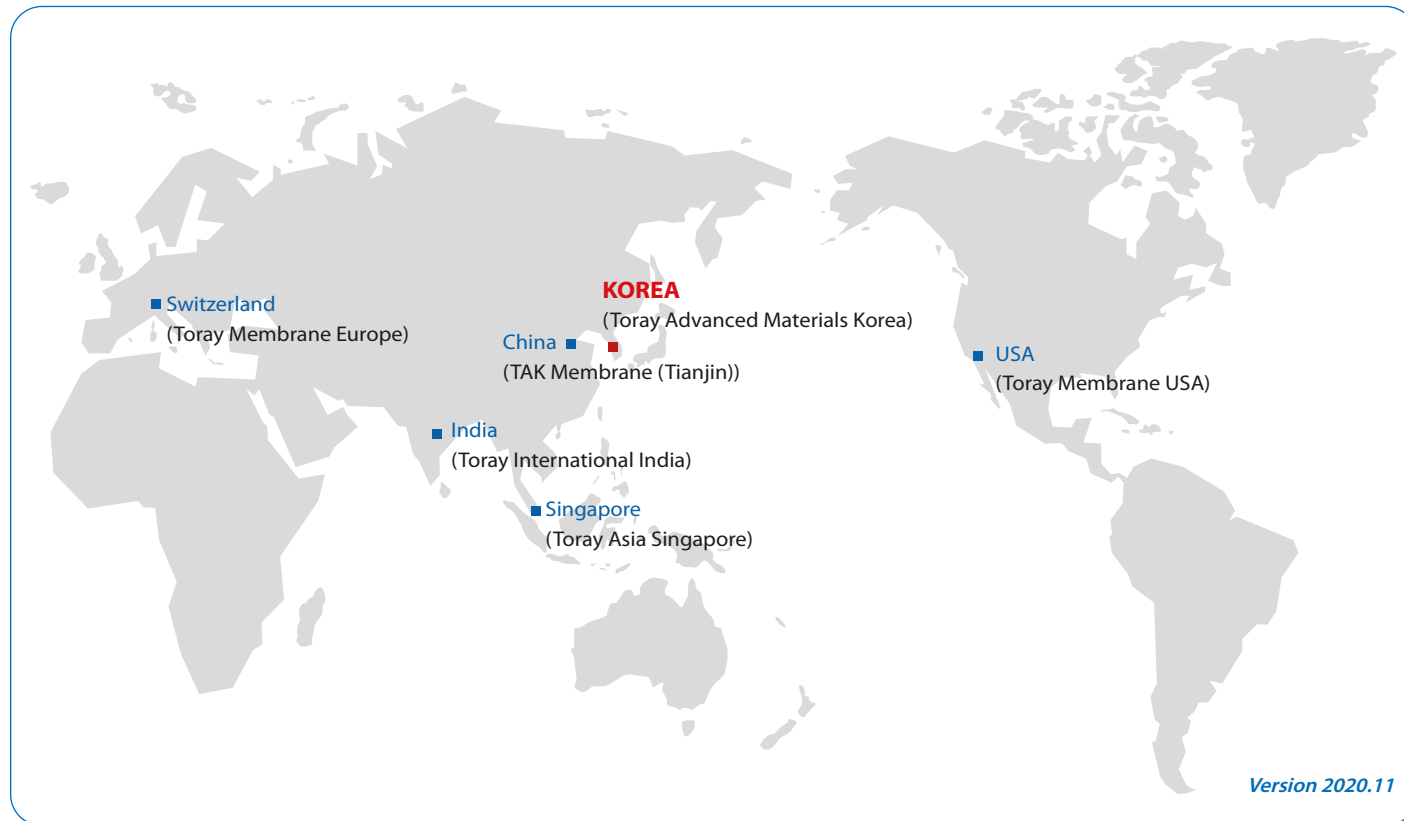


CSM[®] GLOBAL NETWORK



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The Right Fit

CSM[®]

Product Catalog for Residential Membranes



CSM RO, NF, UF Membranes for Home Drinking Water

Standard Grade Residential RO Membranes

CSM Residential(Household) Membranes can eliminate substances larger than 0.0001 μm ; Remove turbidity, including microbes and virtually all dissolved substances, heavy metal ions, bacteria & viruses in the water.

Model Name	Permeate Flow Rate (GPD)	NaCl Rejection(%)	Diameter (inch/mm)	Length (inch/mm)
RE1810-30	30	98	1.8 / 46	10 / 254
RE1810-50	50	98	1.8 / 46	10 / 254
RE1810-80	80	98	1.8 / 46	10 / 254
RE1812-50	50	98	1.8 / 46	12 / 305
RE1812-60	60	98	1.8 / 46	12 / 305
RE1812-80	80	98	1.8 / 46	12 / 305
RE2012-100	100	98	2.0 / 51	12 / 305
# Test Conditions	NaCl 200 mg/L, Pressure 60 psi, Temperature 25 °C, pH 6.5-7.0, Recovery 15%			

Low Pressure Residential RO Membranes

CSM Low Pressure Residential(Household) Membranes can offer increased [ENERGY SAVING](#) & applied to “Pumpless Water Purification System”(NO pump to create net driving pressure)

POU systems using low pressure RO elements require less than 60 psi

POE systems using low pressure RO elements require less than 150 psi

Model Name	Permeate Flow Rate (GPD)	NaCl Rejection(%)	Diameter (inch/mm)	Length (inch/mm)
RE1812-LP	30	93	1.8 / 46	12 / 305
RE2012-LP	50	93	2.0 / 51	12 / 305
RE2012-LPF	60	93	2.0 / 51	12 / 305
# Test Conditions	NaCl 100 mg/L, Pressure 20 psi, Temperature 25 °C, pH 6.5-7.0, Recovery 15%			

Ultra-High Flow Residential RO Membranes

Model Name	Permeate Flow Rate (GPD)	NaCl Rejection(%)	Diameter (inch/mm)	Length (inch/mm)	Test Cond.
RE2012-400	400	96	2.0 / 51	12 / 305	01
RE2812-300	300	97	2.9 / 75	12 / 305	02
RE3012-500	500	97	3.0 / 75	12 / 305	
RE3512-650	650	97	3.5 / 89	12 / 305	03
RE4012-800	800	97	4.0 / 102	12 / 305	
# Test Conditions	01 NaCl 200mg/L, Pressure 80 psi, Temperature 25 °C, pH 6.0-7.0, Recovery 30% 02 NaCl 200mg/L, Pressure 60 psi, Temperature 25 °C, pH 6.0-7.0, Recovery 15% 03 NaCl 200mg/L, Pressure 80 psi, Temperature 25 °C, pH 6.0-7.0, Recovery 40%				



Membrane Type
Membrane Material
Element Configuration

Thin-Film Composite
RO & NF-Polyamide(PA), UF-Polysulfone
Spiral-Wound, Tape Wrapping

Products that are certified to NSF/ANSI Standard 58 can be found through NSF official listing.

The Right Fit



High Rejection & High Recovery Residential RO Membranes

Model Name	Permeate Flow Rate (GPD)	NaCl Rejection(%)	Diameter (inch/mm)	Length (inch/mm)
RE1812-HR+ (#1)	80	99.0	1.8 / 46	12 / 305
(#2)	105	96.0	1.8 / 46	12 / 305
RE2812-HR+ (#1)	300	99.0	2.9 / 75	12 / 305
(#2)	400	96.0	2.9 / 75	12 / 305
#1 Test Conditions	NaCl 200 mg/L, Pressure 60 psi, Temperature 25 °C, pH 6.5-7.0, Recovery 30%			
#2 Test Conditions	NaCl 200 mg/L, Pressure 80 psi, Temperature 25 °C, pH 6.5-7.0, Recovery 60%			

Nanofiltration Residential Membranes

Nanofiltration(NF) Membranes have pore sizes ranging from 0.001 to 0.01 μm Remove all viruses and bacteria, most organic molecules(TOC), and nearly all multivalent ions

NF Membrane is ideal for water softening purposes because it removes divalent ion that causes hard water(e.g. Mg^{2+} , Ca^{2+}) and lets monovalent ions permeate through

Model Name	Permeate Flow Rate (GPD)	NaCl Rejection(%)	MgSO_4 Rejection(%)	Diameter (inch/mm)	Length (inch/mm)
NE1812-70	90	40 - 70	95	1.8 / 46	12 / 305
# Test Conditions	NaCl 250 mg/L, Pressure 60 psi, Temperature 25 °C, pH 6.5-7.0, Recovery 15% MgSO_4 200mg/L, Pressure 60 psi, Temperature 25 °C, pH 6.0-7.0, Recovery 15%				

Ultrafiltration Residential Membranes

Ultrafiltration(UF) Membranes have pore sizes ranging from 0.01 to 0.1 μm Remove bacteria and most viruses, colloids, turbidity and silt.

Model Name	Permeate Flow Rate (GPD)	Molecular Weight Cut Off (MWCO)	Diameter (inch/mm)	Length (inch/mm)
UE1810	200	100K	1.8 / 46	10 / 254
UE2010	450	100K	2.0 / 51	12 / 305
# Test Conditions	Pure Water(2 MΩ), Pressure 20 psi, Temperature 25 °C, pH 6.5-7.0, Recovery 100%			

Chlorine Resistant Residential RO Membranes

CSM Chlorine Resistant Membrane(CRM) has 4 times the endurance to chlorine than standard RO CSM CRM simplifies RO systems by reducing the need for a Pre & Post Carbon Filters

Model Name	Permeate Flow Rate (GPD)	NaCl Rejection(%)	Diameter (inch/mm)	Length (inch/mm)
RE1812-CE50	50	98	1.8 / 46	12 / 305
RE2812-CE	220	98	2.9 / 75	12 / 305
# Test Conditions	NaCl 200 mg/L, Pressure 60 psi, Temperature 25 °C, pH 6.5-7, Recovery 15%			