Selecting a Door: Quality Comes First

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Next to location, one of the most important decisions an owner will make is the selection of components for his self storage facility. By components, we mean specifically your door, hallway systems and accessories. When you consider the amount of use a self storage door receives, it's important to base your selection on much more than just price. The quality and durability of the product are vital in keeping future maintenance costs to a minimum, much less full replacement costs. Aesthetically, the look of your doors and partitions are important as well. Future tenants often do judge a book by its cover, so keeping your doors vibrant, chip-free and ding-free are important aspects to consider. A common pitfall in selecting doors is to allow price to become the determining factor. Remember that you get what you pay for. Too often corners are cut to reduce the price, so any savings offered on the initial investment will be spent plus more on maintenance and repairs.

Door Types

Self storage doors come in two different styles, *swing* and *roll up*. This section will cover some of the similarities, differences, and key points to look for when selecting your style – or styles.

Swing doors are mounted on 180 degree hinges attached to hallway system. They can be a flush (flat) surface or corrugated (ridged). To offer more strength, X-bracing is applied to the back of the door. Swing doors typically come in widths of 3'-0" and are most widely selected due to cost savings. Note that there are fire code considerations on swing doors. Opposing swings doors and clearances in hallways when swings are in the open position can be an obstacle. Check with your local authorities to get clarifications on any regulations that need to be met.

Roll up doors are attached to a barrel and coil around it when raised. Roll up doors typically come in wider sizes than swing doors. Swing doors and roll up doors can be interspersed, depending on the size of your units. It is quite common to use swing doors on 5'-0" wide units or smaller and roll up doors on units larger than 5'-0" wide. Renters tend to like having the maximum size doors on units to make it easier to get in and out of their unit.

Components of a Roll up Door

Most roll up doors on the market today consist of a few key components. These components and their uses are explained below.

Door Curtain – look for a door curtain constructed from at least 26 gauge, grade 80 full hard steel. This is going to offer you the greatest strength, which minimizes door damage. Door curtains typically come in over 20 color choices or a galvanized metal finish.

Guides are roll-formed 18 gauge steel structures that run the length of the door and house the door curtain in its up and down motions. Guides attach directly to the door jambs.

The **Barrel** is a circular component located at the top of the door and provides for an even method for the door curtain to coil. A well-constructed barrel will totally enclose the drums, springs and axle to keep them protected.

Springs – depending on door width, doors will come with one or two springs. Look for a spring that is pre-lubricated. The grease will penetrate the pores of the spring with additives, displacing moisture and preventing the formation of rust or corrosion. This process also relieves the friction created between spring coils, thereby providing smoother door operation.

Ratchet Tensioner – a mechanism to adjust the tension on a spring. If your door has two springs, you'll want a tensioner that adjusts the tension on both springs equally and simultaneously.

Brackets – the mechanism that snaps into the door guides and attaches to the drum on the barrel.

Axle – the axle is the rod that extends through the barrel and inserts into the bracket. Doors are built today with either a live axle or dead axle design. A live axle design rotates as the door is moved up or down, while a dead axle remains static. It is recommended that you look for a dead axle, as it eliminates pushing or shifting and allows for a straighter travel path of the door curtain in the guides. It also better supports the equal simultaneous spring adjustment.

One option to mention is a **wind load rated** door. This is of particular interest to residents of Florida or other coastal areas which require their doors be tested and certified to withstand stronger wind force. As guidelines have become stricter, most wind load rated doors successfully weather the storms by offering wind clips and deeper guide engagement for greater curtain strength. You will need to check local regulations to determine if you are required to use wind load doors on your exterior units and what design pressures will be required.

Hallway Systems

Now that you have a general understanding of your door options, you'll want to examine your hallway partitions and components. A hallway system is considered to be the panels

surrounding the door that provide the framework and parameters of a storage unit. Let's discuss your hallway options.

Types of hallway systems

You have two types of hallway systems: flush (flat) or corrugated (ridged). Or you may select a combination of both. The flush system will have flush panels above the doors, between the doors and in all areas that remain. The corrugated system uses a corrugated panel for all of these areas. The most common system used is a combination of the two. Usually the flush panels are used in between the doors and the corrugated panels are used in the fill-in areas that do not have doors involved. The panel above the doors can be either flush or corrugated depending on the look you are trying to achieve. Because corrugated is typically 26 gauge steel and flush is typically 24 gauge painted steel, it is usually more economical to use the corrugated panels when possible. It all comes down to the overall look you're trying to achieve.

Another area that will need to be considered is the size of doors. The swing doors are usually 3'-0" nominally and are used on the smaller units. The roll up doors can be as small as 3'-0" and as large as the width of the units can take. The hallway system design dictates what size of doors that can be used. It is quite common to use a 16" or 24" pier size design. "Pier" is in reference to the structural size that is between each door. On a 10'-0" wide unit, the maximum door size would be either 8'-8" or 8'-0" depending on the pier size used. So as your unit size varies, so does the door size. On multi story projects the 24" pier size is often the only option due to the building structure interferences. We recommend you consult your door manufacturer to determine what options are available for your hallway system design, taking into consideration the building designs and overall cost implications.

Hallway Options:

Protection packages (mitered edges, corner guards, kick plates)
These protective components are usually found on high wear areas of your hallway, such as corners and lower panels. They are designed to help keep your facility clean and damage free. The types of material used are galvalume, galvanized or aluminum diamond plate.

Soffits Systems
Soffit systems (finished ceiling systems) are becoming a very popular option in hallways. There are several options for these as well: 36" wide continuous light trough, solid enclosed corrugated, or solid enclosed flush. These systems are usually used to hide HVAC ducts, hide a high ceiling or just provide a place to run your lights. Aesthetically, soffits offer a professionally finished look to your ceiling.

Lights (flush vs. screw on)
If a soffit system is used there are two light options that can be utilized. If the standard 36" wide light trough is used, an option for 1' x 4' flush light fixtures

can be adapted in the system. Or you may use the standard surface mount fixtures screwed to the various soffits. Flush lights can be advantageous when there are headroom issues that would cause the standard light fixtures to hang down too far.

Color schemes
Doors come in a number of different colors – typically over 20 standard colors or a variety of customized colors. You can also use color to add an accent or just give your hallway that extra architectural pop. Try changing your header color or adding colored crown molding or trim pieces to your hallway. You can even add a stripe on the door for extra pizzazz.

Locks
There are several different aftermarket lock hasps (slides) that can be used on the doors other than the standard door manufacturer's lock hasp. Most can be installed in the factory to save time in the installation process. Consult your door manufacture to determine your lock hasp options.

Openers (ADA compliance)
There are options to add electric operators to your roll up doors to help with ADA compliance, also offering your customer an added convenience.

Installing your doors

Today's self storage doors are so easy to install that some models can be done in as little as three minutes. However, due to fluctuating site conditions (i.e. obstructions with headers or jambs not being wide enough), it is suggested that you utilize an experienced professional to install your doors. Most door manufacturers have solid relationships with skilled installers and will help ensure you have a quality installation process.

Caring for your doors

Once you've installed your doors, there are a few maintenance tips we can share to keep your doors operating at peak performance.

The most common type of maintenance associated with self storage doors is derived from the springs. Over time the springs may relax, and having the ability to adjust them keeps the doors in good operating condition. Most manufacturers offer some sort of tension adjuster, but care must be exercised not to further exacerbate another issue… spring breakage. This happens on second generation doors that still utilize a live axle assembly. The recommended choice is a dead axle design that, by design, facilitates the disbursement of spring tension across the entire width of the door. The applied tension is distributed equally to every spring, which maintains the life of each spring, and thus the door.

In addition, some manufacturers recommend applying lubrication to the springs once installed. Our recommendation again is a third generation design that has been pre-lubricated at the factory. Remember, rust doesn't wait until the door is installed, so early lubrication minimizes spring maintenance, rust and corrosion. If you have selected a maintenance-friendly design as described here, you can expect your door to last 15-20 years or better.

Other Maintenance Tips

It is recommended that each time you re-rent a unit you conduct a few standard maintenance tips on your doors. Make sure you sweep the guides with a broom to keep them debris free. Use a silicon spray to wipe down the doors. And periodically check the tension to make sure the door is opening and closing at its optimum level.

To check the tension, raise and lower the door. If the door is easy to close but hard to open (cold), you will need to add spring tension. If the door is hard to close but easy to open (hot), you will need to remove spring tension. Check with your door manufacturer on the recommended method for proper tension adjustment.

Warranties

Different types of warranties are offered by most major manufacturers today. Most workmanship and free-of-defect warranties are for one year from installation. Paint finishes are warranted to adhere to the steel for 20-40 years (depending on manufacturer), as well as color warranties against fading or chalking.

Now that you've learned about self storage doors and how they operate, you will have an advantage when shopping for your best option. What should you look for? A quality company that has provided you not the best cost, but the best value. Value accounts for maintenance costs, or the lack thereof, as well as competitive pricing for your doors. By evaluating all your needs and asking questions, you should be able to make an informed decision on your next door purchase.