

# FlexiFit<sup>™</sup> Universal Rain Barrel Diverter System User Guide FDS-0001 V.1

EarthMinded has assembled all the parts needed to add a diverter system to any rain barrel (barrel not included). Using this kit, anyone who can use a drill can install a rain barrel diverter in minutes! Works with plastic and wood rain barrels and tanks.

Please read all instructions and warnings before installation, and retain this Booklet for future reference

Selecting a container 3

This kit includes only the diverter system to be added to a barrel you supply. Therefore, we take no responsibility for losses, damages or injury caused by failure of the barrel, or improper installation of the parts. Follow these instructions carefully for successful results.

This kit will work on both sealed, open top barrels, and top fill rain barrels.

If the rain barrel is pre-drilled for an overflow hose, seal the opening to preserve the automatic overflow function of the FlexiFit diverter. For new top fill rain barrel installations, do not drill and install the overflow hose.

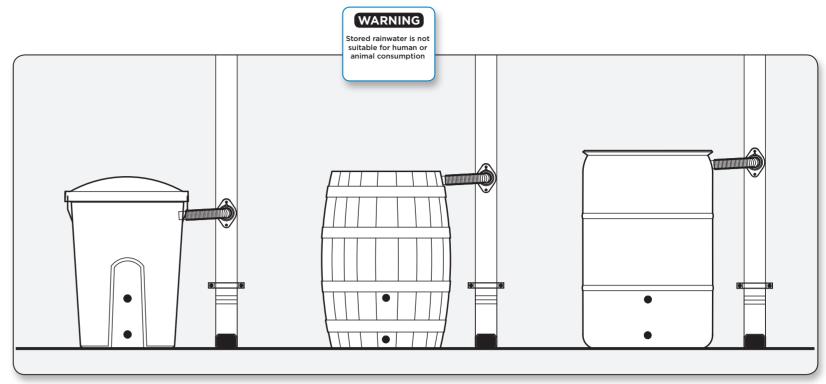
Water weighs 8.3 lbs. per gallon. Be sure to select a sturdy container that can support the weight when full. 55 gallons of water weighs 456 lbs.

Select a sturdy watertight container:

- a. A commercial grade plastic waste barrel with latching lid.
- b. A traditional wood barrel
- c. If using a recycled barrel, use only FDA approved food grade barrels. Make sure the barrel is clean and has not been used to contain toxic or hazardous substances.

The container selected should be sealed, or have a locking lid to prevent mosquitoes, animals and children from entering the barrel.

This kit is not for use with metal drums or barrels.



b. Wood Barrel

a. Plastic Waste Barrel (Open Top)

c. Recycled Plastic Barrel (Sealed)

### 1 **General description**

Rain barrels have been used for hundreds of years to harvest and store rainwater for use with plants, gardens and other outdoor chores.

EarthMinded's Universal Diverter System is a state-of-the art rainwater collection system to be used with a barrel or container you supply. Our FlexiFit<sup>™</sup> diverter installs easily by drilling a single hole into any standard 2" x 3" or 3" x 4"\* rectangular downspout. The diverter sends rainwater into the barrel. Once the barrel is full, the diverter will automatically pass excess water through the downspout.

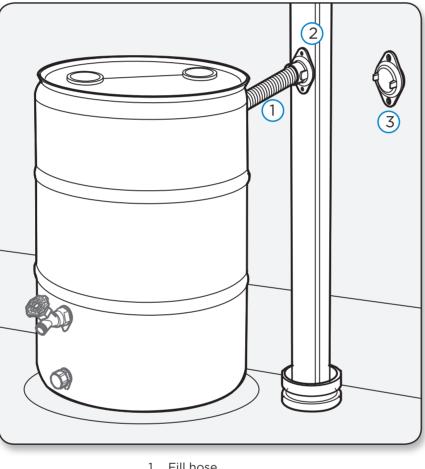
The diverter is easy to remove from the downspout and the kit includes a winter hole cover.

The FlexiFit diverter offers many advantages over conventional top fill rain barrels that commonly flood with heavy rain, require permanent modifications to your downspout, and use unsightly overflow hoses.

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

•Round downspout diverter and cover available as an accessory

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



#### 1. Fill hose 2. FlexiFit diverter

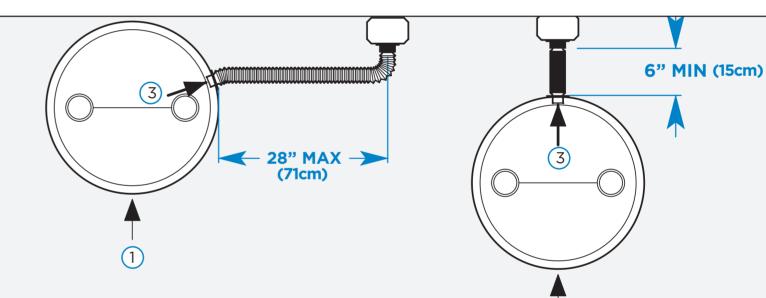
#### Select a location for your rain barrel 4

Before installing the diverter we recommend that you select and prepare the location where the barrel will be used. This will help you to locate the water inlet on the barrel in the most suitable location.

- Choose a downspout that is near the plants or garden beds to be watered. •
- The downspout must be a standard rectangular  $2" \times 3"$  or  $3" \times 4"$ .\*
- The barrel must be located within 28"(71cm) of the downspout to use the fill hose provided.
- The ground under the barrel must be level and firm. A solid surface base of wood, pavers, or stone is recommended.

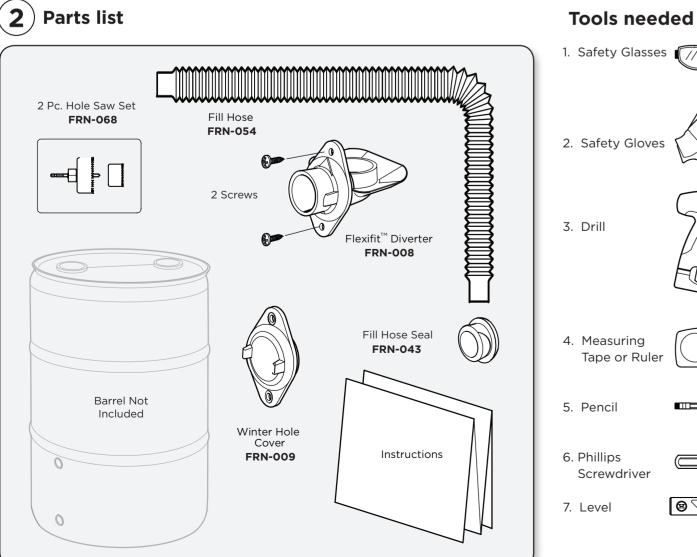
#### \*Water capture percentage is reduced with 3"x 4" downspouts

- 1. Place the barrel in the intended location with the front facing out.
- 2. If the surface is not level, use a shovel or rake to grade the surface. Check by placing a level on the rim of the barrel before continuing.
- 3. Hold the fill hose in position between the barrel and the downspout and mark the water inlet location on the rim of the barrel. This mark can be at the back, right or left side of the barrel.
- Check that the hose can reach horizontally from the mark on the barrel to the downspout.



3. Winter hole cover











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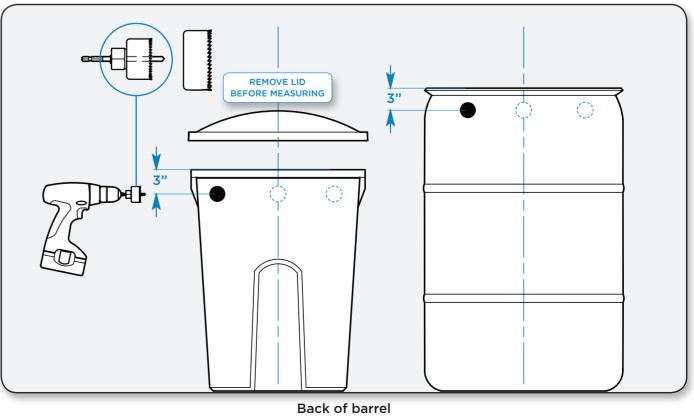
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#### 5 Installing the fill hose seal

- 1. Locate the water inlet mark on the barrel (from Step 4). Measure down 3" (76mm) and mark the center for the water inlet hole. Make sure the water inlet is located on a flat or evenly curved surface: avoid ridges or other features that could affect the water seal.
- 2. Drill a single hole using the (SMALLER) 1-1/2"(38mm) hole saw included in the set
- 3. Insert the fill hose seal into the hole. Pinch the seal into a "U" shape for easier insertion





#### $\mathbf{6}$ 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.
- 1. The hole must be cut at the correct height for the diverter to work properly.
- 2. If the diverter is installed too low, the barrel will not fill properly.
- 3. If the diverter is installed too high, water will overflow from the rim of the barrel (this only applies to open top barrels)

## (2) INCORRECT **WARNING** If the hole is cut too low the barrel will not fill. Damage to home or property may occur if improperly installed. 3 INCORRECT For open top containers or containers with screens only. If the hole is cut too high, water will overflow from the barrel rim.

downspout.

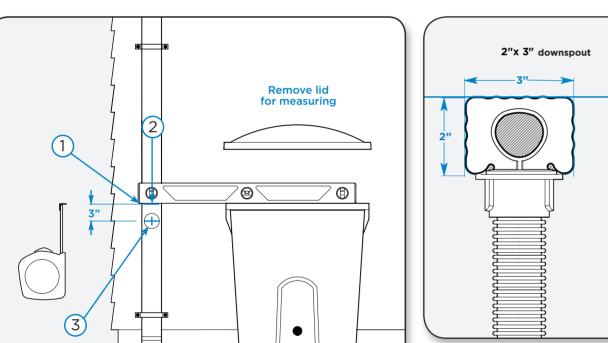
work properly.

CORRECT

#### 7 Marking the FlexiFit Diverter hole on the downspout

#### DO NOT CUT THE DOWNSPOUT UNTIL READING THE ENTIRE USER GUIDE!

- 1. Make a reference mark even with the rim of the barrel on the downspout using a pencil and a straight edge placed on the rim of the barrel as a guide.
- 2. For sealed containers only (no opening lid or screen): measure and make a mark on the CENTER of the downspout
- **3.** For open top containers only: measure 3"(76mm) below the reference line and make a second mark on the CENTER of the downspout. The second mark will now be your reference mark for the diverter height.



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

Be sure to take any elevated base into account before measuring. If you plan on using an elevated base you must do it before measuring and cutting the

An elevated base will increase water pressure if using with a garden hose.

on the narrow 3" side of the downspout (not the front) for the diverter to

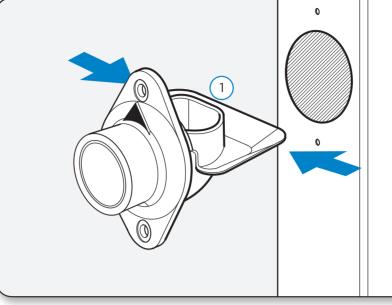
\*Water capture percentage is reduced with 3"x 4" downspouts

When installing to a 3" x 4" rectangular downspout, you must make the mark

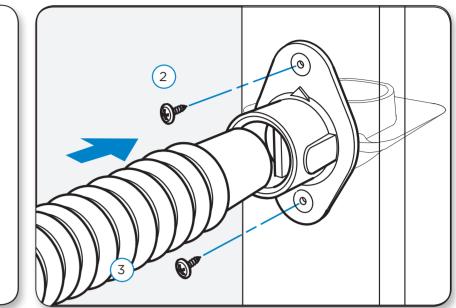
3"x 4" downspout

#### 9 Installing the FlexiFit Diverter

- 1. Insert the diverter into the hole in the downspout by squeezing the sides and pushing the diverter into the downspout until the flange sits flat against the downspout. Do not twist the diverter when installing - push it straight in - with the collection cup facing up at all times to insure a proper seal. Make sure that the arrow on the front of the diverter is installed pointing straight up.
- 2. Use 2 of the self-tapping screws to attach the diverter to the downspout.
- 3. Connect the fill hose to the cuff end of the FlexiFit diverter. Press the hose into the diverter until the corrugated section is flush against the diverter. Use soapy water or hand lotion on the hose cuff and seal to reduce friction and improve fit.



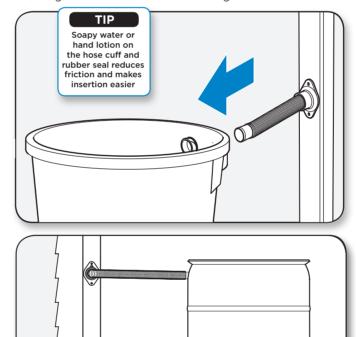




#### (10) **Connecting the barrel**

- 1. Extend the hose to the desired length, up to 28"(71cm). The hose can be bent to form elbows.
- 2. Connect the other end of the fill hose to the fill hose seal on the barrel. Press the hose end firmly into the seal until the corrugated section is flush with the hose seal. Use soapy water or hand lotion on the hose cuff and seal to reduce friction and improve fit.

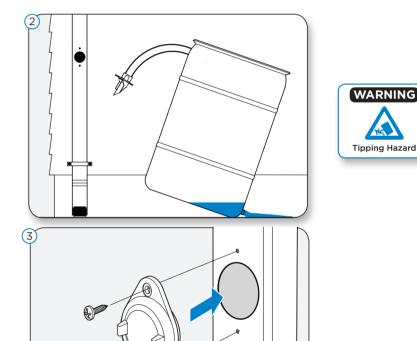
If using an open top barrel with lid make sure the lid is secure and latched. Do not leave the lid off for extended periods of time. The barrel may bow from the weight of the water and make fitting the lid difficult.



### Winterizing the barrel

A rain barrel can be damaged if water is allowed to freeze in the barrel. To Winterize:

- Remove the FlexiFit diverter by removing the 2 screws. Remove the diverter by pulling it out in an upwards motion.
- 2. Completely drain the barrel making sure the water is being drained away from the foundation of the house.
- 3. Cover the hole in the downspout with the winter hole cover and secure with the 2 screws.
- 4. Store rain barrel and diverter for winter.







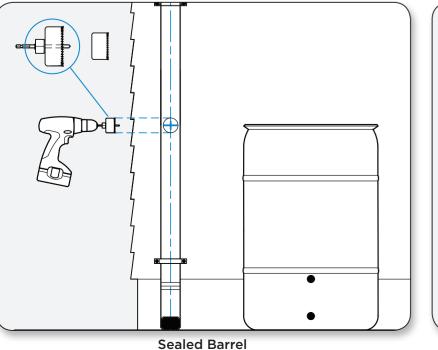
## Warnings regarding potential hazards



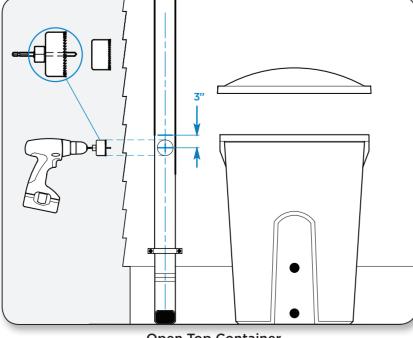


- Do not force the hole saw. Cut slow and steady keeping a firm hold on the drill.
- Always wear safety glasses and gloves when cutting or drilling. • The cut edges of the downspout can be sharp! Wear protective safety glasses and gloves when handling.
- For 3" x 4" downspouts make sure you drill the hole on the narrow 3" side (not the front side).

#### Do not use with heated downspouts!







**Open Top Container** 

# $(\mathbf{11})$ Troubleshooting

#### The rain barrel does not fill with water after rainfall:

- 1. Check the top of the gutter for blockage at the downspout connection.
- 2. Remove the FlexiFit<sup>™</sup> diverter and check that the downspout, diverter. and fill hose are not blocked by leaves or debris.
- 3. Make sure the diverter is installed with the collection cup (arrow) facing up.
- 4. Make sure no point of the fill hose is above the level of the diverter.
- 5. Check that the diverter is installed at the correct height. It must be above the water inlet on the barrel to fill properly. To Correct: drain the barrel and lower the ground until the water inlet on the barrel is 1" (25mm) below the level of the diverter.
- 6. Check the spigot and drain to make sure that water is not leaking. Even a slow leak will drain the barrel over time.

#### The rain barrel overflows and water leaks out from the lid or screen:

The barrel is too low.

To correct: drain the barrel and construct a solid surface base to raise the barrel to the correct height.

The fill hose can be replaced by a 1 - 1/4" (32mm) bilge hose available at most home centers.