

## REACTIVE (NO MEDIA) SILENCERS

### Commercial Products

#### Product Description

VAW Systems' **RSR** (Rectangular), **RER** (Elbow), **CSR** (Circular) and **CER** (Circular Elbow) reactive silencers are specifically designed for noise control in HVAC systems that prohibit any glass fiber fill. With smooth radius inlets and tapered outlets, maximum attenuation at the lowest possible pressure loss is assured. Features include:

- Inlet and outlet connections matched to actual duct dimensions to avoid the need for transitions
- Excellent balance between acoustic and aerodynamic performance
- Constructed with materials that are suitable for corrosive or moisture laden airstreams
- May be tuned at a key frequency(s) in order to address problematic tones in existing air systems

#### Applications

- Supply and return air systems that do not allow for any acoustic media fill whatsoever
- Indoor Air Quality (IAQ) sensitive building designs (Operating rooms, clean rooms, and pharmaceutical and food processing facilities)
- Close coupled to fan plenums and air handling units
- Roof top air handling systems
- Fan systems with prominent tones, such as vacuum exhaust pumps
- Laboratory fume hood ventilation systems, including sensitive manufacturing facilities and clean air systems

#### Silencer Accessories

- Support brackets
- Airflow probes
- Access doors
- Drainage connections

For special applications, such as high temperature, corrosive, or high pressure systems, consider VAW's Industrial Silencer product line.



#### Standard Features

- Casing: 22 ga. galvanized steel
- Internals: 26 ga. galvanized micro-perforated metal liner with tuned chamber and stiffeners
- Constructed in accordance with ASHRAE® and SMACNA® standards

#### Standard Rectangular and Elbow Size Range

- 6 in. to as required connection width dimension
- 6 in. to as required connection height dimension
- 36 to 144 in. long casings

#### Standard Circular Size Ranges

- 6 to 72 in. diameter connection dimension
- 36 to 120 in. long casings
- Casing outside walls  $\geq$  connection ID

## Certified Performance Data

For over 40 years, VAW has been testing, designing, and fabricating noise control products for the HVAC and fan industry in North America with a unique program driven by our experienced acoustic engineers. Our performance data are based on extensive testing:

- Product validation and applied research within our Noise Control Applications Laboratory
- Third party testing at NVLAP® accredited facilities
- Field verification tests

Refer to our Certified Performance Data Sheets and our Selection Software for a complete set of product ratings.



VAW Systems Noise Control Applications Laboratory

## Construction Options

- Heavy casings (HTL): 10, 14, and 16 ga.
- Continuous welding casings
- Casing materials: Stainless steel (304 & 316), Satin coat, Aluminum
- Flange configurations and materials
- Custom configurations for space and weight restrictions, including offsets and Z-shaped elbows
- Transitional (unequal inlet and outlet dimensions)
- Special paint system
- Extended casings for higher velocities and enhanced attenuation – (EH & EW)
- Special shipping splits
- Removable baffles, center body and side panels
- Wire mesh/bird screen protection



### VAW Model Number Definition

The following model name system applies to rectangular silencers (e.g. RER-24V80x72)

RSR	-	_____	_____	X	_____
Product Type (RSR or RER)		Frequency code (12 to 48 in.)	Velocity Code (V12, V20, V30, V40, V50, V60, V70, V80, V96)		Casing Length (36 to 144 in.)

### VAW Model Number Definition

The following model name system applies to circular silencers (e.g. 12CSR-20V90x48)

_____	CSR	-	_____	_____	X	_____
Connection Size/ID	Product Type (CSR or CER)		Casing OD (square Section)	Velocity Code (V50, V60, V70, V80, V90, V100)		Casing Length (36 to 99 in.)

## Selection Software and Services

Contact VAW for free application engineering and product selection support services, or use our COMSIL® Acoustic Analysis and Selection Software

- Most advanced HVAC acoustic algorithms in the noise control industry
- Modern user friendly interface
- Drag'n'Drop icon based analysis grid
- Wide variety of noise control products

Software inquiries: [comsil@vawsystems.com](mailto:comsil@vawsystems.com)