About the RainRouter Multi-Function Diverter System

This kit includes all parts needed to install a multi-function diverter system to a downspout. The RainRouter Multi-Function Diverter System can be used to direct rainwater from a downspout to one of two rain barrels, a single rain barrel, or a single garden hose. The RainRouter system lets you connect one (1) garden hose to a garden hose only, rain barrel to a rain barrel, or a single rain barrel to a single garden hose. Rain barrels 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 diverter.

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

Planning

A. Planning for new installations

1. 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 conventional rain barrel installations, it is recommended to provide at least 12 inches (300mm) of clearance around the outside 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 barrel.

2. Install a downspout extension if the barrel height is less than 12 inches (300mm) to ensure proper installation.

3. Mark the location of the diverter with a temporary post. For conventional installations, the barrel height must be larger than the level of the diverter or water will flood. If it is below the rim of the barrel, the barrel will only fill to the height of the diverter.

Considerations for garden hose installations:

- For garden hose installations, the diverter will not work if it is placed below the level of the barrel.
- The diverter must be installed 12 inches (300mm) above the top 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 barrel.

Tools needed

1. Safety glasses
2. Pencil or marker
3. Level
4. Safety gloves
5. Measuring tape or ruler
6. Phillips screwdriver
7. Screwdriver
8. Winter hole cover
9. Self-tapping screws
10. Phillips screwdriver
11. User guide (not pictured)
12. Hazard warnings booklet (not pictured)

Contents

1. RainRouter selection value
2. RainRouter shutoff valve
3. Multi-hose shutoff (2)
4. Flexible diverter
5. Garden hose connection
6. Garden hose connection assembly
7. Garden hose cover
8. Smile kit cover
9. Multi-hose assembly
10. Easy valve kit cover
11. User guide (not pictured)
12. RainRouter selection booklet (not pictured)

Installation Hazard

- Wear safety glasses
- Wear safety gloves
- Install on a clear and level surface

3. About the RainRouter Multi-Function Diverter System

Warning Regarding Operating settings

- Make a reference mark on the downspout where you will install the diverter as high as is convenient, at least 12 inches (300mm) above the top of the diverter.
- Do not cut the downspout until reading the entire guide!

4. About the FlexiFit diverter

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Installing the garden hose fitting for remote installations

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

1. Select a location for the water inlet about 3” (76mm) below the rim of the barrel
2. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall.
3. Insert the rubber hose seal into the hole. Pinch the seal into a “U” shape for easier insertion.

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 drainhole and make sure that the barrel is level. Check that the barrel is level by filling it with water to the rim. Make sure the barrel is level or lower than the diverter.
2. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
3. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall.
4. Insert the rubber hose seal into the hole. Pinch the seal into a “U” shape for easier insertion.

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

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

1. Check that the diverter and the diverter hose are not kinked or blocked by debris. Use the garden hose connector to install the hose from the diverter system to the RainRouter Multi-Function Diverter System.
2. Check that the water inlet on the rain barrel is level or lower than the diverter.
3. Check to see that the active setting indicator (protruding ridge on the valve housing) is aligned with the desired ON settings.
4. Check the fill hose to make sure that water is not leaking.
5. Press the end of the fill hose into the hose seal.

Troubleshooting

Water is not reaching the collection spot

Check to see if the diverter is installed into the downspout correctly.

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

Installing the fill hose fitting for local rain barrel installations

Use the EarthMinded fill hose and seal provided.

1. Select a location for the fill hose about 3” (76mm) below the rim of the barrel.
2. Make sure the hole is located at a point on a centerline surface without edges or other features that would affect the hose seal.
3. 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.
4. Insert the rubber hose seal into the hole. Pinch the seal into a “U” shape for easier insertion.
5. Make sure that no point along the hose has any kinks.

Installing the RainRouter Multi-Function Diverter System

The RainRouter Multi-Function Diverter System can be used for any rain barrel. 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 hole is located at a point on a centerline surface without edges or other features that would affect the hose seal.
3. 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.
4. Insert the rubber hose seal into the hole. Pinch the seal into a “U” shape for easier insertion.
5. Make sure that no point along the hose has any kinks.

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.

Drilling the hole for the Flexifit diverter

1. Select a location for the diverter on the outside of a downspout at the desired point. Drill the hole using the 2-1/8” (54mm) hole saw.
2. Check that no point along the hose has any kinks. Use a non-kinking hose.

Marking the diverter for 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 drainhole and make sure that the barrel is level. Check that the barrel is level by filling it with water to the rim. Make sure the barrel is level or lower than the diverter.
2. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
3. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall.
4. Insert the rubber hose seal into the hole. Pinch the seal into a “U” shape for easier insertion.

Troubleshooting

Water is not reaching the collection spot

Check to see if the diverter is installed into the downspout correctly.

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

Installing the rain barrel for remote installations

If your barrel does not have a bottom drain, install the garden hose connector provided.

1. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
2. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall. The cut edge of the downspout can be sharp. Wear protective safety gloves.
3. When cutting, do not force the drill. Cut slow and steady. Hold the drill with both hands.

Troubleshooting

The rain barrel floods

Check to see if the diverter is installed into the downspout correctly. Check for any algae or debris.

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

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

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

Top Fill Rain Barrels

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. Place the rain barrel in its intended location, which should be on a solid and level base. Remove the cap from the bottom drainhole and make sure that the barrel is level. Check that the barrel is level by filling it with water to the rim. Make sure the barrel is level or lower than the diverter.
2. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
3. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall. The cut edge of the downspout can be sharp. Wear protective safety gloves.
4. When cutting, do not force the drill. Cut slow and steady. Hold the drill with both hands.

Troubleshooting

Water is not reaching the collection spot

Check to see if the diverter is installed into the downspout correctly.

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

Installing the garden hose fitting for remote installations

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

1. Place the rain barrel in its intended location, which should be on a solid and level base. Remove the cap from the bottom drainhole and make sure that the barrel is level. Check that the barrel is level by filling it with water to the rim. Make sure the barrel is level or lower than the diverter.
2. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
3. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall. The cut edge of the downspout can be sharp. Wear protective safety gloves.
4. When cutting, do not force the drill. Cut slow and steady. Hold the drill with both hands.

Troubleshooting

Water is not reaching the collection spot

Check to see if the diverter is installed into the downspout correctly.

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

Installing the garden hose fitting for remote installations

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

1. Place the rain barrel in its intended location, which should be on a solid and level base. Remove the cap from the bottom drainhole and make sure that the barrel is level. Check that the barrel is level by filling it with water to the rim. Make sure the barrel is level or lower than the diverter.
2. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
3. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall. The cut edge of the downspout can be sharp. Wear protective safety gloves.
4. When cutting, do not force the drill. Cut slow and steady. Hold the drill with both hands.

Troubleshooting

Water is not reaching the collection spot

Check to see if the diverter is installed into the downspout correctly.

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

Installing the garden hose fitting for remote installations

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

1. Place the rain barrel in its intended location, which should be on a solid and level base. Remove the cap from the bottom drainhole and make sure that the barrel is level. Check that the barrel is level by filling it with water to the rim. Make sure the barrel is level or lower than the diverter.
2. Select a location for the water inlet about 3” (76mm) below the rim of the barrel.
3. Drill a hole using the 1-1/2” (38mm) hole saw into the barrel wall. The cut edge of the downspout can be sharp. Wear protective safety gloves.
4. When cutting, do not force the drill. Cut slow and steady. Hold the drill with both hands.

Troubleshooting

Water is not reaching the collection spot

Check to see if the diverter is installed into the downspout correctly.

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