



**FLOOD**  
**SAFE**USA



# Commercial Flood Proofing Systems

**ASSESSMENT & CONSULTATION | FLOOD DOOR & WINDOW SOLUTIONS**

**FloodSafe USA, LP** is an industry leader in providing flood-proofing assessment, design, structural-enhancement, and project implementation of comprehensive built-in and aesthetically pleasing **commercial flood-proofing** within the USA.

**No human intervention is required prior to a flood event!**

**832.835.1872 • [FloodSafeUSA.com](https://FloodSafeUSA.com)**

**[info@floodsafeusa.com](mailto:info@floodsafeusa.com)**

# Commercial Flood Doors

Flood proof your business or building automatically with a FloodSafe USA Commercial Flood Door.

## DOOR TYPES

- Single or Double Door
- Custom Retrofit
- Full or Half-Lite
- Door/Sidelight
- Standard Utility Door



## Benefits

### ■ Custom Doors Available

Custom door size and designs may be fabricated to meet special requirements.

### ■ Automatic Protection

The FloodSafe USA Commercial Flood Door provides a continuous seal around the perimeter of the door panel for automatic protection against water infiltration when the door is in the closed position. No additional apparatus required for 24/7 protection when the door is closed securely.

### ■ Operates Like a Normal Door

FloodSafe USA doors look and function like a normal door, may be fitted with standard door hardware, and provide fully automatic protection.

### ■ Minimal Disruption To Business Operations

FloodSafe USA flood doors, and exterior wall floodproofing, are typically installed so that normal business operations may continue uninterrupted.

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# CASE STUDY

## Structural Analysis of a Fully-Submerged Flood Door

Door Maximum Dimensions (inches), W x H	Door Front/Back Sheet Metal Thickness, min.	Door Channel Perimeter Sheet Metal Thickness, min.	Door Top/Bottom Cap Sheet Metal Thickness, min.	Door Internal, Vertical Z-Stiffeners	Design Load Duration
<b>42 x 84</b> (larger can be fabricated)	<b>18GA; Galvannealed steel</b> (not stainless)	<b>16GA; Galvannealed steel</b> (not stainless)	<b>12GA; Galvannealed steel</b> (not stainless)	<b>20GA min; 6-in. O.C. max.</b>	<b>No Limit</b>
Door Frame	Door Frame Anchors to Structure	Design Water Depth relative to bottom of door	Allowable Water Depth relative to bottom of door	Design Uniform Pressure (psf)	
<b>16GA min; F-profile, Galvannealed steel</b>	<b>3/8-in. dia. min.; 24-in. O.C. max.; Galvannealed steel</b>	<b>102-in. max.</b>	<b>90-in. max.</b>	<b>217 max.</b>	



## SPECIFICATIONS

- Cold Rolled Steel (galvannealed steel and stainless steel optional).
- Welded Flood Door Hollow Metal Frames - 16 gauge (standard) -- optional gauges available.
- Door panels are 18 gauge w/ 16 gauge perimeter reinforcement.
- Three heavy-duty welded hinges per door.
- EDM continuous gasket at door panel perimeter.
- Minor seepage may occur (under normal conditions, seepage subsides as flood water rises).



# CASE STUDY



## Starbucks

### **It's the amazing story of survival for one Houston Starbucks in Meyerland**

—a store that was back on its feet serving up hot cups of coffee just days after Hurricane Harvey surrounded it with several feet of water.

<https://youtu.be/PfucrxqMOFk>

*Flooding caused by Hurricane Harvey*



## McDonalds in Knoxville

The featured image is a mural on a McDonald's wall in Knoxville. This franchise owner decided he wanted to add a second drive-thru lane to his store. He was informed that in order to obtain the building permit, he must first flood proof the building — which had never once experienced a flood! He was informed that the only way to do this was to level the site, raise it, and rebuild. That is when his architect found FloodSafe USA. We informed him that we could seal his walls and install flood doors for a tiny fraction of what he would spend tearing it all down and rebuilding...and he wouldn't lose a single day of business doing it! Needless to say, this franchise owner was very happy he found us!

# TESTIMONIALS



**This photo depicts an automatic floodgate holding back the flood waters of Hurricane Harvey in 2017.**

This floodproofing measure was installed after Memorial Day Flood of 2015 destroyed the lower level of the building. There is a commercial flood door in place as a backup in the event that water breaches the floodgate.

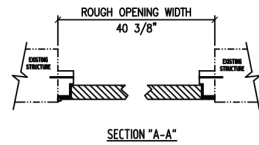
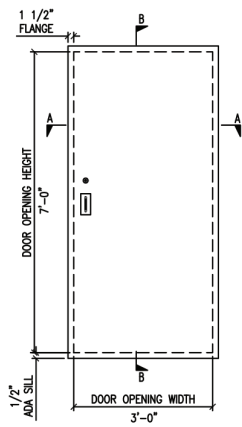
**-Braeburn Country Club, FloodSafe since 2015, Houston, Texas**

Following the Memorial Day Flood of 2015, the son of this elderly couple contacted us for floodproofing. Their home is located in the Memorial area of Houston and due to significant drainage issues in the area, their street is like a river when heavy rains come. Floodproofing was performed in the fall of 2015, and their home has successfully survived the Tax Day flood of 2016 and Hurricane Harvey in 2017. The wife told us, "this is one of the best decisions we have ever made, which is saying something for a 75 and 80 year old."

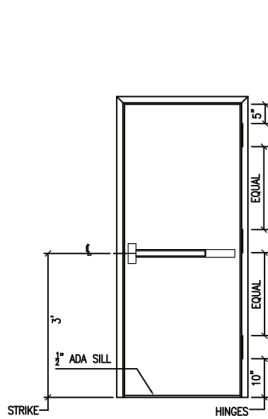
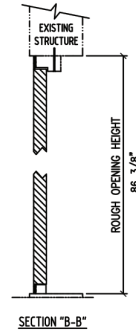
**-FloodSafe Client since 2015, Houston, Texas**

Having flooded three times before, this family decided they were not willing to go through that again. They proudly announced on Facebook after Hurricane Harvey in 2017 that their home was dry thanks to FloodSafe.

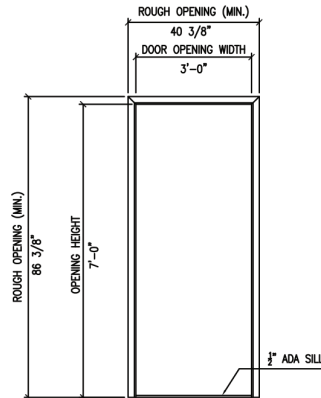
**-Martin Family, Houston, Texas**



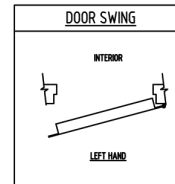
DOOR / ROUGH OPENING DIMENSIONS  
DOOR 1



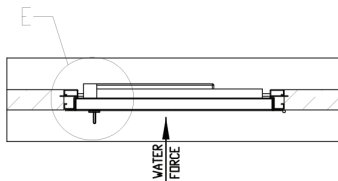
HARDWARE LOCATIONS  
(INTERIOR VIEW)



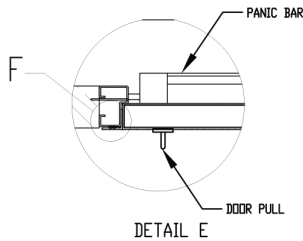
FRAME/OPENING ELEVATION



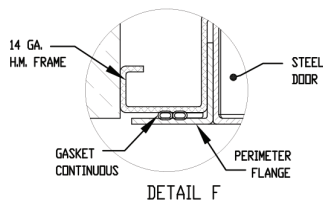
- NOTES:
1. DOOR MUST BE INSTALLED WITH SWING SIDE TO FLOOD WATER.
  2. SEE SHEET DD1 & DD2 FOR FLOOD DOOR DETAILS.
  3. BOTH MK101 DOORS L.H. SWING



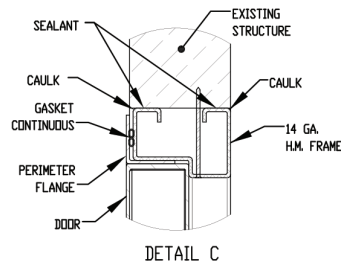
SECTION A-A



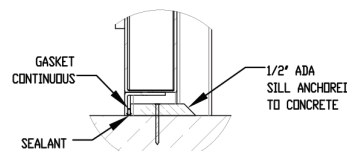
DETAIL E



DETAIL F

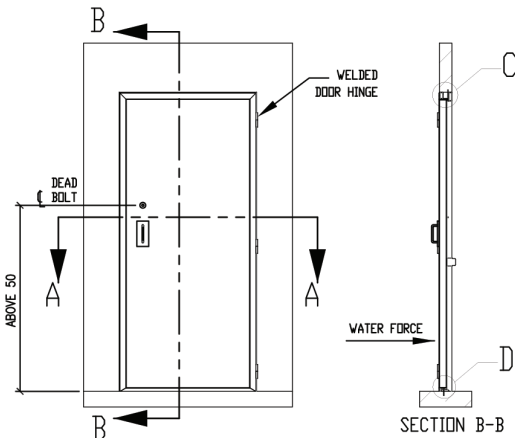


DETAIL C



DETAIL D

- NOTES:
1. DOOR MUST BE INSTALLED WITH SWING SIDE TO FLOOD WATER.



SECTION B-B

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# 2000 Series Flood Door

# Assessment & Consultation

## Residential & Commercial Assessments

FloodSafe USA will provide a total analysis of what you need to comprehensively protect your home or business from future flood damage. We work with your design and engineering teams for new construction to build the flood protection right into the structure, or we advise you directly on a retrofit of an existing structure. We combine expertise with our knowledge of proven flood proofing products, and then present you with the solution that best fits your needs. Our goal is to make sure you never flood again!

Very few professionals have experience in comprehensive flood protection. Doing it improperly can be very costly! Take all the guess work out of the equation and call in the professional. FloodSafe USA is a leader in flood assessment and implementation of flood proofing solutions.

### Let's Get Started!

Step #1: Request Your Building Assessment

Step #2: On-Site Measurement & Evaluation  
(or electronic via plans/drawings)

Step #3: Customized Flood Proofing Proposal with Cost Estimate

Step #4: Flood Proof Your Building

## Consulting Services

FloodSafeUSA provides consultation services electronically or in person, and most frequently we are hired for some or all of the following service tasks:

- ☒ Identify potential flood risks and oversights in new construction plans
- ☒ Identify potential flood risks and gaps in retrofit projects
- ☒ Recommended effective solutions for common flood risks
- ☒ Research uncommon conditions and create a custom solution
- ☒ Customize a comprehensive flood prevention proposal for any structure
- ☒ Oversee implementation of the proposed plan to ensure precise installation results for a "floodsafe" structure.
- ☒ Additionally, FloodSafe USA is able to implement most (if not all) of the proposed flood prevention solutions, so that you don't have to secure other specialty contractors.

FloodSafe USA will consult directly with you (or a designated individual of your choosing), and may also need to correspond with your architect/engineer/on-site managers.

For electronic consultation, please submit drawings, photos and direct contacts of on-site managers (for existing structures), and list specific service tasks you need him to complete. An estimate with his rate and a list of additional information required will be returned to you for your review and approval. You may submit this information to [info@FloodSafeUSA.com](mailto:info@FloodSafeUSA.com)



## CONTACT US

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