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**WATERITE, INC.
PRODUCT SPECIFICATION SHEET
RO-SYS-005 R5**

**VECTAMAXX™ RSR COMMERCIAL
REVERSE OSMOSIS SYSTEMS**

A. GENERAL SPECIFICATIONS

TYPE: Extra low-pressure RO, spiral wound membrane, recirculation loop.

VOLTAGE: 120VAC/60hz

SERVICE AMPS: 120VAC
RSR1200 15A
RSR2400 15A

CERTIFICATIONS: Certified by INTERTEK to CSA 22.2 and Conforms to ANSI/UL Standard 979 For INDOOR USE ONLY

FEED WATER PRESSURE: 40 PSI minimum, 65 PSI maximum

FEED WATER TEMP: 35° C maximum

B. MATERIAL SPECIFICATIONS:

FRAME COLOUR: White powder coat

FRAME MATERIAL: 6061 Aluminum square tubing, c/w leveling feet

FRAME DIMENSIONS:

Height	RSR1200:	34.5" (88 cm)
	RSR2400:	52" (132cm)
Width		19" (48 cm)
Depth		19.5" (49.5 cm)

OPERATING PRESSURE:	130 PSI (9.1 bar)
MEMBRANE:	RSR1200: <i>BLACK MAX®</i> , spiral wound TFC, BME4021SXL, 1200 USGPD permeate @ 500 mg/l NaCl, 100 PSI, 25°C feed. RSR2400: <i>BLACK MAX®</i> , spiral wound TFC, BME4040SXL, 2400 USGPD permeate @ 500 mg/l NaCl, 100 PSI 25°C feed.
UNIT DRY WEIGHT:	RSR1200: 94 lbs. (42.6 kg) RSR2400: 100 lbs. (45.3 kg)
INLET SOLENOID:	120VAC/60Hz, normally closed, 1/2" FNPT, 0 differential, SS
LOW PRESSURE SWITCH:	115VAC/60Hz, cut-out @ 15 PSI
DRIVE PUMP AND MOTOR:	115VAC/60hz, ¾HP Horizontal multistage centrifugal pump, non-self-priming, co-axial pump/motor design. All metallic parts in contact with liquid are stainless steel. RSR1200: 6.5 USGPM @ 80 PSI RSR2400: 6.5 USGPM @ 80 PSI (Based on 0 psi inlet pressure)
CONCENTRATE ORIFICE (DLFC):	High-impact resin fitting insert, factory installed
RECIRCULATION VALVE:	SS needle valve, metal seated, o-ring packing
SYSTEM FITTINGS:	Stainless steel
LOW PRESSURE FITTINGS:	Jaco standard pressure compression or standard resin push-on
LOW PRESSURE TUBING:	Higher pressure 1/2" LDPE, clear
PRE-FILTRATION HOUSING:	Polypropylene, 4"x10", 100 PSI rated, o-ring seated with threaded cap, pressure release, 1" inlet/outlet, full flow, 10 USGPM maximum.



FILTER CARTRIDGE: Melt-blown polypropylene, 5-micron

MEMBRANE HOUSING: 304 SS body, Noryl caps, band clamp closure, 3/4" FNPT concentrate ports, 1/2" permeate port, 250 PSI rating

PRESSURE GAUGES: Glycerin filled, stainless body, 1 1/2". 0-150 PSI feed water pressure, system pressure.

FLOW METERS: King-style panel mounted, 0.2-2.0 USGPM

C. PERFORMANCE SPECIFICATIONS

PERMEATE PRODUCTION

RATE: RSR1200 0.8 USGPM (3.0 LPM)
 RSR2400 1.6 USGPM (6.0 LPM)

Calculated production rate @ feed water of 500 mg/l NaCl, 25°C, average system pressure @ 130 PSI, 60 % recovery, inlet pressure of 60 PSI.

WASTE PRODUCTION RATE:

Recovery Rate @ 60%

Feed Water 1000 TDS RSR1200 0.53 USGPM (2.0 LPM)
 RSR2400 1.06 USGPM (4.0 LPM)

MEMBRANE CROSSFLOW: RSR1200: (1) 6.5 USGPM (25 LPM)
 RSR2400: (1) 6.5 USGPM (25 LPM)

D. RECOMMENDED FEED WATER PRETREATMENT SPECIFICATIONS:

TDS: < 1500 TDS
HARDNESS: < 6 GPG (103 mg/l)
TOTAL IRON: < .05 PPM
TANNIN: < .5 PPM
CHLORINE: < 0.1 PPM
pH: 5.5 – 9.5

ORGANIC/MICROBIOLOGICAL ACTIVITY: 0
MANGANESE: <.05 PPM
HYDROGEN SULPHIDE: 0
TURBIDITY: SDI < 5.0



E. FEED WATER REQUIREMENTS:

RSR1200: 2.2 USGPM minimum*
RSR2400: 4.4 USGPM minimum*

*includes 10% safety factor
on feed water exceeding 1000 TDS.
at recommended feed pressure

F. OPTIONAL EQUIPMENT

Panel mount permeate/raw water TDS monitor
Permeate pressure switch

All materials and components used to fabricate RSR Series systems meet or exceed requirements specified by NSF Standard 61.

