

DRAWING NUMBER  
**SRH9520-06**

SIZE  
**A**

SCALE:  
**NONE**

DATE:  
**05/31/07**

APPROVED BY:  
**TWK**

CHECKED BY:  
**TWK**

DRAWN BY:  
**JJ**

**RH9520-06**

FIGURE NUMBER

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

# VORTEX RAINWATER FILTER

## FOR A ROOF AREA UP TO 5,500 SQUARE FEET

### 6" OUTLET VORTEX RAINWATER FINE FILTER FOR ABOVE OR BELOW GRADE APPLICATION

**FUNCTION:** Used in installations where multiple downspouts are connected together to a single pipe into the vortex filter. The vortex rainwater filter can filter up to a 5,500 square foot roof area for site irrigation, toilet and urinal flushing, janitorial use, laundries, fire protection, evaporative cooling tower make-up, process water or other non-potable uses. The vortex fine filter is typically installed in the underground piping system to remove debris from the storm water system and divert 90% of clean rainwater to an underground storage tank. (An above grade application is possible).

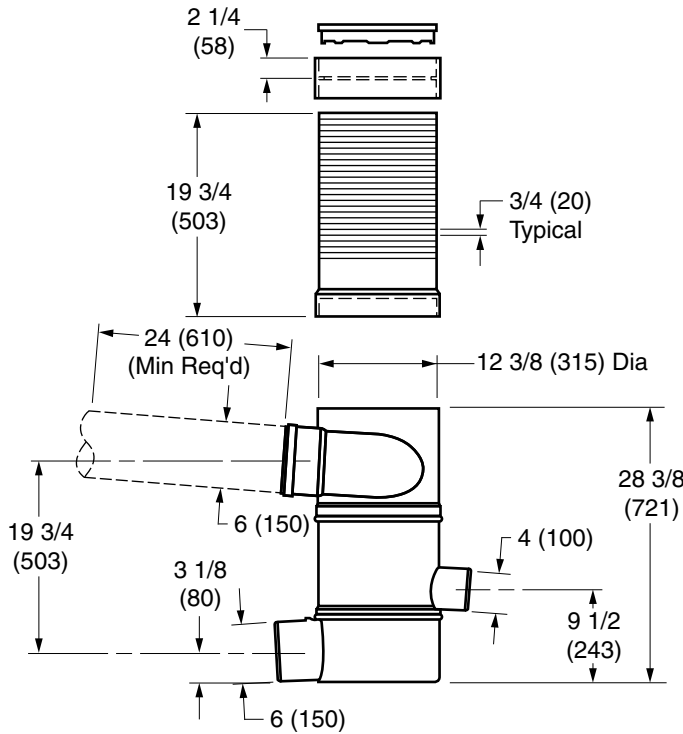


Fig. RH9520-06...(WISY WF1002)



**RECOMMENDED PIPE CONNECTIONS:**

Rainwater Inlet: 6" (150) Sewer + Drain, 6" (150) SDR 35  
 Filtered Rainwater Outlet: 4" (100) No-Hub  
 Stormwater Outlet: 6" (150) No-Hub

**REGULARLY FURNISHED:**

Polypropylene Filter Housing, Upper Ring, Housing Lid (RH9520-06), 280 micron Stainless Steel Fine Mesh Filter (RH9520F) and 12" (305) Stainless Steel Lift Handle.

**NOTE:** Vortex Fine Filter must be mounted plumb for proper operation. For a roof area above 5,500 square feet, additional vortex fine filters should be added.

**NOTE:** 20" (510) Min Clearance above Housing Lid required for filter removal.

**ACCESSORIES:**

- Blind Insert (RH9510BI) Used in place of the mesh filter to divert flow directly to the storm water system.
- 20" (510) Extension Tube (RH9520ET) This Polypropylene tube is used for inspection and as an access opening to the ground level. It is fitted with a collar to accept the lid. It is easily cut to length due to molded-in parallel lines. Up to three extension tubes can be combined.
- Stainless Steel Wall Bracket (RH9520WB) For securing the filter unit to a wall in above grade applications.

**NOTE:** When connecting smaller inlet pipes to the Rainwater Inlet, an eccentric pipe connector must be used to ensure the piping inverts are level.

**OPTIONS:**

- 25" (635) Stainless Steel Lift Handle (RH9520LH25) To remove mesh filter for cleaning.
- 39" (990) Stainless Steel Lift Handle (RH9520LH39) To remove mesh filter for cleaning.

**NOTE:** Dimensions shown in parentheses are in millimeters.

|      |          |                              |    |         |                  |                      |                                   |
|------|----------|------------------------------|----|---------|------------------|----------------------|-----------------------------------|
| F    | 11/02/10 | Added Notes & Min. Dim.      | JJ | TK      | WEIGHT<br>POUNDS | VOLUME<br>CUBIC FEET | FIGURE NUMBER<br><b>RH9520-06</b> |
| E    | 01/12/10 | Removed Fixing Set Accessory | JJ | TK      |                  |                      |                                   |
| D    | 10/28/09 | Add Pipe Connection Notes    | RN | TK      |                  |                      |                                   |
| C    | 02/02/09 | Added Text                   | JJ | TK      |                  |                      |                                   |
| REV. | DATE     | DESCRIPTION                  | BY | CKD. BY |                  |                      |                                   |



**JAY R. SMITH MFG. CO.**  
 DIVISION OF SMITH INDUSTRIES, INC.  
 POST OFFICE BOX 3237  
 MONTGOMERY, ALABAMA 36109-0237 (USA)  
 TEL: 334-277-8520 FAX: 334-272-7396 www.jrsmith.com



LOCATION

# VORTEX RAINWATER FILTER FOR A ROOF AREA UP TO 5,500 SQUARE FEET

## 6" OUTLET VORTEX RAINWATER FINE FILTER FOR ABOVE OR BELOW GRADE APPLICATION

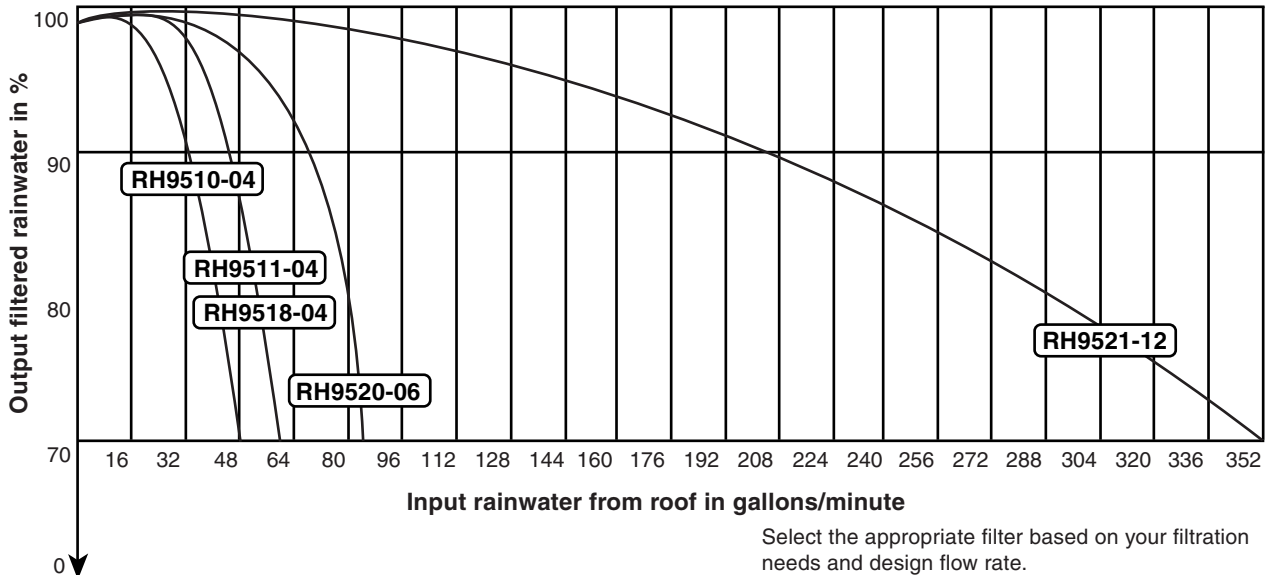
Principles of the WISY Fine Filter – RH9520-06 (WISY WF1002)

The Fine Filter filters and collects rainwater over the entire rain event. When dry, the filter acts as a first flush device during the first 20 seconds of rainfall. It also helps aerate the rainwater.

The filter has a self-cleaning effect. Depending on the amount of rainfall and debris filtered, the stainless steel fine mesh filter should be cleaned about 1 to 4 times a year in a dishwasher or by hand. The circulating air within the main housing of the Fine Filter dries the stainless steel fine mesh filter thus lowering the demand for more frequent maintenance.

To safeguard against backflow, a backflow device should be installed.

### Efficiency Ratio and Performance Chart



Select the appropriate filter based on your filtration needs and design flow rate.

Our filters efficiently recover the rainwater for various flow rates, i.e. for 90% filtered water you can select\*:

- RH9510-04 for up to 32 gallons/minute flow rate
- RH9511-04 for up to 42 gallons/minute flow rate
- RH9518-04 for up to 42 gallons/minute flow rate
- RH9520-06 for up to 65 gallons/minute flow rate
- RH9521-12 for up to 208 gallons/minute flow rate

\*Efficiency ratio tested with brand new filters



A product of WISY AG in cooperation with RMS.

DRAWING NUMBER  
 sRH9520-06BS

SIZE  
 A

SCALE:  
 NONE

DATE:  
 10/18/07

APPROVED BY:  
 TWK

CHECKED BY:  
 TWK

DRAWN BY:  
 JJ

FIGURE NUMBER  
**RH9520-06BS**

WE CAN ASSUME NO RESPONSIBILITY FOR USE OF SUPERSEDED OR VOID DATA

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

|      |          |               |    |         |               |                   |                    |
|------|----------|---------------|----|---------|---------------|-------------------|--------------------|
| REV. | DATE     | DESCRIPTION   | BY | CKD. BY | WEIGHT POUNDS | VOLUME CUBIC FEET | FIGURE NUMBER      |
| A    | 02/24/09 | Revised Table | JJ | TK      |               |                   | <b>RH9520-06BS</b> |