# Installation Guide: Frameless Models



7/1/2011, updated 4/26/2013 ©Ark Showers, Chicago IL. 800.275.3824 Congratulations on the purchase of your bathtub shower screen and thanks for choosing Ark Showers.

Your shower screen is designed to enhance the appearance of your bathtub shower and provide a satisfying showering experience for years to come.

The following description and photos explain how to install the bathtub shower screen.

#### Disclaimer

Ark Showers recommends that only trained professionals install our shower doors. Ark Showers warns its customers that the installation of shower screens performed by those who are not professionally qualified or trained to do so could result in serious bodily injury or property damage. Ark Showers accepts no responsibility for such damage or injury resulting from the improper installation of shower screens.

# **Contents**

Plan ahead!	4
Check the delivery contents	5
What is in the boxes?	5
Summary of installation procedure	5
Tools required	6
Beginning the installation	8
Attach the hinges to the glass	8
Mark the holes for the hinges	9
Drill the holes for fixing the hinges to the wall	.11
Fix the shower screen to the wall	.12
Fit the wall sweeps and bottom sweep	.13

#### Plan ahead!

It is important to take the following into consideration while you are planning a bathroom renovation project and before making a purchase:

- Our frameless shower screens weigh between 52 and 72lbs, depending on the model you choose. Consequently they need to be securely attached to the wall and the wall itself needs to be sound
- The weight of the frameless model is taken completely by 8 screws which attach the 2 hinges to the wall. (The weight of the semi-frameless model is taken partly by the tub, because the bottom of the continuous hinge rests on the tub ledge, and partly by the screws fixing the mounting bracket to the wall).

It is recommended to find a good contractor who can assess your particular situation and make any necessary wall preparations prior to the installation. Please contact us if you have any questions about your particular requirements and we'll do our best to advise.

## SAFETY WARNINGS - PLEASE READ BEFORE COMMENCING

- ➤ The frameless shower screen is both bulky and heavy (up to 85lbs in the packaging). It is recommended to use two able bodied people to move it. Failure to do this could lead to injury or damage to the screen.
- ➤ Tempered glass is considerably stronger and safer than regular glass. The tempering process creates balanced internal stresses which cause the glass, if broken, to crumble into small granular pieces instead of splintering into large, more dangerous jagged shards. Due to the internal stresses however, tempered glass cannot be modified (e.g. drilled or cut) and it should not be installed if there is any evidence of damage e.g. chips as this can cause the glass to shatter. Shattering may not take place at the same time the damage occurs, it can occur at some point in the future. So, DO NOT INSTALL THE SHOWER SCREEN IF YOU DISCOVER ANY DAMAGE TO THE GLASS, PARTICULARLY ALONG THE EDGES. Contact us instead.
- ➤ Work carefully and methodically when installing the shower screen to ensure that the glass does not come into contact with hard surfaces. The shower screen is precarious when resting unattached on the tub ledge while marking the holes and later, when screwing it to the wall. At least two people are required for these steps.

## **Check the delivery contents**

Your shower screen is shipped in two boxes, one large (the glass) and one small (the two hinges). Occasionally the large box suffers damage during shipping but damage to the contents is uncommon. As soon as conveniently possible, please inspect the boxes, especially the large box, for any signs of damage. If you do notice any damage to a box we would be grateful if you would retain all of the packaging and check the corresponding area of the contents after opening the box. In the unlikely event that you find your shower screen is not in perfect condition, please notify us as soon as conveniently possible so that we can rectify the situation. Thank you for your cooperation.

#### What is in the boxes?

You will find the following inside the cardboard boxes your shower screen was shipped in:

Large box (glass):

- 1. Glass shower screen
- 2. Packet of wall seals (3) and bottom seal

Small box (hinges):

- 1. Hinges (2)
- 2. Gaskets (4 gaskets per hinge, one thick and one thin for each side of the glass)
- 3. Screws and anchors (4 per hinge), hex key

Please inspect the contents of the boxes carefully to ensure that all the parts are there and that everything is undamaged and blemish free. Contact us (800 275 3824) if anything is missing and we will rectify the situation promptly.

# Summary of installation procedure

The shower screen is installed in six main steps:

- 1. Mount the hinges onto the glass
- 2. Offer the shower screen up to the wall and raise it up 3/8" (10mm) above the tub ledge using wooden shims (to create a gap for the bottom seal)
- 3. Mark the holes for drilling
- 4. Move the shower screen to a safe place and drill the 8 holes
- 5. Move the shower screen back into position and screw it to the wall
- 6. Attach the wall seals to the glass

Alternatively, installation can be simplified by the use of a template. This eliminates steps 2 and 4 above.

## **Tools required**

- 1. Variable speed electric drill specific requirements will depend on the tile you are drilling through; see table opposite for suggestions.
- 2. 5/16" (8mm) drill bit. It is recommended to use a pilot (e.g.  $\frac{1}{4}$ ") drill first; this helps to prevent the final drill from wandering when the hole is started and makes drilling easier, especially in hard materials.
- 3. Safety goggles for while you are drilling
- 4. Measuring tape
- 5. Pencil to mark the holes and vertical plumb lines
- 6. Sprit level (ideally long) for checking the walls, tub and shower screen are plumb/level and marking plumb lines
- 7. Philips screw driver, #2 to screw hinges to the wall
- 8. Mallet to tap the anchors into the holes (or a hammer and protective material e.g. a shim)
- 9. Shims to raise the glass to the correct height above the tub ledge. We recommend wooden shims because they don't slide as easily as the plastic shims. Alternatively, a 3/8" strip of wood can also be used to create this gap. It is important that the gap is at least 3/8"; if the gap is smaller than this then the sweep will fit too snugly causing it to bind on the tub and potentially leak.

\*The type of drill bits required depend on the material you are drilling into. Please refer to the table below for suggestions.

Material	Characteristics	Suggested	URL for Product	Comments
		drill bit	example	
Porcelain	Dense, hard,	Diamond		Higher silica content
	brittle	tipped		than ceramic, fired at
				higher temperatures
Ceramic	Similar to	Carbide	http://www.amazon.com	Higher clay content
	porcelain but	tipped	/Bosch-GT2000-Glass-	than porcelain. May
	less so	(brand new)	Tile-4-	also be possible to use
		or Diamond	Piece/dp/B001GNC8RI/r	a masonry drill bit at
		tipped	<pre>ef=cm_cr_pr_product_t</pre>	slow speed and without
			<u>op</u>	hammer action
Glass	Dense, hard,	Diamond	http://www.amazon.com	
	brittle	tipped	/Anytime-Tools-	
			<u>DIAMOND-GLASS-</u>	
			MARBLE/dp/B000HE9R	
			<u>04/ref=sr_1_3?s=hi&amp;ie=</u>	
			<u>UTF8&amp;qid=1293120873</u>	
			<u>&amp;sr=1-3</u>	
Marble	Relatively soft,	Diamond	http://www.amazon.com	
	often with	tipped	/Bosch-GT2000-Glass-	
	imperfections	(Carbide	Tile-4-	
	e.g. veins	tipped)	Piece/dp/B001GNC8RI/r	
			ef=cm_cr_pr_product_t	
			<u>op</u>	
Stone or	Hard	Masonry	http://www.amazon.com	Hammer action may be
Reconstit			/Bosch-HCBG800-	necessary
uted			<u>Granite-8-Piece-</u>	
stone			Hammer/dp/B0000TZYZ	
			C/ref=pd_cp_hi_2	

# Beginning the installation



1. It is useful to check how plumb the bathtub and the wall are prior to installation. Knowing this in advance will help with fine adjustments during the installation.

- 2. Find a place in or near to the bathroom to lay the shower screen box flat or on in a stable position on a long side.
- 3. Remove all of the external packaging and the lid. Cut the internal foam packing free. Place packaging (especially the banding) to one side to prevent tripping.



- 4. Remove the clear plastic from the glass. What remains is the glass resting on the packaging materials in underside of the box.
- 5. Inspect the glass, particularly along the edges, in good light to ensure that there are no chips or blemishes.

# Attach the hinges to the glass



6. Open the box of hinges and remove one hinge from the protective bag. Unscrew the two hex bolts holding the hinge plate to the hinge, using the hex key provided. Take care not to scratch the hinge or bolts.



7. Remove the hinge plate and two of the four gaskets (one slightly thicker and one thinner) and position the hinge in one of the cut outs of the glass, so that the two bolts will eventually face in the direction you prefer. Most people prefer to have the screws facing into the bathtub so that the flush side of the hinge is what is seen from the bathroom.

8. Replace the two gaskets, the hinge plate and the two bolts. Ensure that the gaskets and hinge are neatly aligned with the glass then tighten the two bolts down until hand tight.



# Mark the holes for the hinges

The shower screen should be positioned so that water runs from the bottom of the glass back into the tub. For 'standard' rectangular US tubs (rectangular outside shape) it is recommended that the shower screen be mounted parallel to the outside edge of the tub and above the middle of the tub ledge at it's narrowest part as shown.

If the tub has a wide ledge then the shower screen should normally be positioned closer to the inside edge to prevent water from collecting on the ledge.



It is important to install the shower screen with a gap between the bottom of the glass and the tub ledge, wide enough to enable the seal to function properly. The design gap is a little over 3/8" (10mm) and it is recommended that the gap be no less than 3/8".

- 9. Using a spirit level, mark vertical plumb lines on the wall to guide where the shower screen should be positioned to be plumb.
- 10. Place shims and/or a 3/8" spacer on the tub ledge, close to the wall and approximately 3 feet from the wall, sufficient to create a gap of at least 3/8" between the tub ledge and the glass while the holes are marked.

NOTE: The following steps require at least two, ideally three able bodied people

- 11. Carefully move the shower screen into position and adjust the shims until the glass is at the desired height. Ensure that the glass is plumb relative to the vertical plumb lines. Hold the glass still next to the wall and mark where the eight holes will be drilled for both the top and bottom hinges.
- 12. Carefully move the glass out of the way while you drill the holes.

## Drill the holes for fixing the hinges to the wall

5/16" (8mm) holes are required for the anchors supplied and it is recommended to build up to this size with one or two smaller holes first. It is important to select the right drill bits for the job.

#### **DRILLING SAFELY**

- > Use eye protection when drilling
- > Ensure that there are no electrical or water supplies behind the wall where the holes will be drilled

#### **DRILLING TIPS**

- If the tile has a very smooth, glazed surface, masking tape applied where the holes will be drilled can help prevent the drill bit from wandering until it has penetrated the glaze.
- > Start each hole slowly building up the speed when the drill bit begins to run smoothly and in the right line.
- > Don't push too hard on the drill, this may cause the tile to crack.
- > Don't allow the drill bit to overheat:
  - keep the drill speed down and take frequent breaks to allow the drill bit to cool off
  - use a water spray (like those used at the hairdresser) to assist with cooling. Be careful not to direct the spray at the drill because this could lead to electric shock.
- Fix a plastic bag under each hole before it is drilled to collect the debris.

It may take some time to drill the holes so be patient, don't push too hard on the drill

13. With the eight holes drilled, press the anchors fully into the holes



### Fix the shower screen to the wall

NOTE: This requires two able bodied people

- 14. Carefully lift the shower screen into position, adjust the shims/spacers again and line the hinges up with the holes.
- 15. Start by tightening one of the screws on the top hinge about half way home then repeat with one of the screws on the bottom hinge. This will prevent the shower screen from moving to the side while the remaining screws are tightened. Work carefully to prevent damaging the finish on the screw heads or scratching the hinge surfaces. It is easy to scratch the hinge surfaces while tightening the screws because they are very close to one another. Inserting a shim between the screw and the hinge prevents this. All eight screws should be hand tight at the end.



16. Once the shower screen is secured to the wall, ease the shims/spacers out from underneath the glass.

## Fit the wall sweeps and bottom sweep

Sweeps are provided for above, between and below the hinges and below the bottom of the glass. The most important seals are the bottom wall seal and the bottom seal; not much water lands where the top and middle wall seals are, so you may wish to try using the shower screen without them and add them later if needed.



The recommended way to install the bottom seals is to attach the bottom wall seal so that it is touching the tub and install the bottom seal so that it butts up against the wall seal. The sides of the bottom wall seal (which grip it to the glass) can be cut back/notched to allow the bottom seal to attach closer to the wall, see photo opposite. Cutting the seals requires a sharp utility knife and it is better not to try to 'saw' the plastic, rather to use repeated cuts/strokes in the same direction until the knife gets through. Take time to cut the seals and please contact us if you need more.

(The method suggested in the video on our website, <a href="http://www.arkshowers.com/frin1.html">http://www.arkshowers.com/frin1.html</a>, is to attach the bottom seal so that it is close to the wall and attach the bottom wall seal so that it butts up against the top edge of the bottom seal. The benefit of this method is that the bottom seal is able to perform its function all the way up to the wall but the downside is that the bottom seal can foul on the wall when the glass is opened, so it is not recommended if you plan to open/close the glass. Moving the bottom seal away from the wall alleviates the foul but leaves a gap between the end of the bottom and the wall, where water can escape).

- 17. To install a seal, open the shower screen as far as possible either into or out of the bathtub.
- 18. Starting at one end and working to the other end, press the seal a little at a time until it sits snugly on the glass. A little water wiped on the glass or seal beforehand can make this job easier.





This completes the installation. We hope you enjoy your Ark Shower Screen; we stand by our products so please contact us if you have any questions or concerns about your shower screen in the future.