GARAGA-certified installer's phone number handy.

25) My garage door opens by itself. Is this possible? What could be the cause of this and what is the solution?

Is this an actual problem?

Yes, it's possible for your garage door to open by itself. There are a few unusual factors that can cause your door open by itself. Here are a few scenarios we've come across:

- Residential electric garage door openers manufactured after 1993 are equipped with two safety mechanisms that operate while the door is closing. The first is photoelectric and the second is mechanical. The most common scenario is a misalignment of the photoelectric reversal system. When the two sensor housings are out of alignment, the beam is cut off, which the door opener interprets as an object in the way of the door's descent. As a result, it automatically reopens the door. Realigning the beams will resolve the problem. To make sure that it has been corrected, check the wall panel near the entrance to your home. The indicator light should have stopped blinking.
- Another common scenario: during the winter, the threshold of your garage door must be kept clean to avoid any accumulation of snow. Otherwise, the door's mechanical mechanism will butt up against this buildup, and depending on how sensitive it is, may reverse the door.
- Also, a power surge caused by a lightning storm, for example, may have damaged the electrical circuits of your door opener.
- There's one last scenario that applies to door openers manufactured before 1993. Before this time, remotes were programmed by positioning clips. By sheer chance, one of your neighbors may have a remote programmed with the same code. After 1993, LiftMaster started using a rotating code with millions of possible programming combinations.

According to a persistent urban legend, a plane passing over your home can cause your garage door to open. To correct many people's misimpression, we should point out that it all depends on the frequency used by the door opener. The frequency used in older garage door openers could interfere with certain military planes. This problem was corrected starting in 1993 by employing a different transmission frequency.

A couple of possible solutions:

Before leaving home, wait a few seconds to ensure visually that the door is completely closed and that none of the security mechanisms have triggered it to reopen.

Another solution: if you want to be sure that your garage door is completely closed, there is a garage door monitor (829 LM) that you can install in your home (e.g. in your bedroom) that will indicate whether the door is completely closed or not.

The permanent solution: use of LiftMaster's MyQ™ technology

For your peace of mind, we recommend MyQ™ technology, which will allow you to:

Open and close your garage door from your smartphone

Receive an email when your garage door is opened

Program the door to close automatically 60 seconds after it is opened
In order to benefit from this technology, you need to have a door opener model that offers built-in MyQ™ technology.

Otherwise, if you have a LiftMaster door opener manufactured after 1998, you can purchase the 888 LM wall station with an 828 LM Internet gateway to equip your current door opener with MyQ™ technology.

If you have a LiftMaster model dating from 1993 to 1998 or even certain models made by other manufacturers, adding an 821 LM universal door controller can also equip your door opener with My™ technology.

Consult a Garaga retailer to verify the model and year of your door opener and analyze the possible solutions... So you can sleep peacefully!

26) Planning, the key to building a garage

Are you considering the addition of an attached garage to your house? Do you wish to convert your carport into a garage? Now that's a great idea! Adding a garage will not only prove to be very practical, but it will also increase the resale value of your property.

However, such an important project requires some serious planning. In order to avoid making mistakes that could become disastrous while at the same time staying within your budget, you need to act properly.

Garage attached to the house

BEFORE AFTER

The main steps involved in planning the construction of an attached garage are the following :

Determining your needs

1. **Determining the size of the garage**
2. **Designing the plans**
3. **Obtaining the building permit**
4. **Planning financing and construction**

Now let's look more closely at these planning steps.

1-Determining your needs

Start off by deciding how much money you wish to invest in this project. Think about the reasons that justify building a garage and how you plan to use it.

- Will you use it to park cars?
- Will it become a large storage room or a workshop?
- Will you add a workbench to it?
- Will you need several electric outlets?
- Will you need a service door?
- Will you need windows or heating?

At this point, it would be appropriate to visit your town's department of urban planning to know more about the local building codes regarding an attached garage. For example, there might be setbacks to take into account when choosing a location or even a maximum height to consider when the time comes to design the plans.

2-Determining the size of the garage

The size of your garage is unquestionably one of the most vital aspects of the planning. An unnecessarily large garage will reduce the available space on your land while a garage too small will greatly limit possible uses.

Generally, the minimum size for a single garage is 12 ft. wide by 22 ft. long (3.7 m x 6.7 m) and 18 ft. wide by 22 ft. long (5.5 m x 6.7 m) for a double garage. However, these numbers are a strict minimum. Many home owners choose to make their garages wider so they can open their car doors freely, and longer so they have enough room to put in a workbench.

When it comes to garage size, the rule of thumb is this: build bigger when in doubt. You will appreciate having extra storage space for bikes, the lawnmower, gardening tools and sports equipment, especially since it is impossible to predict what your needs will be five or ten years from now.

If you plan to park cars in the garage, keep in mind that car sizes vary considerably. For example, you could one day replace your subcompact car by a larger family van. Would you have enough room in your garage to accommodate this type of vehicle without having to change its interior design completely? Do a sketch to better visualize the layout of your garage.

3-Designing the plans

Once you have determined your needs and the required size for your garage, consult an expert who will be designing the construction plans.

The designer will make sure the garage does not clash with the house, but rather complements it. A garage that does not match the house, either because of its size, its finish or its architecture, could even reduce the property's resale value.

A garage and a house should have several common elements, including the slope of the roof, the exterior finish and the type of doors and windows.

4-Obtaining the building permit

Now that you are ready to start your project, go back to your department of urban planning to obtain a building permit. In some instances, a permit to connect your garage to an electrical power utility and to the water supply could also be required.

It is essential to respect local codes to the letter since an inspector will meticulously examine the garage once the construction is finished. If the building does not exactly match the plans or meet local codes, you will have to, in the best-case scenario, modify the building or, in the worst-case, start the construction over.

5-Planning financing and construction

Since building a garage is a project that requires a hefty investment, financing must be carefully planned. Whether you decide to get a loan from your bank or increase your mortgage payments, your financial institution will be able to inform you of the various options available and offer sound financial advice.

You will also have to decide whether you want to hire a general contractor, hire subcontractors while assuming project management or even do some of the work yourself.

If you choose to hire a general contractor, ask him to obtain the building permit from your town. This way, he will be responsible for making the necessary changes so the garage meets local codes.

One thing is sure, planning the construction of an attached garage is not a luxury, but a crucial step that will help make this important project a success.

If you plan to add an attached garage to your house, do not hesitate to contact Drummond Designs' Renovation Service. Working from pictures or sketches provided by clients, Drummond Designs' team of experts can suggest ideas and offer advice that will take into account your needs and budget.

You can reach Drummond Designs by dialing toll-free 1 800 567-5267 (ext. 2) or visit Drummond Designs' Web site at www.drummondhouseplans.com

Garage detached from the house

How much does a detached garage cost?

Although the total cost may vary greatly, building a garage detached from the house generally costs at least $45 per square foot ($480 per square metre). For example, a single garage 12 feet wide by 24 feet long (3.7 m x 7.3 m) costs approximately $12,600. In the case of a double garage 18 ft. by 24 ft. (5.5 m x 7.3 m), the cost is about $19,500. Keep in mind that these prices are approximate and include labour costs.

The price of $45 per square foot ($480 per square metre) applies for a garage built with standard materials. If you elect to use high quality materials, the price will increase to about $55 per square foot ($538 per square metre).

It is important to note that the above-mentioned amounts only include the construction of the building itself. The costs of connecting the garage to the sewers or paving the driveway, for instance, are extra expenses that must be considered when establishing a budget for this type of project.

The exterior finish chosen for the garage also creates a considerable fluctuation in costs. A garage featuring the same type of roof as the house or comparable architectural details will necessarily prove to be more expensive. Similarly, a garage with the façade or even all four walls made of brick will be a lot more costly that a model covered with PVC siding.

The cost of a detached garage varies according to its size and its exterior finish. **To know more about detached garages or to enquire about garage plans, do not hesitate to contact an expert from Drummond Designs by dialing toll-free 1 800 567-5267. You can also visit their web site at www.drummondhouseplans.com.**

27) Residential - How much headroom is required above the garage door?

In order to install torsion-spring hardware, we recommend a clearance of 12 in. (305 mm). On the other hand, if there is only 5 in. (127mm) to 12 in. (304 mm) available, it is best to use a dual-track system, designed for low headroom. When equipping a garage door with an electric door opener, add 2 in. (51 mm) to these measurements.

Torsion (1)		Extension (2)	
Headroom	**Operation type**	**Headroom**	**Operation type**
0" to 5"	Not possible (lower headboard of door)	**0" to 5"**	Not possible (lower headboard of door)
5" to 12"	Low Headroom (double track system)	**5" to 8 1/2"**	Low Headroom (double track system)
12" and higher	Standard (12" radius) (3)	**8 1/2" and higher**	Standard (10" radius)

1. Garaga recommends the use of torsion springs for improved door operation and increased safety.
2. Garaga recommends the use of safety cables with extension springs for more security.
3. You can order a 15 inch radius with torsion springs operation.

If an electric operator is being used, add 2 inches(51mm) to headroom required.

28) What are the advantages of aluminium?

Aluminum doors offer the advantage of being lighter and therefore tend to be easier on their opening mechanism. In the long run, great savings can be made on maintenance costs since the mechanism will last longer. However, when it comes to doors measuring 12 ft. (3660 mm) wide or less, there is little difference between aluminum and steel. Finally, remember that aluminum is recyclable.

29) What are the GARAGA garage door colors that correspond to GENTEK or RESIDENTIAL colors (roller aluminum supplier)?

Here are the new corresponding Garaga colors:

For H-Tech, Top Tech, G-1000, G-2020, G-2023, G-2323 models:

GARAGA Colors	Comparable to GENTEK or RESIDENTIAL (Canada)
White	Corresponds to RESIDENTIAL White SG # 110
Nordic	Similar to GENTEK Ice White # 429 Similar to RESIDENTIAL White LG # 801
Ivory	Similar to GENTEK Maize # 502 or similar to RESIDENTIAL Ivory # 302
Universal Brown	Corresponds to RESIDENTIAL Universal Brown # 331
Terra Brown	Corresponds to GENTEK Commercial Brown # 562
Tundra	Corresponds to GENTEK Pebble # 559
Savana	Corresponds to GENTEK Wicker # 538
Heron Blue	Corresponds to RESIDENTIAL Heron Blue # 54
TEX White **(Top Tech / G-2000)**	Similar to GENTEK Ice White # 429 and similar to RESIDENTIAL White LG # 801

For Cambridge, Eastman, North Hatley, Stratton, Standard+, Acadia, TriForce, DualForce, Uniforce, G-5000, G-5138, G-5200, TG-6200, TG-8024, TG-8524 models:

GARAGA Colors	Comparable to GENTEK or RESIDENTIAL (Canada)
Ice White	Close to GENTEK Ice White # 429 close to RESIDENTIAL White LG-801
Moka Brown	Corresponds to GENTEK Commercial Brown # 562
Claystone	Corresponds to RESIDENTIAL Royal Clay # 913 Close to GENTEK Pebble # 559
Desert Sand	The closest match is with GENTEK Almond # 532
Dark Sand	Corresponds to GENTEK Sable # 547
Charcoal	Corresponds to GENTEK Slate # 523
Evergreen	Corresponds to GENTEK Bonneville Green # 598
American Walnut	No correspondence with Gentek or Residential
Black	Corresponds to GENTEK Black # 525
Silver	No correspondence with Gentek or Residential

IMPORTANT NOTE: Please keep in mind that paint reacts differently depending on the surface being painted, for instance aluminum or steel. In addition, our baked-on polyester semi-gloss paint finish and especially the wood grain effect (alum = rustic, steel = light) can create an illusion. You should therefore expect a slight difference in the shade of color.

30) What can I do to reduce the noise of my garage door while opening or closing?

It often happens that the garage is below a room (Bedroom or other) where the noise caused by the door may cause a problem.

What to do then?

Change the steel rollers for nylon rollers, choose an opener with a belt drive instead of a chain drive. If you already have an opener with a chain drive, you can get a mounting isolator kit. A torsion type spring will be less noisy and the choice of an aluminium door (lighter door) will reduce the noise.

Finally we advise you to do regular lubrication of the rollers and the tracks.

If you want to know more, go to this Web site adress: www.cmhc-schl.gc.ca/publications/en/rh-pr/tech/99110.htm

31) What other measures should I take to ensure weather tightness?

An important item in weatherproofing a garage door is the exterior weather stripping found around the frame. For this purpose, a double-lip weather strip is the most efficient. In order to provide proper insulation, a garage door should be equipped with weather stripping featuring a thermal break at each panel intersection. Examine the weather stripping. Is there any at the top of the garage door?

32) What should I be aware of in terms of Garage Door Safety?

You will find valuable answers and safety tips at DASMA Safety Guideline page about garage door openers, door safety and maintenance tips that are used throughout the industry.

DASMA Link: Garage Door System Safety Guideline

33) What to do when the header of a garage door has an arch?

You must expand the interior frame of the door by the equivalent of 1 ¾ inch (45mm) (the addition of a second 2 in. X 6 in. wood stud, and the thickness of ¾ in. plywood) to be able to slip the external frame weather stripping behind the arch. The frame weather strip will then be airtight around the whole door. We must not forget that the plastic retainer that houses the double-lip rubber is not flexible enough to follow the arch in question. This case being even worse for smaller doors (ex : 8 in wide).

There is also the possibility of building a false arch (thickness of more or less 1in.) that will not obstruct the installation of the door weather stripping.

34) Where do I find the installation manual?

The installation guide for each residential door model can be found under the “Technical specifications” tab of each product page or at the bottom of the home page.

However, you can also download the installation manual for residential garage doors here.

To access residential door models: http://www.garaga.com/garage-doors/residential/.

35) Where do I register my Garaga garage door warranty?

Register your Garaga garage door warranty at our website.

Follow the link below to register your warranty:
www.garaga.com/register-your-warranty/

36) Where is my CarGO opener serial number located?

The serial number is located on the plastic housing covering the opener.

37) Where is my garage door serial number located?

The serial number on a Garaga garage door is located on the inner surface of the door, at the lower right corner of the panel closest to the ground.

38) Which hardware is more appropriate for my garage door? The 2 in. (50 mm) or the 3 in. (75 mm)?

The answer to this question lies in the **size** of the door and the **extent** to which it is used. If the door measures less than 150 square feet (14 square metres) and operates at a normal rate, that is to say, 8 cycles per hour at most, the 2 in. (50-mm) tracks and rollers are perfectly suitable. For all other applications, we recommend the 3 in. (75-mm) hardware. Make sure tracks are welded, not riveted, and that they bear the GARAGA name.

39) Which is a better choice: Extension or Torsion springs?

Torsion springs are located above the door and are safer and more suitable for double garage doors (14 ft wide & over). Extension springs are located above the horizontal tracks and require less clearance. They must always be equipped with safety cables.