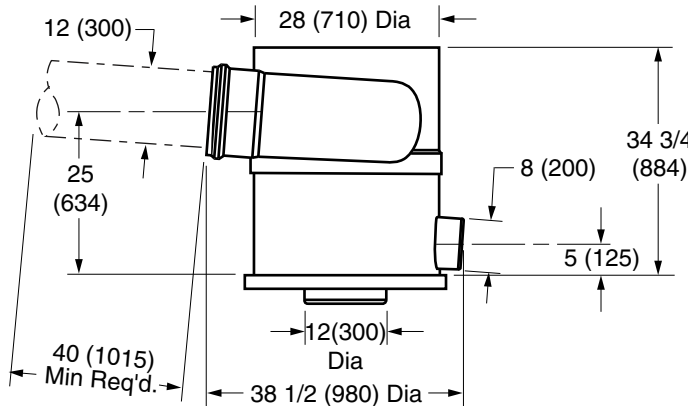
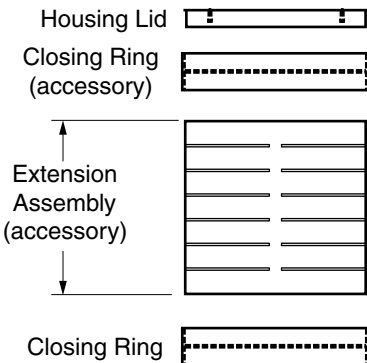




# VORTEX RAINWATER FILTER FOR A ROOF AREA UP TO 32,000 SQUARE FEET

## 12" 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 32,000 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 installed in the underground piping system to remove debris to the stormwater system and divert 90% of the clean rainwater to an underground storage tank. (An above grade application is possible).



**RECOMMENDED PIPE CONNECTIONS:**

- Rainwater Inlet: 12" (305) SDR 35
- Filtered Rainwater Outlet: 8" (205) No-Hub
- Stormwater Outlet: 12" (305) SDR 35

- Fig. RH9521-12..... Steel Lid carries Traffic Loads up to 12 Tons (DIN 1072/SLW12)
- Fig. RH9521-12XH..... Steel Lid carries Traffic Loads up to 60 Tons (DIN 1072/SLW60)
- Fig. RH9521-12AC..... Aluminum Lid for light Traffic Areas (WISY WF3011)

**REGULARLY FURNISHED:**

Polypropylene Filter Housing, Closing Ring, Baseplate, Housing Lid (RH9521-06), 380 micron Stainless Steel Fine Mesh Filter (RH9521F), 20" Stainless Steel Lift Handle (RH9521LH20), Closing Ring and Safety Kit (RH9521SK). 28" SQ 11GA. Stainless Steel Support Base Plate.

**ACCESSORIES:**

- 20 inch Stainless Steel Extension Handle (RH9521EX20)
- 36 inch Stainless Steel Extension Handle (RH9521EX36) To extend the lift handle for removal of the mesh filter for cleaning.
- 24" Extension Assy. (RH9521ET)
- 48" Extension Assy. (RH9521ET-48)

- 1. NOTE:** Vortex Filter must be mounted plumb for proper operation. For a roof area above 32,000 square feet, additional Vortex Filters should be added.
- 2. NOTE:** When connecting smaller inlet pipes to the Rainwater inlet an eccentric pipe connector must be used to ensure the piping inverts are level.
- 3. NOTE:** 36" min clearance above housing lid required for filter removal.
- 4. NOTE:** Dimensions shown in parentheses are in millimeters.

DRAWING NUMBER  
SRH9521-12

SIZE  
A

SCALE:  
NONE

DATE:  
05/31/07

APPROVED BY:  
TWK

CHECKED BY:  
TWK

DRAWN BY:  
JJ

**RH9521-12**

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

H	10/27/10	Removed Accessory Ext. Tube	JJ	TK
G	8/25/10	Revised Dwg. & Notes	RN	TK
F	03/15/10	Revised Accessories	JJ	TK
E	3/12/10	Revised Reg. Furnished	RN	TK
REV.	DATE	DESCRIPTION	BY	CKD. BY

WEIGHT POUNDS	VOLUME CUBIC FEET
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**FIGURE NUMBER**  
**RH9521-12**



**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

B

DRAWING NUMBER  
 SRH9521-12BS

SIZE  
 A

SCALE:  
 NONE

DATE:  
 10/19/07

APPROVED BY:  
 TWK

CHECKED BY:  
 TWK

DRAWN BY:  
 JJ

**RH9521-12BS**

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

DIMENSIONS ARE SUBJECT TO MANUFACTURERS TOLERANCE AND CHANGE WITHOUT NOTICE

# VORTEX RAINWATER FILTER

## FOR A ROOF AREA UP TO 32,000 SQUARE FEET

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

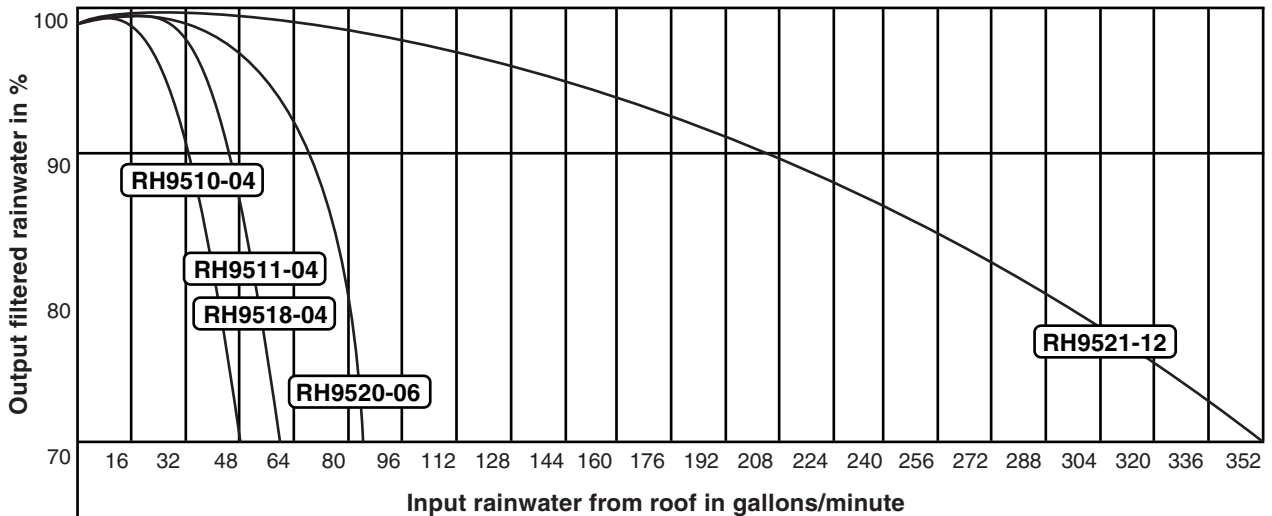
Principles of the WISY Fine Filter – RH9521-12 (WISY WF3011)

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 approximately twice a year. 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.

REV.	DATE	DESCRIPTION	BY	CKD. BY	WEIGHT POUNDS	VOLUME CUBIC FEET	FIGURE NUMBER
B	2-8-10	Revised Text	RN	TK			<b>RH9521-12BS</b>
A	02/24/09	Revised Table	JJ	TK			