



EarthMinded™

RainRouter™ Multi-Function Diverter System

User Guide v.1

Turn a downspout into a spigot when it rains!

Warnings Regarding Potential Hazards

PLEASE REFER TO HAZARD WARNINGS BOOKLET FOR MORE INFORMATION AND RETAIN THIS BROCHURE FOR FUTURE REFERENCE.

Drowning Hazard



Installation Hazard



Electrocution Hazard



Infestation Hazard



Tipping Hazard



Wear Safety Glasses



Contamination Hazard



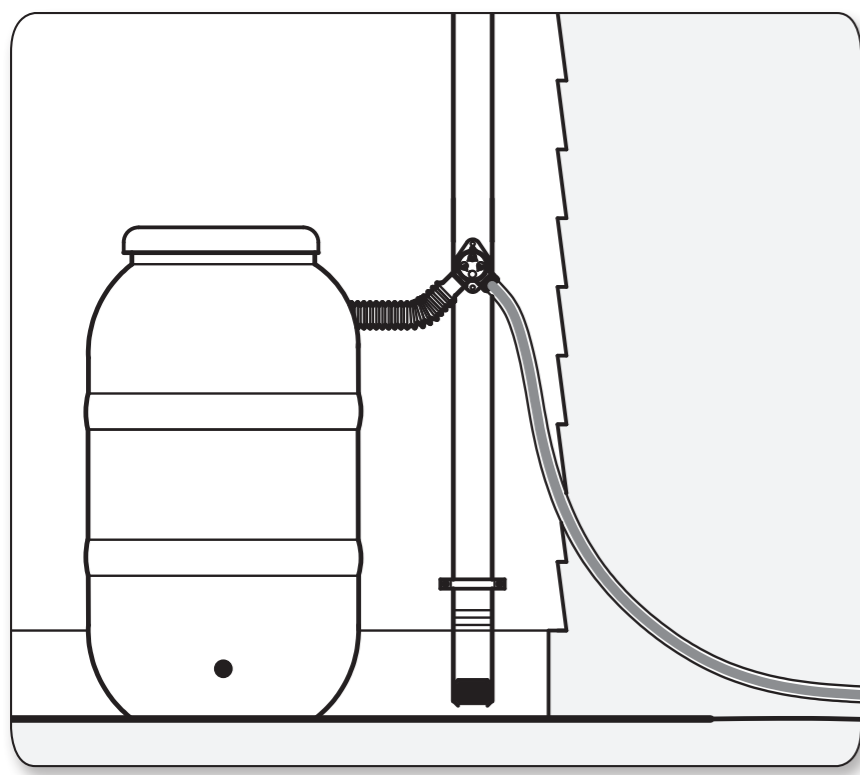
Wear Safety Gloves



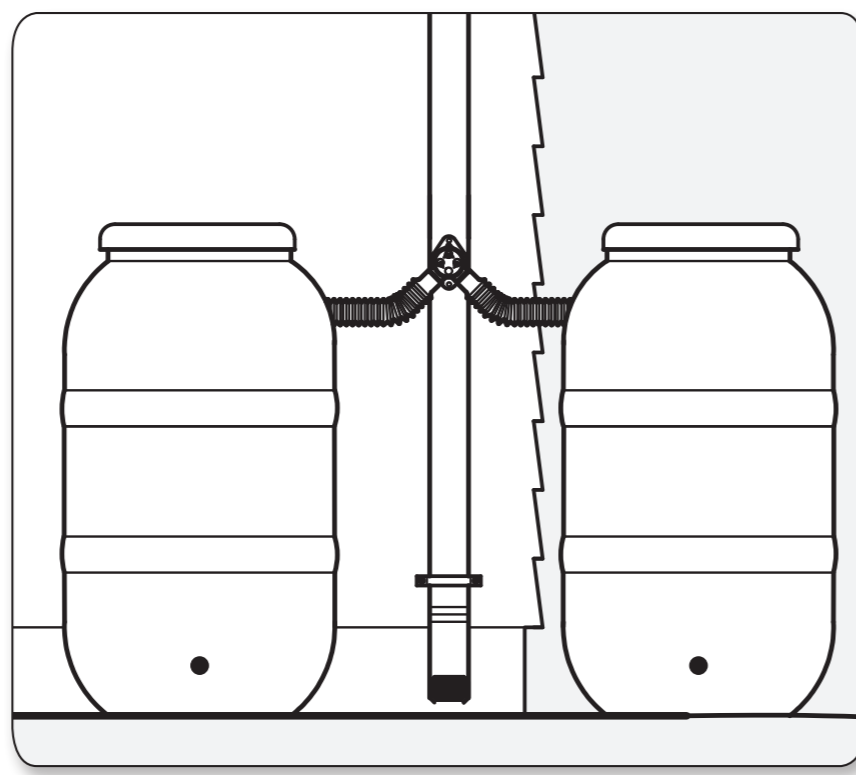
1 About the RainRouter Multi-Function Diverter System

This kit includes all parts needed to add a state-of-the-art diverter system to a rain barrel. The RainRouter Multi-Function Diverter System can be used to send rainwater from a downspout to multiple collection spots. The RainRouter system lets you connect two (2) garden hoses, a garden hose and a rain barrel, or two (2) rain barrels to a single installed diverter. A rain barrel can also be located to a more convenient location, such as the center of a garden, using a garden hose to connect the rain barrel to the downspout.

Some areas prohibit the use of rain barrels. Please check local regulations before installing.



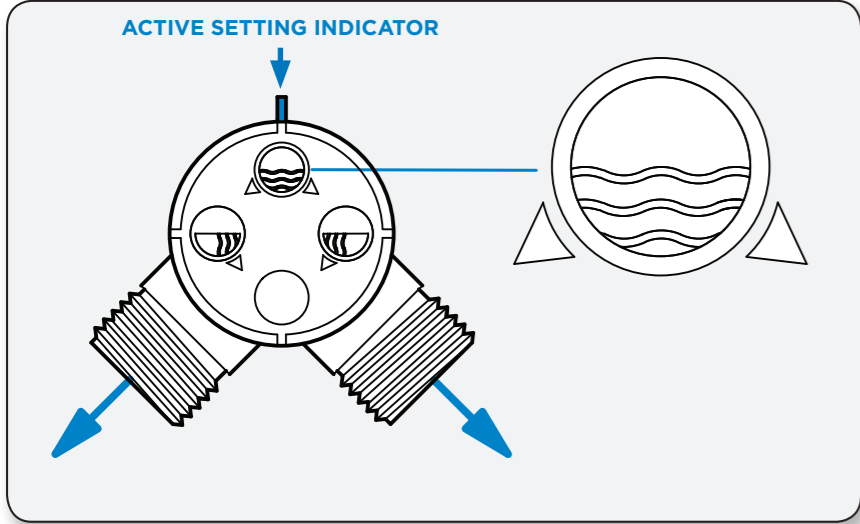
Rain barrel and garden hose



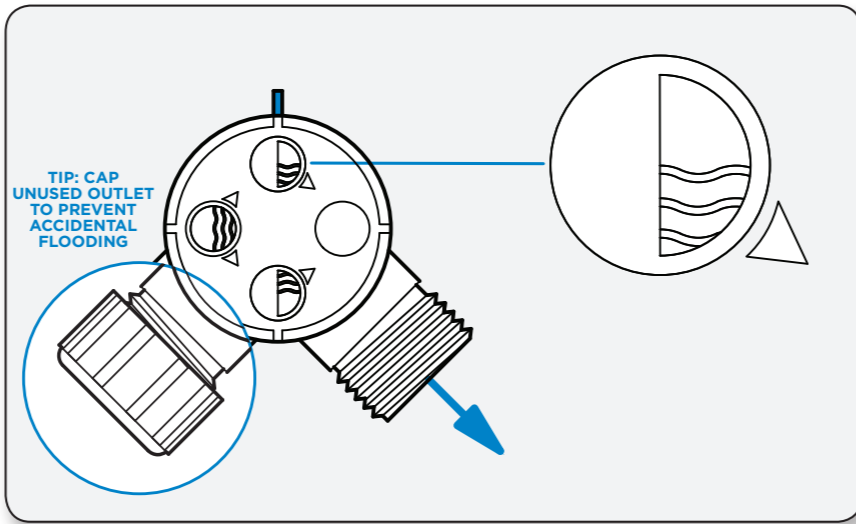
2 Rain barrels

2 Operating settings

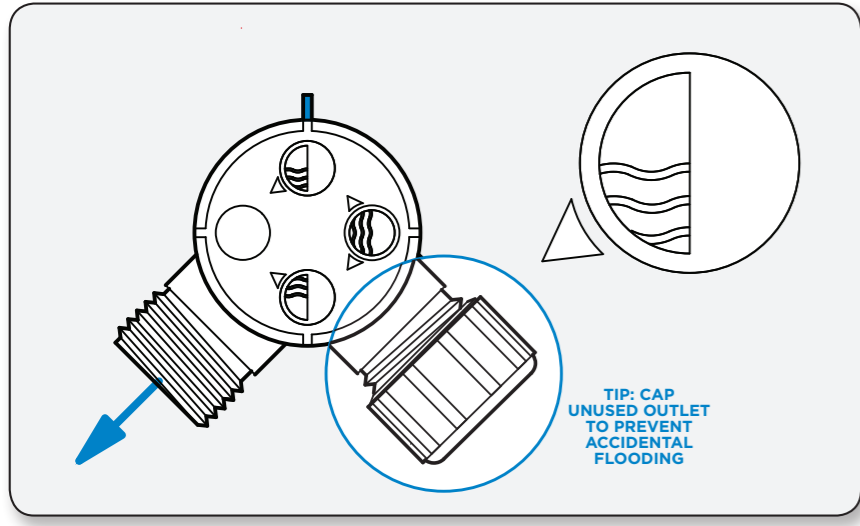
Water flows to both outlets



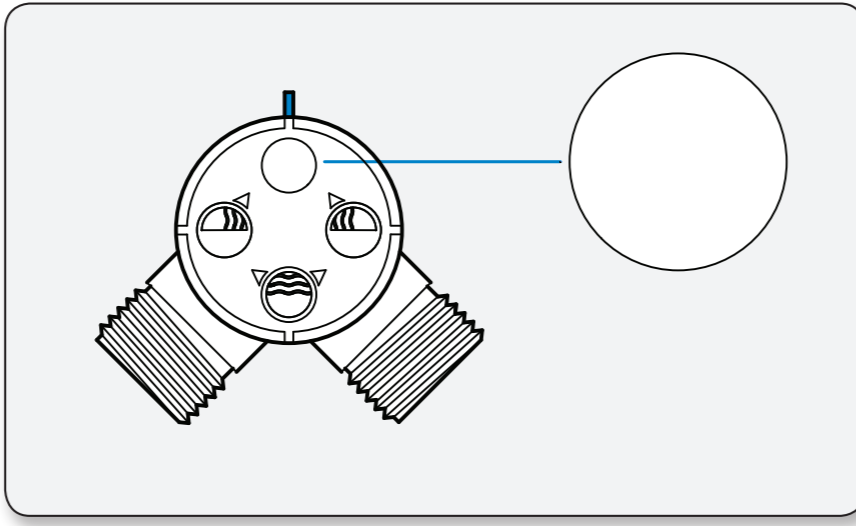
Water flows to right outlet only



Water flows to left outlet

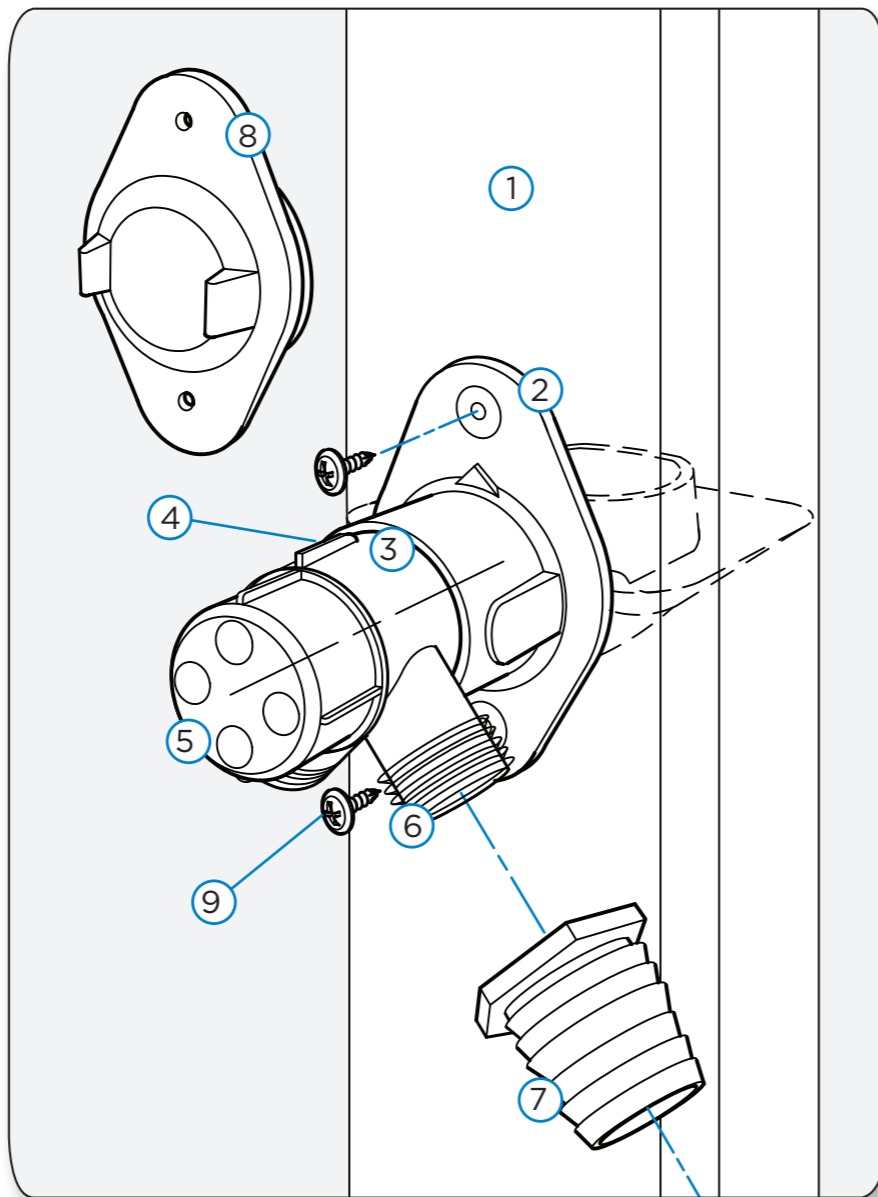


No water flow to outlets, water automatically bypasses the downspout



3 Assembly diagram

- Downspout
- FlexiFit™ diverter
- Valve housing
- Active setting indicator
- Selector dial
- Garden hose connection
- Multi-hose adaptor connects to:
 - 1-1/2" (38mm) and 1-1/4" (32mm) diameter bilge hose
 - EarthMinded rain barrel fill hose
 - Male end of a garden hose
- Winter hole cover
- Self-tapping screws



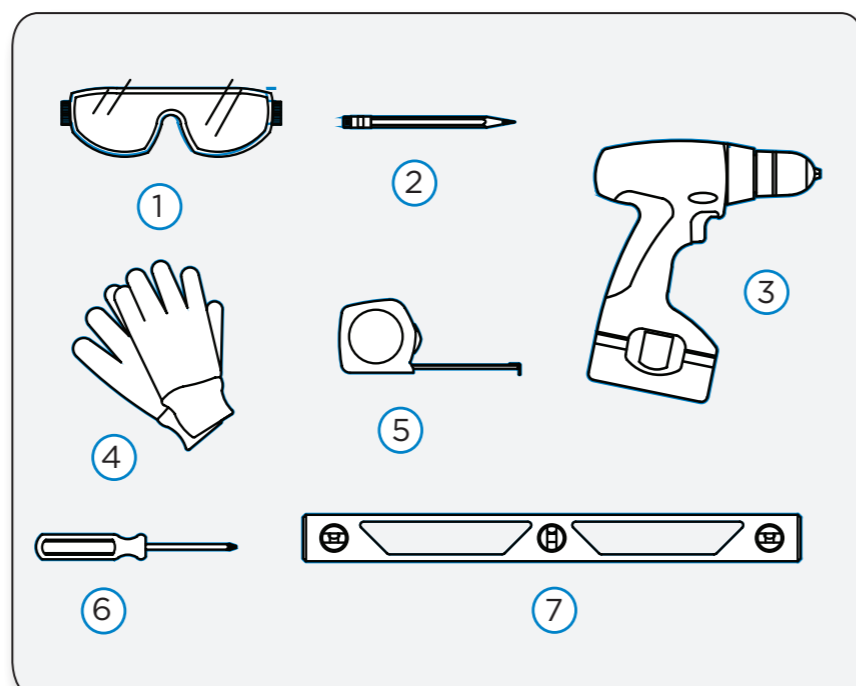
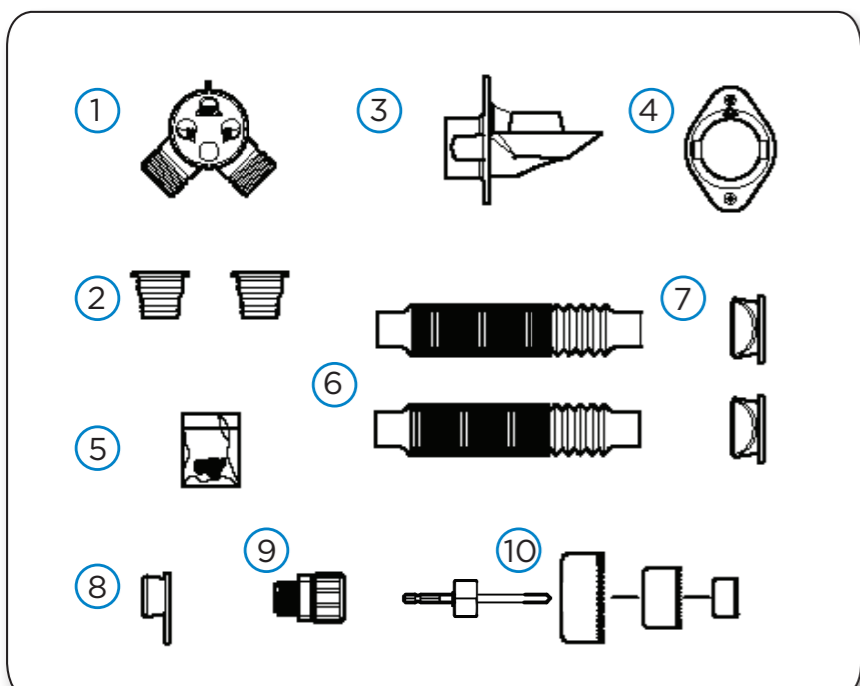
4 Contents

- RainRouter selector valve
- Multi-hose adaptors (2)
- FlexiFit™ diverter
- Winter hole cover
- Screws (2)
- Fill hoses
- Fill hose seals
- Threaded seal
- Garden hose connection assembly
- 3 pc. hole saw set
- User guide (not pictured)
- Hazard warnings booklet (not pictured)

Tools needed

- Safety glasses
- Pencil or marker
- Drill
- Safety gloves
- Measuring tape or ruler
- Phillips screwdriver
- Level

The cutting edge of the hole saw is sharp and presents a hazard. It must be used only as directed in this User Guide.



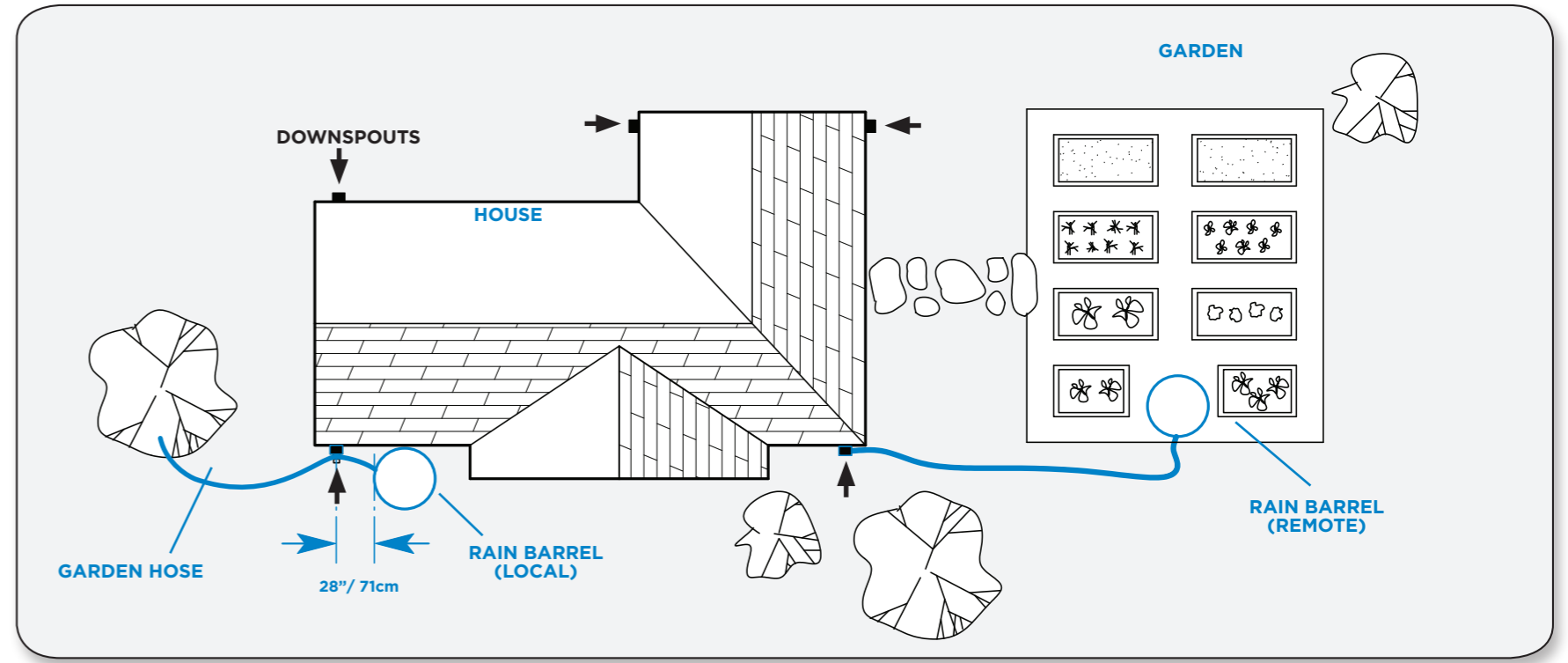
5 Planning

A. Planning for new local installations:

Select a downspout on which to locate the RainRouter selector valve, keeping in mind the route to the areas that you intend to send the water to and elevation changes or obstacles along the path of the hose. For garden hose or remote rain barrel installations, it is recommended you lay out the hose before installing the diverter. For conventional rain barrel installations, refer to the instructions included with your EarthMinded rain barrel.

B. Planning for new remote installations:

A rain barrel can be located away from a downspout to a different location such as the center of a garden by using a garden hose to connect a rain barrel to the downspout. Follow the instructions in this guide for marking the height of the diverter instead of the instructions in the EarthMinded rain barrel user guide.



6 About the FlexiFit diverter

DO NOT CUT THE DOWNSPOUT UNTIL READING THE ENTIRE GUIDE!

The FlexiFit diverter redirects water from your downspout to the barrel and automatically passes water through the downspout when the barrel is full of rainwater. The diverter is installed in a hole that is cut in the downspout.

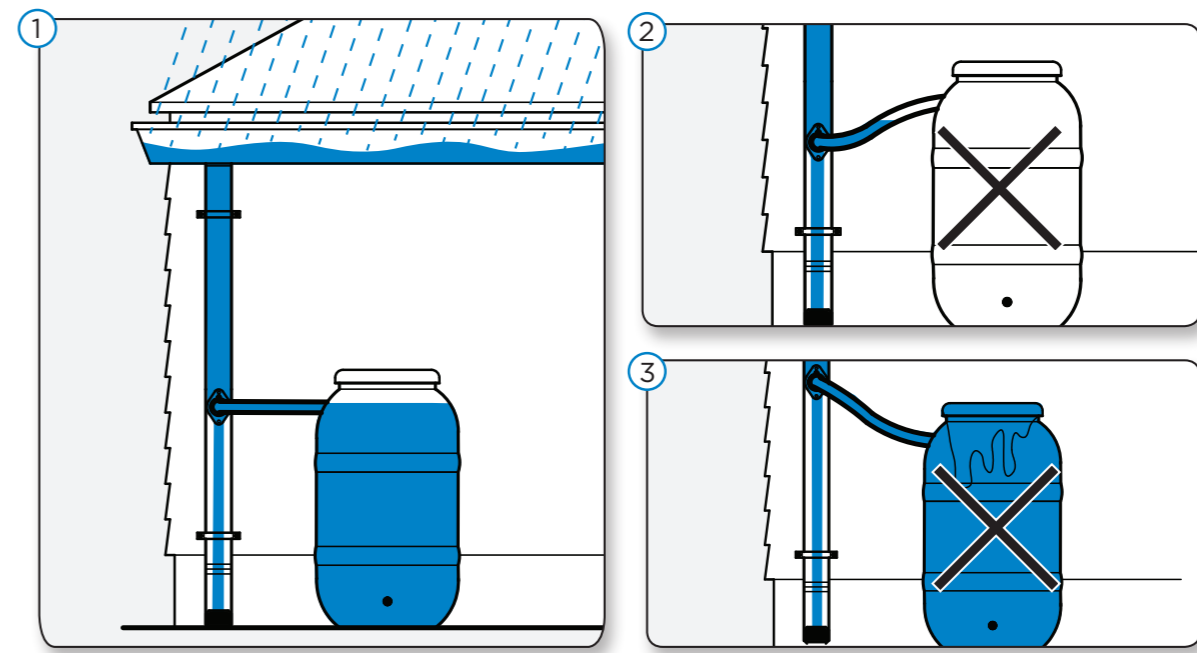
- The hole must be cut at the correct height for the diverter to work properly.
- If the diverter is installed too low, the barrel will not fill properly.
- If the diverter is installed too high, water will overflow from the rim of the barrel (this only applies to open top barrels).

IMPORTANT: There are two ways to install the diverter depending on the type of barrel you use. If the barrel is a sealed container without a lid or screen, the diverter can be located at the same level as the rim of the barrel or higher. This will improve the filling efficiency of the diverter.

If the barrel has a removable lid or screen, the center of the diverter hole must be drilled 3" (76mm) below the level of the rim of the barrel to prevent water from leaking from the lid seam or screen. The diverter will not work if it is placed below the level of the water inlet on the barrel.

The diverter provided in this kit is not for use with round downspouts.

A round downspout diverter available as an accessory at www.earthmindedconsumerproducts.com



WARNING

Damage to home or property may occur if improperly installed.

7 Easy diverter installation method

This method does not automatically bypass water to the downspout

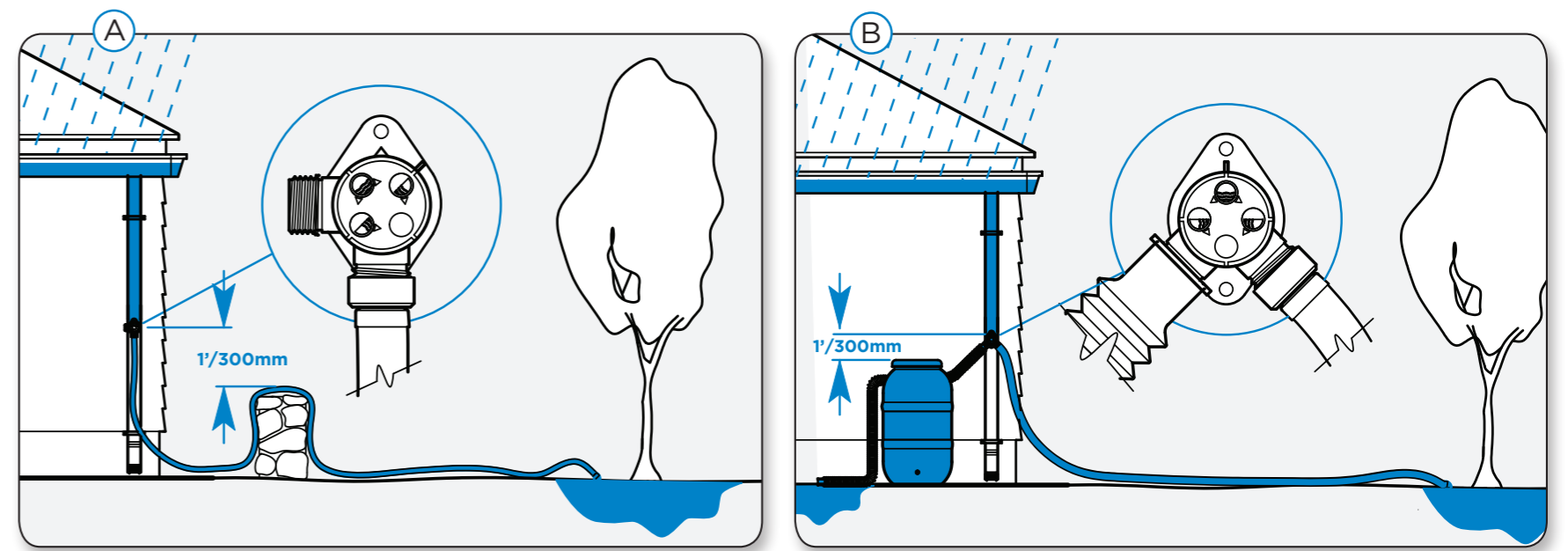
During rain, the water will continue to flow to this location unless the selector valve is set to the OFF mode.

A. For use with garden hose(s) only, without a rain barrel connection

Make a reference mark on the downspout where you will install the diverter as high as is convenient, at least 1' (300mm) above the highest point in the hose run.

B. For connecting a sealed rain barrel, or a rain barrel with an overflow hose where flooding is not a concern

Make a reference mark on the downspout where you will install the diverter as high as is convenient, at least 1' (300mm) above the level of the rim of the barrel or highest point in the hose run. The barrel will overflow when full. If flooding is an issue, use the precision installation method or attach an overflow hose near the rim of the barrel.



8 Precision diverter installation method

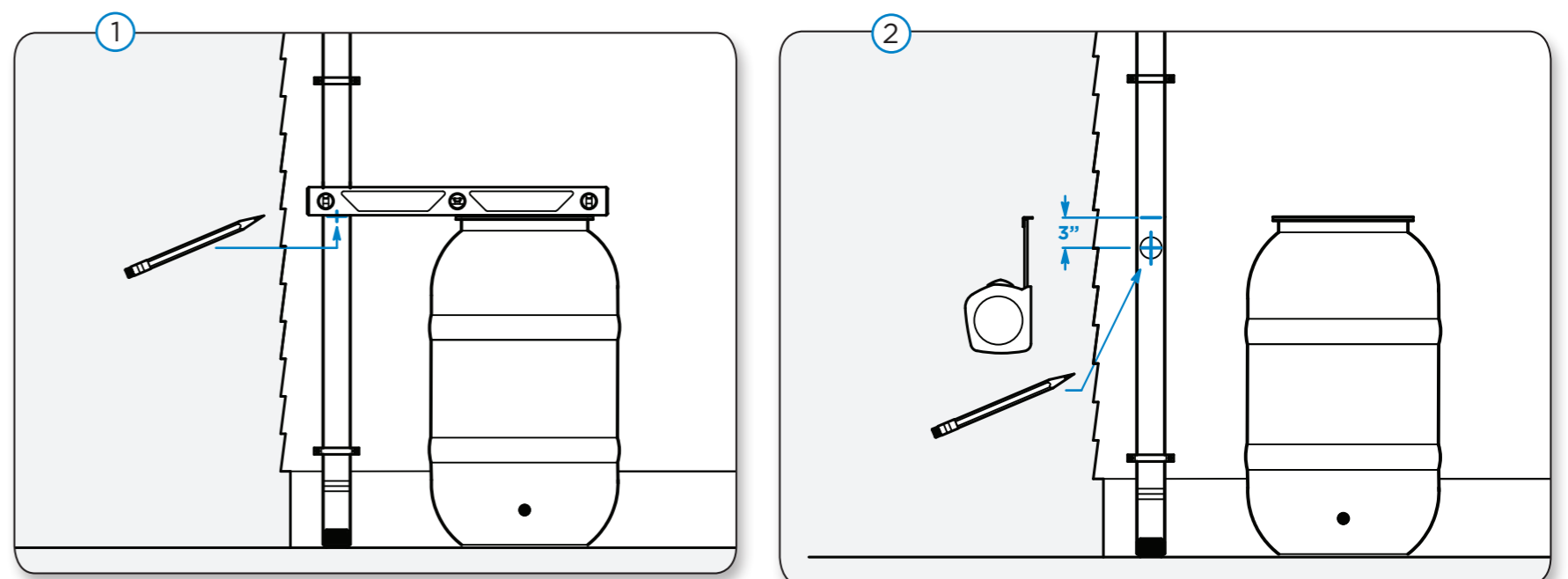
This method is recommended for:

- Connecting rain barrel(s) using the FlexiFit diverter's automatic bypass function
- Connecting both a rain barrel and a garden hose

- If the barrel is going to be installed near the downspout, place a level on the rim of the barrel, and mark the height of the rim of the barrel on the downspout.
- Measure down 3" (76mm) below that mark - this will become your reference mark for drilling the hole in the downspout.

When installing both a local and a remote barrel, measure from the rim of the barrel nearest the downspout (local rain barrel) and be sure to use a sealed barrel or install an overflow hose to the remote barrel.

Note: The height of the top of the diverter will dictate the fill level of the rain barrel. If it is above the rim of the barrel, the barrel will flood. If it is below the rim of the barrel, the barrel will only fill to the height of the diverter.



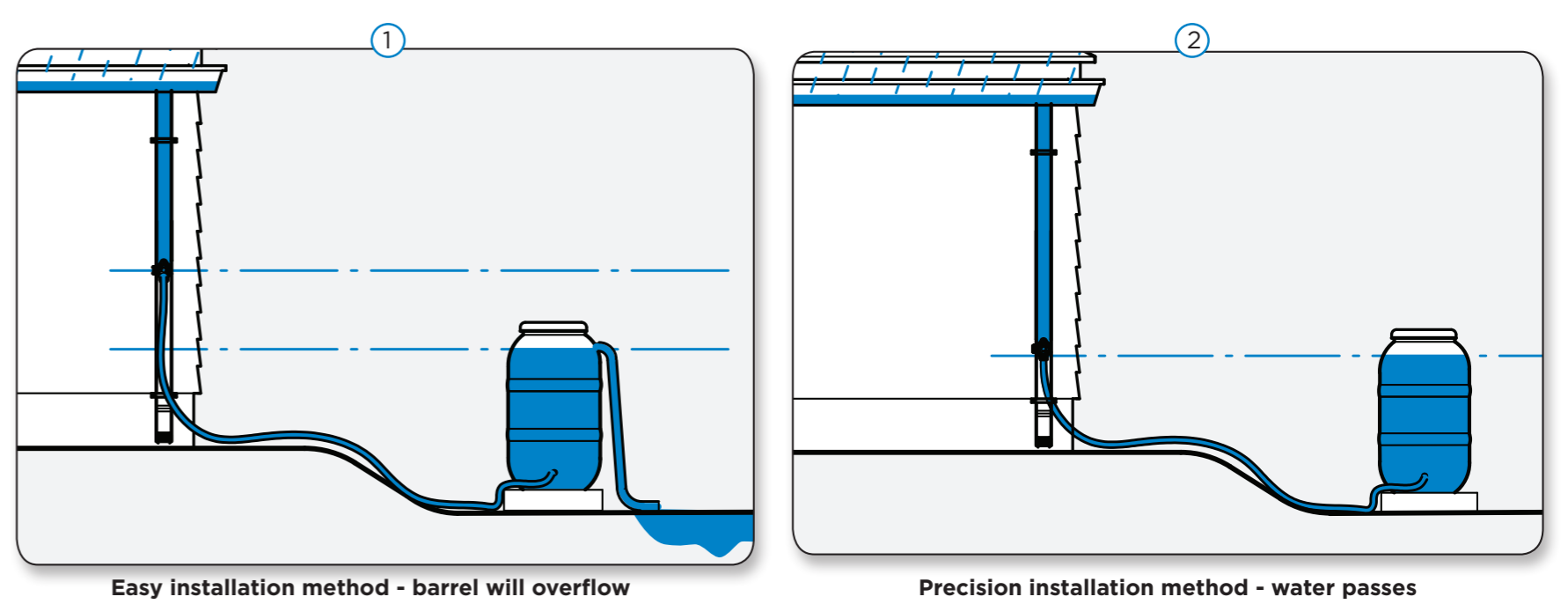
9 Remotely locating a rain barrel

A rain barrel can be located away from a downspout to a more convenient location such as the center of a garden by using a garden hose to connect the rain barrel to the downspout.

- For the easy installation method, fitting an overflow hose to the barrel is recommended.

For the precision installation method follow the special instructions for marking the diverter height at the downspout. When installing a top-fill rain barrel, the overflow hose will need to be removed and plugged to maintain the automatic bypass function and discourage infestation. If two (2) barrels are connected, the rims of both barrels need to be at the same height or the lower barrel will overflow.

For garden hose or remote rain barrel installations, the entire hose length must be lower than the level of the diverter or water will not flow to the collection spot.

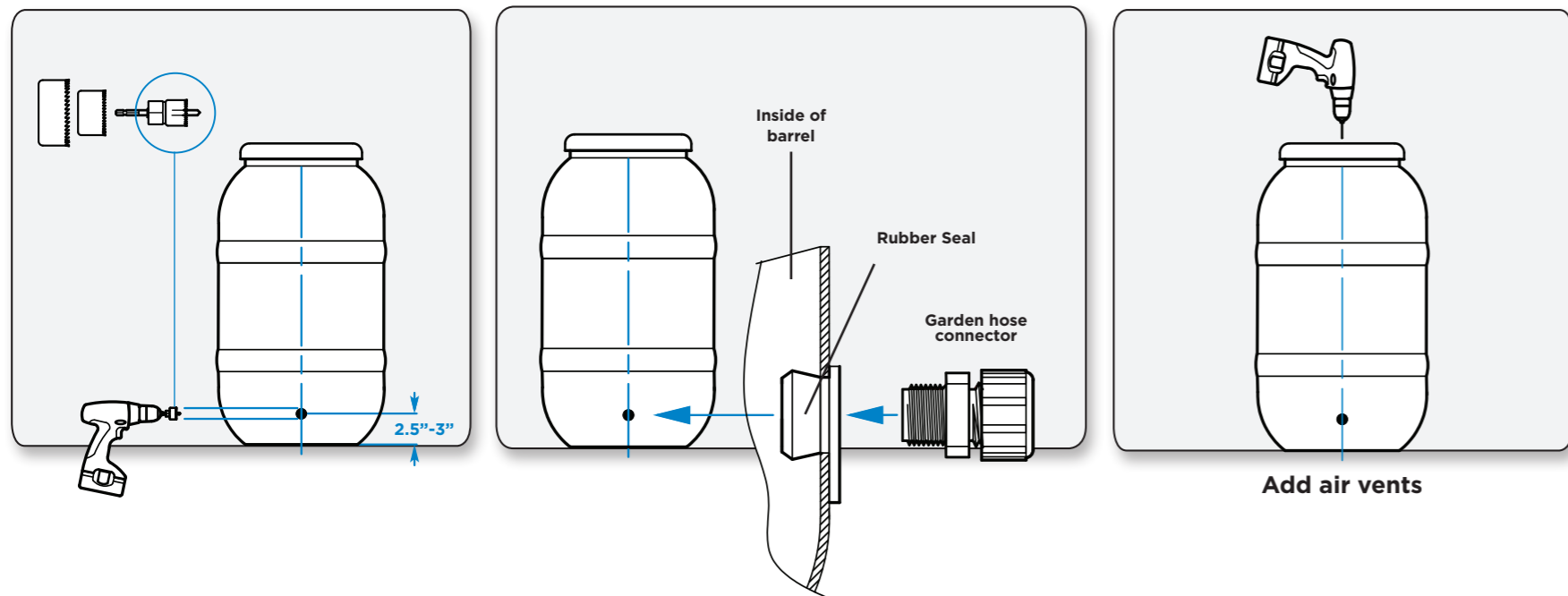


10 Installing the garden hose fitting for remote installations

The remote rain barrel will fill using a garden hose connected to the bottom drain. If your barrel does not have a bottom drain, install the garden hose connector provided.

1. Consider the path of the hose when locating the garden hose connector.
2. Measure approximately 2.5" (65mm) up from the bottom of the barrel and mark the center for the hole.
3. Drill a hole using the (SMALL) 1-1/4"(32mm) hole saw included in the set.
4. Insert the threaded rubber seal into the hole. Pinch the seal into a "U" shape for easier insertion.
5. Thread the garden hose connector into the seal until the hex collar sits firmly against the seal. Soapy water or hand lotion on the threads will reduce friction and improve fit.

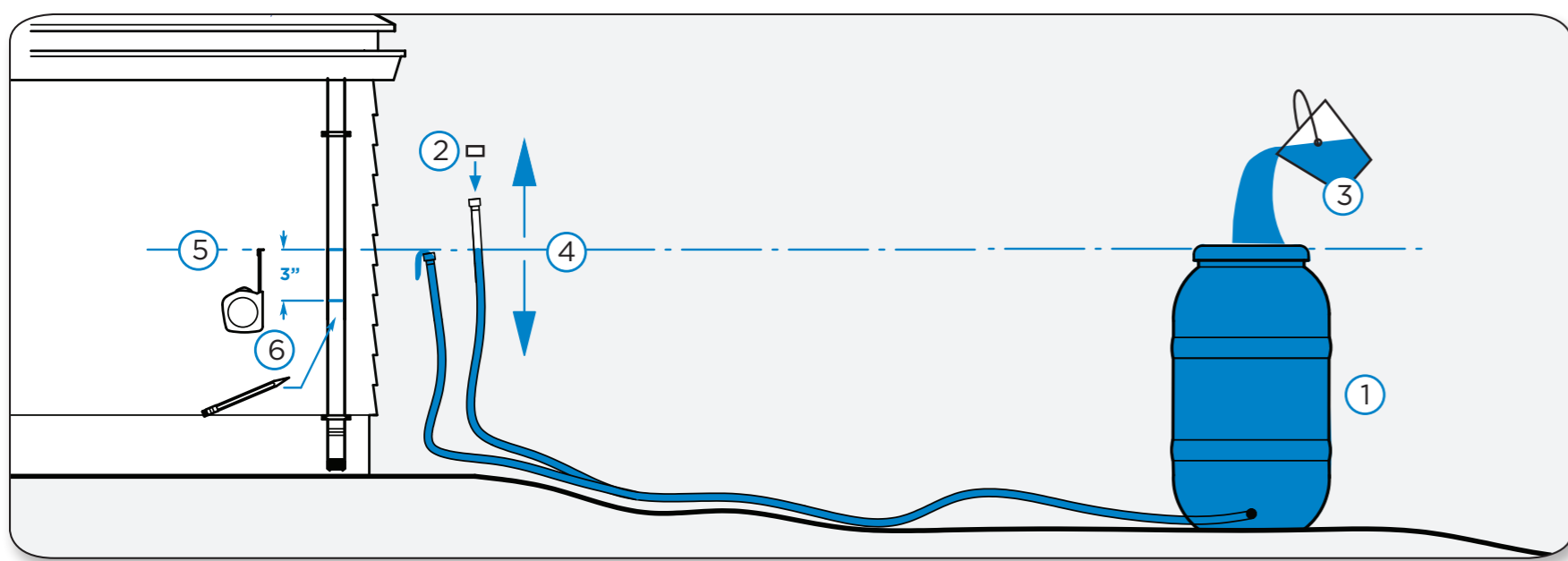
When remotely locating a sealed barrel (no removable lid), you will need to add air vents to allow the barrel to fill. Drill a few small holes into the top of the barrel with a 3/64" (1.45mm) or smaller drill bit to allow air to escape while discouraging infestation.



11 Marking the diverter height for remote installations

Special instructions for marking the diverter height at the downspout for new remote installations

1. Place the rain barrel in its intended location, which should be on a solid and level base. Remove the cap from the bottom drain and attach the female end of the hose to the barrel.
2. Screw the cap on the male end of the hose and run it to the downspout. This is how the hose will connect to the RainRouter diverter system.
3. Fill the barrel with water to the the rim.
4. Raise the end of the hose near the downspout and remove the cap. Slowly lower the hose until the water is just level with the end of the hose. This indicates the level of the barrel rim at the downspout. Slowly raise and lower the hose a second time just to verify.
5. Make a mark on the downspout at this level.
6. Next, measure down 3" (76mm) and make a second mark. The second mark will now be your reference mark for the diverter height.



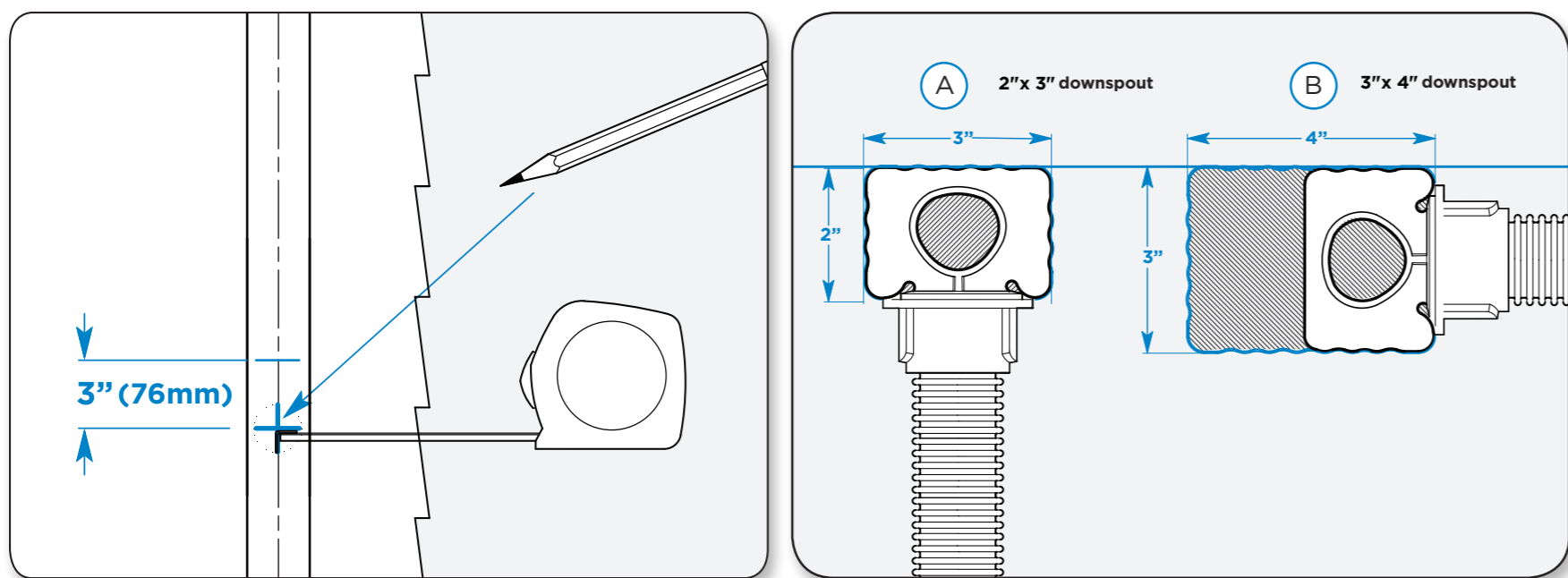
12 Marking the FlexiFit diverter hole

Using the reference mark on the downspout, measure and mark the horizontal center point on the 3" (76mm) side of the downspout.

For 2"x 3" downspouts, this will be the front face. (Fig.A)

For larger 3"x 4" downspouts, it will be the narrow side. (Fig B)

*Water capture percentage is reduced with 3"x 4" downspouts

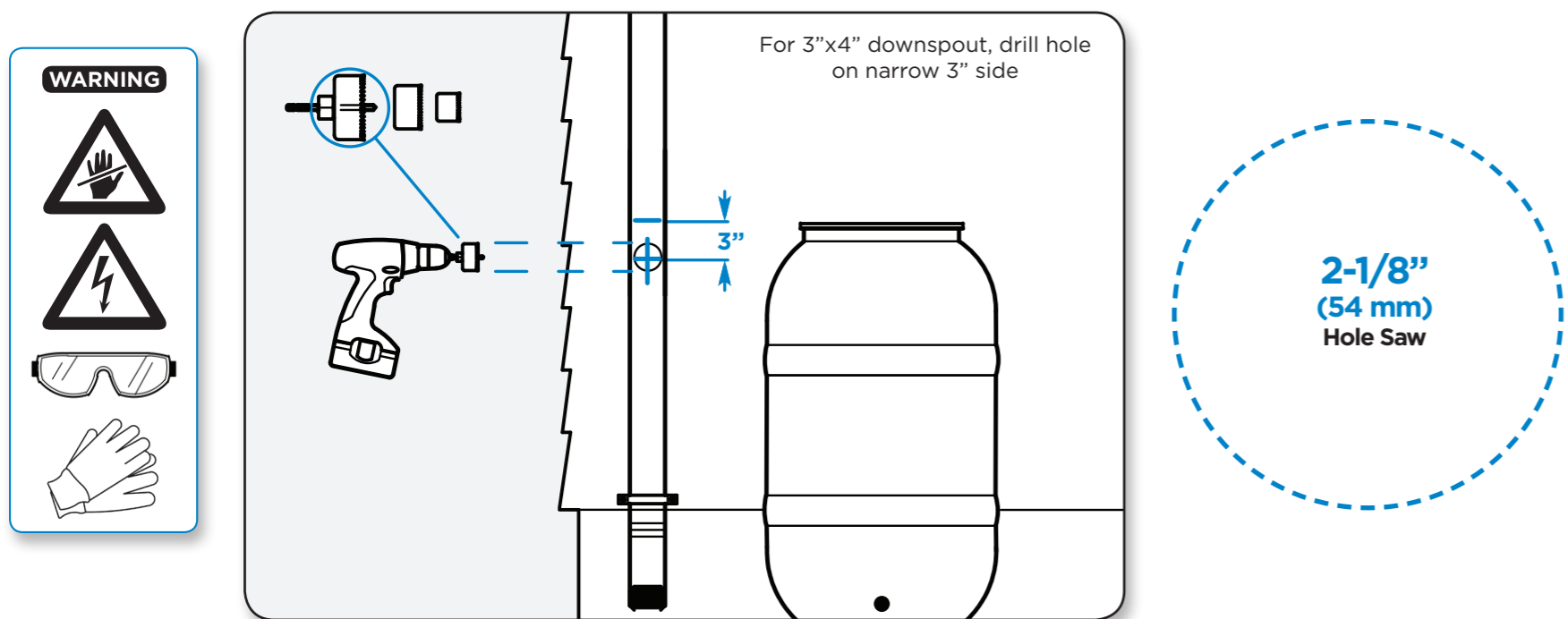


13 Drilling the hole for the FlexiFit diverter

1. Drill a hole in the downspout with a 2 1/8" (54 mm) hole saw. The center bit of the hole saw should align with the center point marked on downspout. After drilling, carefully remove the hole saw to prevent the cut-out piece from falling into the downspout.
2. When cutting, do not force the drill. Cut slow and steady. Hold the drill with both hands.

The cut edge of the downspout can be sharp. Wear protective safety gloves.

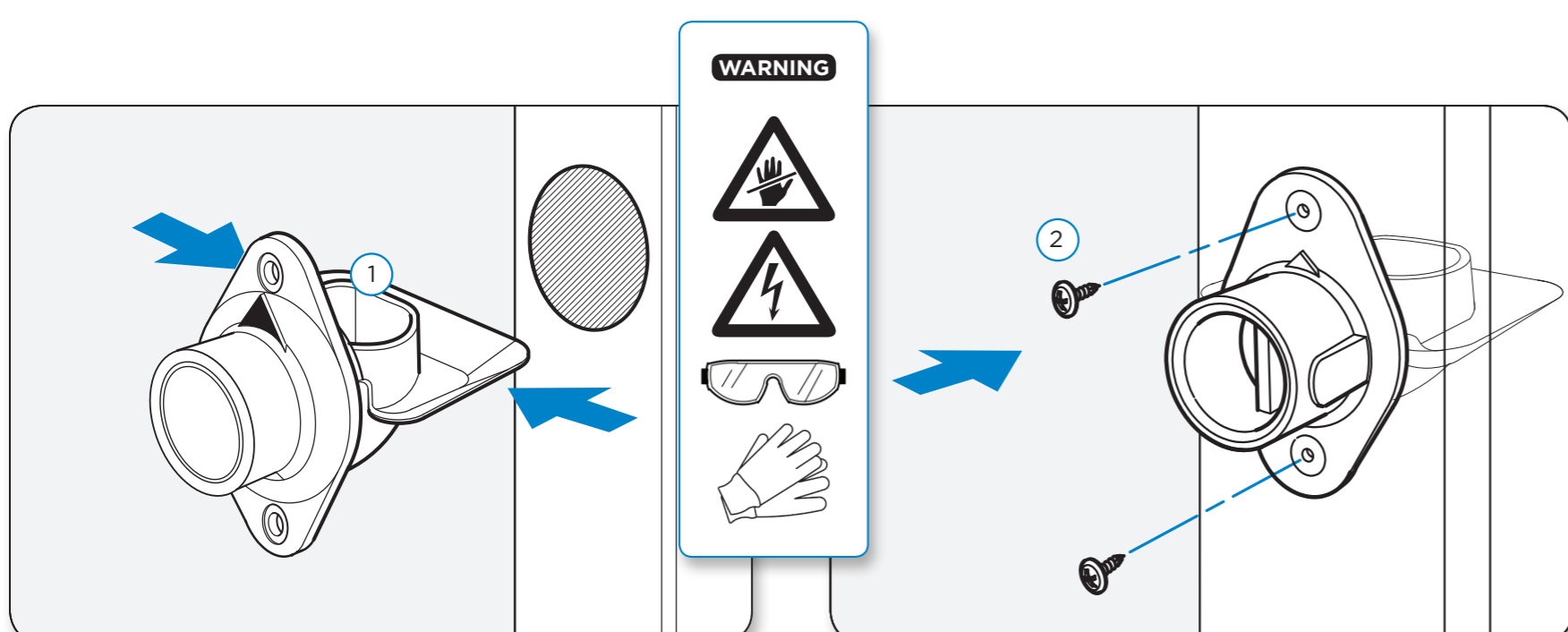
Always wear safety glasses and gloves when cutting or drilling!



14 Installing the FlexiFit diverter

1. Insert the diverter into the downspout hole by squeezing the sides, making sure the collection cup faces up. Push in until the diverter's flange sits flat against the downspout. Check that the arrow on the outside of the diverter is pointing straight up.
2. Use the two (2) self-tapping screws to attach the diverter to the downspout.

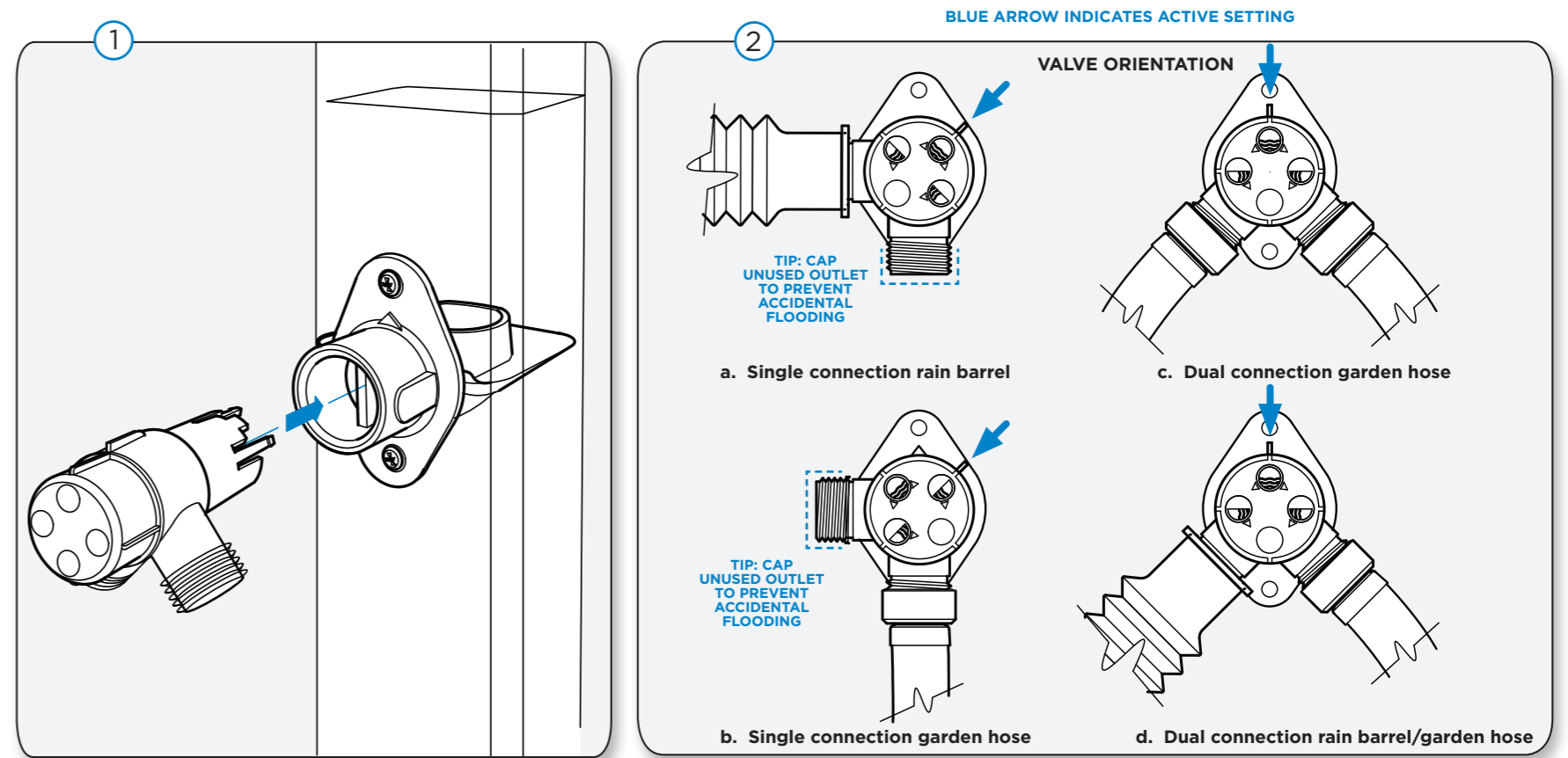
The diverter collection cup must face up to work. Make sure the arrow on the outside of diverter is pointing straight up!



15 Installing the RainRouter selector valve

After the diverter is installed into the downspout, the RainRouter selector valve is ready to be inserted into the diverter.

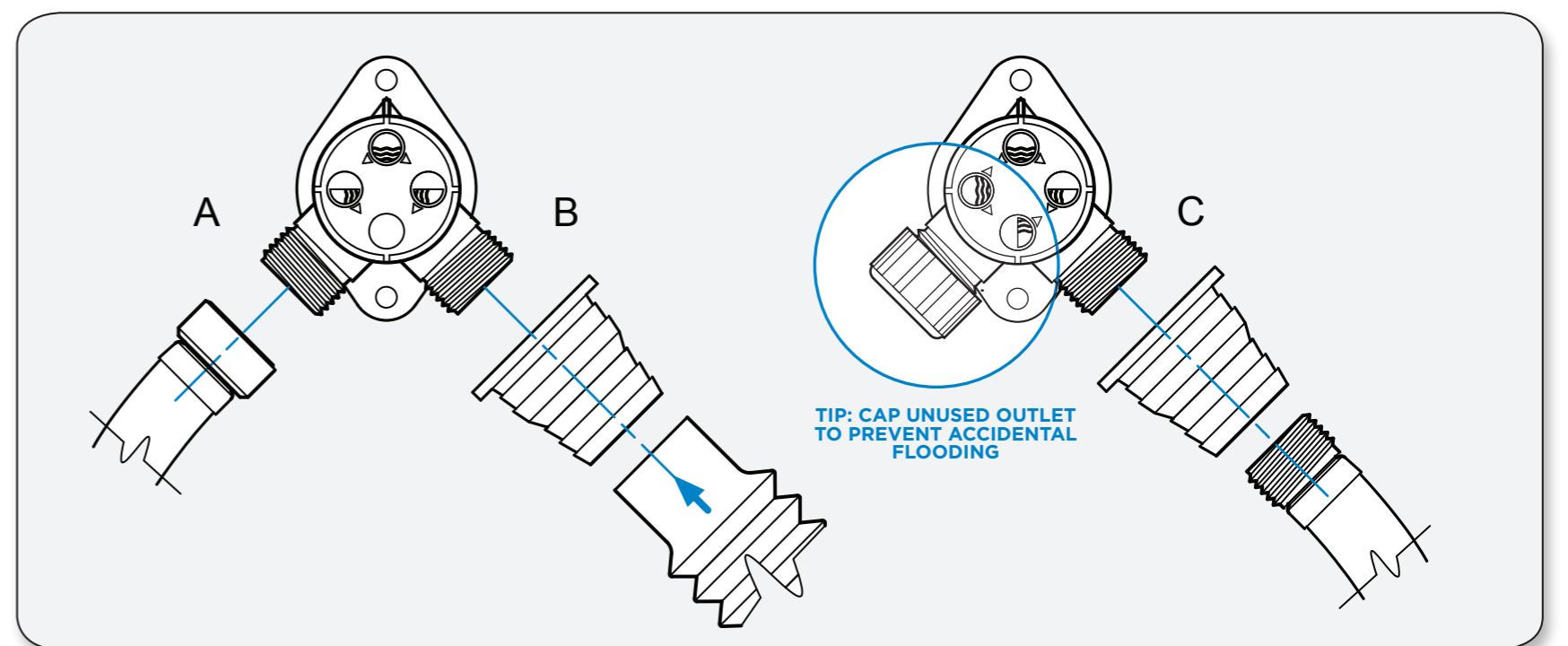
1. Hold the valve with the Y outlet ends facing down and press into the diverter opening until there is no gap between the valve and the diverter. If there is a gap, gently twist the valve from side to side while pushing inward until the valve seats against the front edge of the diverter with no gap.
2. Position the valve based on the connection(s) you are trying to achieve.



16 Connecting a garden hose or a rain barrel to the RainRouter selector valve

- To connect to a garden hose:** Thread the female end of the hose directly to the threaded end of the valve.
- To connect to an EarthMinded rain barrel fill hose or bilge hose:** Attach the multi-hose adaptor to the threaded end of the selector valve first. Next, press the hose over the barbed end of the adaptor. Two multi-hose adaptors are included for connecting two rain barrels to the selector valve.
- To connect a remote rain barrel:** Connect the male end of the garden hose to the outlet on the selector valve using the multi-hose adaptor. The female end of the hose should connect to the rain barrel for a water tight connection.

Remember to set the selector valve to the desired operating setting.

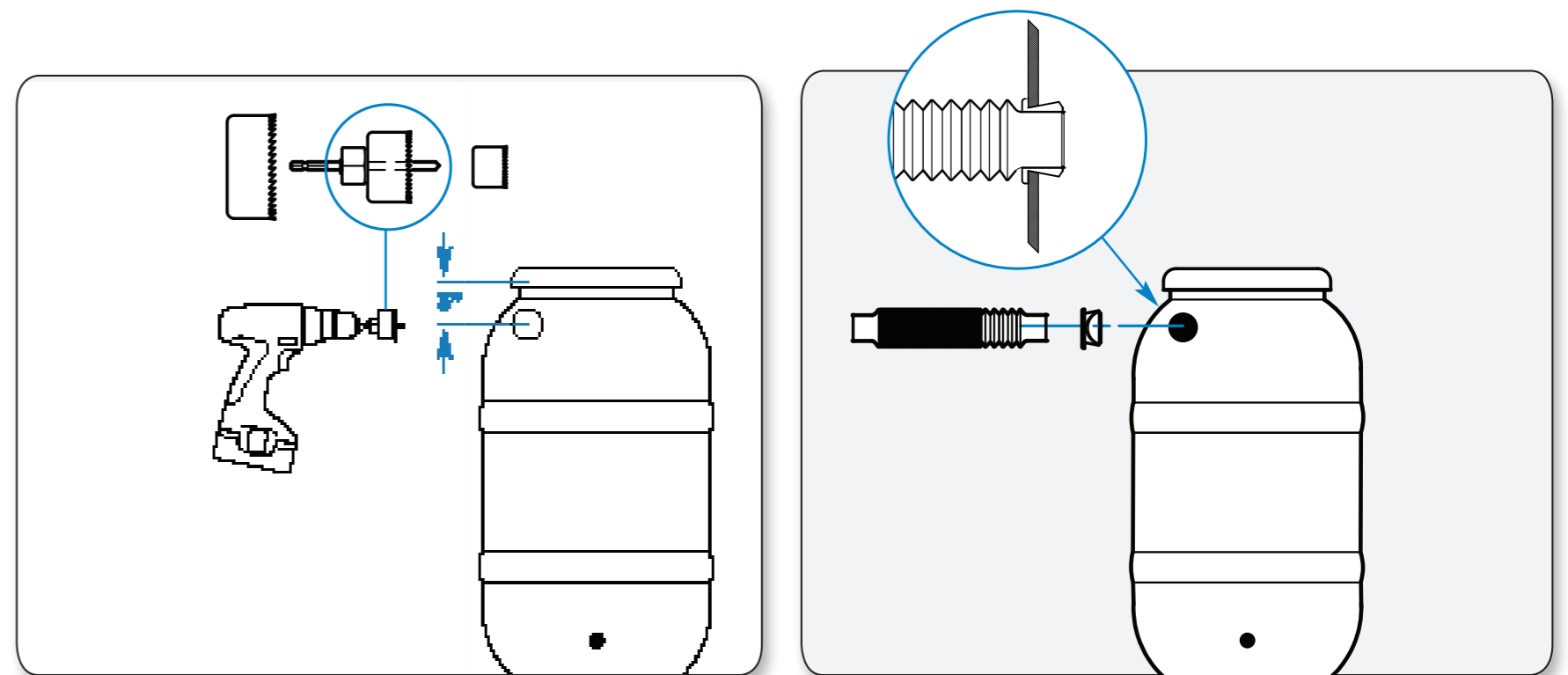


17 Installing the fill hose fitting for local rain barrel installations

Use the EarthMinded fill hose and seal provided

1. Select a location for the water inlet about 3" (76mm) below the rim of the barrel.
2. Make sure the inlet is located on a flat or evenly curved surface; avoid ridges or other features that could affect the hose seal.
3. Drill a hole in the barrel using the 1-1/2" (38mm) hole saw included.
4. Insert the rubber hose seal into the hole. Pinch the seal into a "U" shape for easier insertion.
5. Press the end of the fill hose into the hose seal.

If using a top fill rain barrel with an existing overflow hose you will need to plug the overflow hole to maintain the FlexiFit diverter's bypass function and discourage infestation.



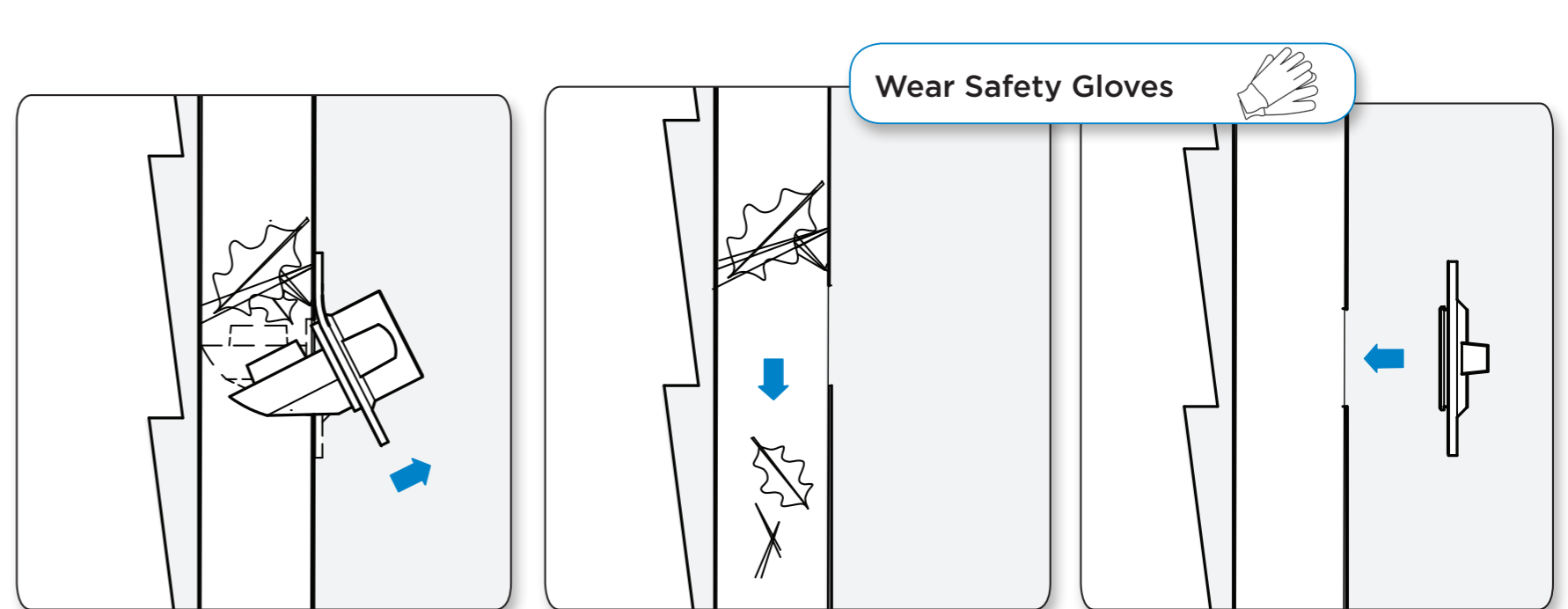
18 Removal, maintenance, and winterization of the RainRouter Multi-Function Diverter System

The RainRouter Multi-Function Diverter System and hose can be damaged if left installed in freezing temperatures. To winterize:

1. Remove the RainRouter valve from the FlexiFit diverter by gently twisting the valve from side to side while pulling outward.
2. Remove the FlexiFit diverter from the downspout by removing the two (2) screws, and then pull out and upward at the same time.
3. Remove any debris that may have collected in the downspout above the diverter.
4. Cover the hole in the downspout with the winter hole cover and replace the screws.

The valve, diverter, and winter hole cover can be cleaned with soap and water.

For remote rain barrel installations, the fill hose should occasionally be connected to a household spigot and turned on to flush out any algae or debris.



19 Troubleshooting

Water is not reaching the collection spot

- Check the top of the gutter for blockage at the downspout connection.
- Remove the diverter and check that the downspout, diverter, valve, and fill hose are not blocked by debris.
- Make sure the diverter is installed with the collection cup (arrow) facing up.
- Make sure no point of the fill hose is above the level of the diverter.
- Check that the water inlet on the rain barrel is level or lower than the diverter.
- Check the fill hose to make sure that water is not leaking.
- Check to see that the active setting indicator (protruding ridge on the valve housing) is aligned with the desired ON settings.
- Make sure that no point along the hose has any kinks; water pressure is low and will not work out kinks in a hose.
- Check that no point on the hose is above the level of the diverter.
- This is a low-pressure gravity fed system; it not suitable for use with sprinklers or other devices requiring pressure. We recommend using a non-kinking hose.
- For remote rain barrel installations, the fill hose should occasionally be connected to a household spigot and turned on to flush out any algae or debris.

The rain barrel floods

- The barrel is too low. To Correct: drain the barrel and construct a solid surface base to raise the barrel so both ends of the fill hose are level.
- An overflow hose can be added to the rim of the barrel to drain off excess water. (overflow hose not included)