Main Street Lumber
Main Street Millwork

Choosing the Right Exterior Doors for Your Home

Thank you for choosing Main Street Millwork! Providing you with a beautiful high quality exterior door that will stand the test of time is something that we take very seriously. That is why we're asking you to read the information below to ensure you are selecting the right door for the job. By following these guidelines and answering a few questions, you will be sure to enjoy your new door for many years to come:

About Doors in General:

1) What Door Types Are Available?

Exterior doors come in three primary types - Wood, Fiberglass and Metal.

2) What Are the Advantages and Disadvantages of Each Door Type?

Wood Door Advantages - Wood doors are natural, beautiful and versatile with many species available. They can be easily stained or painted for the desired appearance. Wood is a good natural insulator. Wood doors are available in a wide variety of stock sizes and styles or can be designed and custom built to your exact specifications.

Wood Door Disadvantages - Wood is hygroscopic, which means that it can swell, or contract based on the changing moisture level in the environment. Using wood doors with high or direct exposure to the elements can be problematic if not properly finished. ***Note - Painting wood doors black may void the warranty.**

Fiberglass Door Advantages - Fiberglass is hard to beat for durability. It is strong, dent resistant and will not shrink, split or rot. Fiberglass doors are good insulators and will not transfer heat and cold making them very energy efficient. Simulated wood grained fiberglass doors come in a wide variety of styles and grain options that can be stained to look like real wood. Smooth fiberglass doors also have many style options and are great for painting.

Fiberglass Door Disadvantages - Although there are now many style and glass options for fiberglass doors, it is important to point out that they are a mass-produced product and limited to the design molds that each manufacturer has available. Custom sizes and styles are not an option.

Metal Door Advantages - Metal doors will not swell or contract. They are durable and long lasting over time when a proper painted finish is maintained.

Metal Door Disadvantages - Metal doors are also a molded product. They are mass produced and limited to available design molds. They are paint grade only. Custom sizes and styles are not an option. Unlike fiberglass, metal is susceptible to denting. Metal doors can also rust if the finish is not properly maintained.

3) Is There A Size Difference Between Wood, Fiberglass and Metal Doors? - Yes. Wood exterior doors normally come in full height and width. (Example - A wood door that is called out as 3-0x8-0 would be a full 36"x96".) Fiberglass and metal doors are undersized. (Example - A fiberglass or a metal door that is called out as 3-0x8-0 would be 95-1/4" x 35-3/4".) This is important to know when replacing doors. We also need to know what your final door is going to be when we are asked to provide a temporary construction door to size the door frame accordingly.

4) Are Your Exterior Doors for New Construction or Replacement?

New Construction - Exterior doors for new construction typically require a complete pre-hung unit consisting of the door and frame (jamb). New door units are assembled in our shop to the proper specifications needed for your new build and are the safest way to ensure the best possible operation and fit. Knowing that you need exterior doors for new construction tells us that we should be able to provide industry standard sizes unless you require a custom design and build.

Replacement - When replacing existing exterior doors, the sizing could be quite different from today's new doors depending on their age. The width, height and thickness of your older doors may determine what type of new doors will work. For example; If your old doors are full height and width, or significantly under sized, fiberglass or metal doors probably won't work. You may need wood doors that can be sized to fit.

If you wish to replace just the doors only and not the frames, it is best to have someone qualified that can fit, bore and mortise them on site. Replacing complete units work best because it allows us to assemble them in our door shop to ensure the best possible operation and fit. Due to our production-oriented process, our machines are set to our standard hinge and bore locations, therefore we do not machine new doors to match older existing door specifications. You will need to have it done on the job or allow us to build you a new door unit.

5) What Exterior Door Types and Styles Are Best to Compliment Your Home?

Exterior doors come in many types and styles. Knowing the architectural style of your home, such as "Craftsman" or "Contemporary", will help us suggest options that may look best. You should also decide if you want some glass in your doors or would prefer them to be an all solid panel design. Although some doors have been created with a specific architectural style in mind, others like full glass doors can be used anywhere. When choosing exterior doors with glass, you should consider how much privacy, if any, is needed. Some doors come with clear or obscure glass options. The bottom line is to choose doors that fit your personal taste and needs.

6) Do You Plan to Paint or Stain Your Exterior Doors?

Answering this question will also help us narrow down your exterior door options based on material type and price. If you're wanting to go with wood doors, it's important to know that wood species vary greatly in characteristics and price. For example; Some woods are better for painting and are less expensive than stain grade hardwoods. If you are leaning toward fiberglass doors, you will need to go with textured wood grained fiberglass if you intend to stain them. If you're planning on painting your fiberglass doors, smooth fiberglass works best. Metal doors are smooth and paint grade only.

7) Where Will Your Exterior Doors Be Located?

This is one of the most important considerations when planning for your exterior doors. Exterior doors should always have an appropriate overhang or porch to protect them from the elements. The fact is, any exterior swinging door can leak in extreme weather conditions no matter the type. For example; In rare storm conditions where a door is subjected to a high pressure driving rain, water can be driven or forced around a wood door's raised panels. It is also possible for water to come between any type of swinging door and jamb under the same storm conditions. That said, any quality exterior door should perform well under normal conditions when it is properly finished and protected from rain and sun by an adequate overhang or porch.

Recommendations -

Wood exterior doors should only be used under deep covered entries, porches or adequate overhangs. If your wood door must be exposed to a moderate amount of sun and rain, maintaining the correct finish is critical to its longevity. **(See our exterior door warranty for finishing, maintenance and overhang requirements.)**

Fiberglass doors are best in locations that have more exposure to sun, wind and rain. Fiberglass doors will not crack, split or rot and water can't come around the raised panels because they are a one-piece molded product. It is however, still important to maintain the finish and have an adequate overhang to maintain the appearance and avoid other water penetration issues.

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Exterior Door Unit Installation, Finishing and Maintenance

Installing Exterior Door Units

The importance of properly installing exterior pre-hung door units cannot be overstated. You should only use qualified installers that follow best practice methods for exterior door unit installation to ensure proper fit and operation. There are several common jobsite issues that are out of our control that can affect how an exterior door unit will operate and perform. The installer should know how to work around these issues to achieve a quality installation.

These issues include:

1. The exterior wall for the door's rough opening is out of line or out of plumb.
2. The concrete slab or floor is out of level.
3. The rough opening for the exterior unit is to large or too small.

For exterior door units to operate and seal properly they must be **plumb, square and level**, even if the wall and opening are not. It is important for the installer to know how to compensate for this.

When setting the door unit in it's opening, proper caulking and sealing should be done underneath and around the threshold to protect against water infiltration.

When plumbing, squaring and securing the unit, wood shims or blocking should be used between the jamb and the rough studs along the top and both sides of the unit. This is especially important around the strike and hinges. Screws should be used to secure the jamb in the opening.

After the door unit is set, Fiberglass or foam insulation can be placed around the door unit between the jamb and studs to help with air infiltration. ***Important -** If you are using expanding foam insulation, be sure not to use too much. This can cause the door jamb to be pushed over from its proper position if it hasn't been secured properly. The result of this is a door that can bind or appear to tight in the jamb.

Once we deliver your exterior door units to the jobsite, we cannot control the actions of other subcontractors or the environmental conditions that occur. That is why it is important to take precautions to protect installed door units from damage and abuse. **(See "Good Doors Gone Bad")**

Finishing Exterior Doors

Wood Doors - Wood exterior doors are beautiful. They are however, a natural hygroscopic material that can shrink, swell or crack based on the available moisture in the environment. It is extremely important to follow the preparation and finishing steps below:

1. Inspect your door carefully for defects before finishing.
2. Lightly sand the door. The amount of sanding will depend on the desired appearance.
3. Remove all dust with a tack cloth before applying the initial finish.
4. Apply finish to the door immediately after fitting and hanging, but never during or immediately after high periods of moisture.
5. For staining, apply a high quality exterior grade stain to all exterior surfaces **including the top, bottom and sides** of the door, followed by the application of at least 3 (Three) coats of exterior grade polyurethane top coat with UV inhibitors.
6. For painting, apply a quality solvent-based primer to **all surfaces and edges**, followed by 3 coats of high quality exterior paint recommended by the manufacturer to be compatible with the Primer. ***Note - Painting Wood Doors Black May Void The Warranty.**

Fiberglass Doors - Today's fiberglass doors offer the look of real wood with the added benefit of greater durability. Although they won't shrink, swell or crack, it is important to follow the preparation and finishing steps below to ensure a realistic and durable finish:

1. Expect your door carefully for defects before finishing. ***Do not** sand textured fiberglass doors.
2. Before staining, wipe the door with mineral spirits to remove any dust or residue from the surface. Allow door surface to dry completely before applying stain.
3. Apply a premium quality oil based exterior stain suitable for fiberglass with a soft brush or rag. Wipe to desired tone with a clean lint free cloth.
4. After the stain has completely dried, (48 hours), apply 2 to 3 coats of a quality polyurethane with UV inhibitors. ***Note -** It is very important to finish and seal all surfaces including the top bottom and side edges of the door.
5. For painting, apply a quality acrylic-based primer to all surfaces and edges, followed by several coats of high quality acrylic latex-based exterior paint that is compatible with the primer.

Note - Not following these preparations and finishing steps may void the manufacturer's warranty.

Exterior Door Finish Maintenance

Maintaining a quality finish on an exterior door is critical to prevent water and sun from damaging the door's appearance and performance. Clean your door regularly with a soft slightly damp rag to prevent dust, pollen and mold from building up. The main goal is to keep the door's exterior finish from breaking down. It's time to apply a fresh finish coat whenever you notice any cracking or fading of the finish. How often this occurs will depend on the door's degree of exposure to sun and rain. Keeping a proper and adequate finish on your exterior door will allow it to perform and look good for many years.

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"Good Doors Gone Bad" Exterior Door Issues and Who's Responsible

Building exterior door units is much like raising good kids. During their early development you make sure they're strong and sturdy, you set strict guidelines and protect them from damage and harm. When the time is right, they're delivered to the world with high performance expectations.

That's our goal for the exterior door units that we build here at Main Street Millwork; however, just like kids, sometimes good doors can go bad due to detrimental interactions or a harmful environment. Since we can't control what happens to them once they leave our care, we can't be responsible for the issues listed below. Please review these common jobsite issues that cause good doors to go bad and how to avoid them:

These Issues Are the Customer's Responsibility:

Issue #1 - Poor or Improper Installation - This is the number one problem we see with exterior door units. Improper installation can lead to operational issues like dragging, difficulty with latching, binding and poor weather sealing. **To Avoid This:** Exterior doors should be installed by qualified installers only who follow best practice methods as described under the "Installing Exterior Door Units" section.

Issue #2 - Storing Doors in Exposed or Wet Areas - Exposing unfinished doors to high humidity or rain is a leading cause of warping and cracking. **To Avoid This:** Unfinished door slabs or units should always be stored in a dry and controlled environment. If possible, door slabs should be laid flat until they are finished. Do not leave door slabs leaning against a wall for long periods of time. This can cause them to warp.

Issue #3 - Finishing Doors During or Right After Very Humid Conditions - You should never finish a wood door during or right after a high humidity event. Doing this will trap moisture inside the wood. When this happens, the moisture will look for a way out as it dries and potentially warp or crack the door. **To Avoid This:** Wood doors should always be finished in a controlled and low humidity environment.

Issue #4 - Not Securing Door Units Properly During Construction - Doors that are not properly secured within their jambs while a home is under construction can result in costly damage. For example; A door that is not secured properly and left to blow in the wind can be damaged by constantly blowing open and slamming shut. **To Avoid This:** Install a construction lock to keep it latched and locked. If it does not need to be used for access during construction, you may want to also secure the door with a wood brace to prevent any use at all.

Issue #5 - Waiting Too Long to Apply the Finish - Installing exterior door units and leaving them unfinished and exposed for long periods during construction is very problematic. Wood that is exposed to the elements is subject to sun, rain and constantly changing humidity levels. This can cause grain raise, warping and splitting of the wood before and even after it's finished. **To Avoid This:** Never leave unfinished doors exposed to the elements for very long. Doors should be sealed and or finished in proper conditions within a few days after receiving them.

Issue #6 - Improper or Inadequate Finish - Doors that aren't finished properly will not provide adequate protection from sun and moisture. If water can penetrate a wood door or jamb it can cause rotting, splitting and warping. If the finish is not adequate to protect the wood from the sun it can dry the wood to the point of cracking and splitting. **To Avoid This:** Apply a quality finish to all surfaces and edges. Be sure to seal the top and bottom edge of the door to prevent water from soaking into the wood's open-end grain. **(See the "Finishing Exterior Doors" section)**

Issue #7 - Inadequate Overhang - It is never a good idea to have a swinging door on a wall without an adequate overhang or cover. This will expose the door unit to the full force of the sun, wind and rain. Even the best units can leak in this situation. In fact, Manufacturers will typically not warranty doors that don't have the proper overhang or cover. **To Avoid This:** Follow the overhang requirements detailed in our Exterior Door Warranty.

Wrong Type of Door for The Application - Using the wrong type of door in certain architectural situations is another common problem. For example; putting a wood door in a location that has a high exposure to direct sun and rain is sure to have maintenance challenges. Twin operable or fixed stationary French doors look great; however, installing them in a wall with no overhang is a terrible application because you will have leaking issues. **To Avoid This:** You should always have the appropriate overhang or porch. If there is no cover at all, you should consider using a window instead. If you must have a door unit in a fully exposed situation, it should be properly flashed and caulked, and you should consider using a fiberglass door with a composite frame that won't rot or split.

Mistreatment by Trades and Others - Another common issue is the damage from abuse that doors and door units take on jobsites. Here are some of the most common issues that we can't control:

1. Unsecured exterior doors being damaged by wind and slamming.
2. Trades and others scratching or gauging doors while taking equipment or material in and out.
3. Getting doors wet or getting overspray from texture or paint on them.
4. Breaking t-astragals and flush bolts on twin units by slamming doors while the bolts are extended. Also, trying to force flush bolts into place before the holes have been drilled and breaking the flip levers.
5. Damaging or tearing off door sweeps by dragging doors or running chords under them.
6. Damaging thresholds by trades running over them with wheel barrows or other equipment. Also, denting and scratching thresholds by dropping bricks or tools on them.
7. Scratching door glass while cleaning.

To Avoid This: Post signs and talk to your trades about these issues. Hold them responsible.

At Main Street, we do our best to ensure that you are delivered a quality product. We will always take care of our mistakes and repair or replace any item that we damage or is not up to standards. All we ask is that you do the same. As your door and trim material supplier, we consider ourselves a partner in your endeavor to build a quality home.