

Ceramic Alumina

Alumina flat sheet and multi-channel tubular · UF to near-NF



Product overview

Alumina ceramic is the workhorse: lower cost than SiC and a wider pore range, from tight UF to near-nanofiltration. Flat sheet or multi-channel tube, cross-flow and high-temperature capable.

Key features

- Flat sheet or multi-channel tube
- Tight UF down to near-NF on select elements
- Cross-flow, high temperature
- Municipal reuse, food & beverage, fine chemical separations
- Choose SiC for the oiliest streams

Technical specifications

Parameter	Value	Unit
Formats	Flat sheet · multi-channel tubular	
Material	Alumina (Al ₂ O ₃)	
Filtration range	UF to near-NF	
Operation	Submerged (flat) or pressurized cross-flow (tubular)	
Cleaning	Backwash + CEB + CIP	
Flux / recovery / cut-off	Set on the stream at quotation	

Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Ceramic SiC Flat Sheet

Silicon carbide flat-sheet module · submerged MBR and UF



Product overview

Recrystallized silicon carbide flat-sheet module for the hardest feeds: hydrophilic, oil-tolerant, solvent- and oxidant-stable, with real pressurized backwash in the submerged MBR format.

Key features

- Hydrophilic recrystallized SiC
- Pressurized backwash + maintenance CEB + recovery CIP
- Oil, solvent and oxidant tolerant
- Stacks up to 10 modules per tower (75 m²)
- BABA / AIS skid configuration available

Technical specifications

Parameter	Value	Unit
Module L × W × H	746 × 715 × 160	mm
Sheets per module	42	
Area per module	7.5	m ²
Dry weight	44.8	kg
Pore size	100	nm
Flux, municipal MBR	60	LMH
Flux, industrial MBR	40	LMH
Flux, submerged UF	150	LMH
Flux, oily / high hardness	100–120	LMH
Max suction	–0.6	bar
Max backwash	1.2	bar
Temperature	5–45	°C

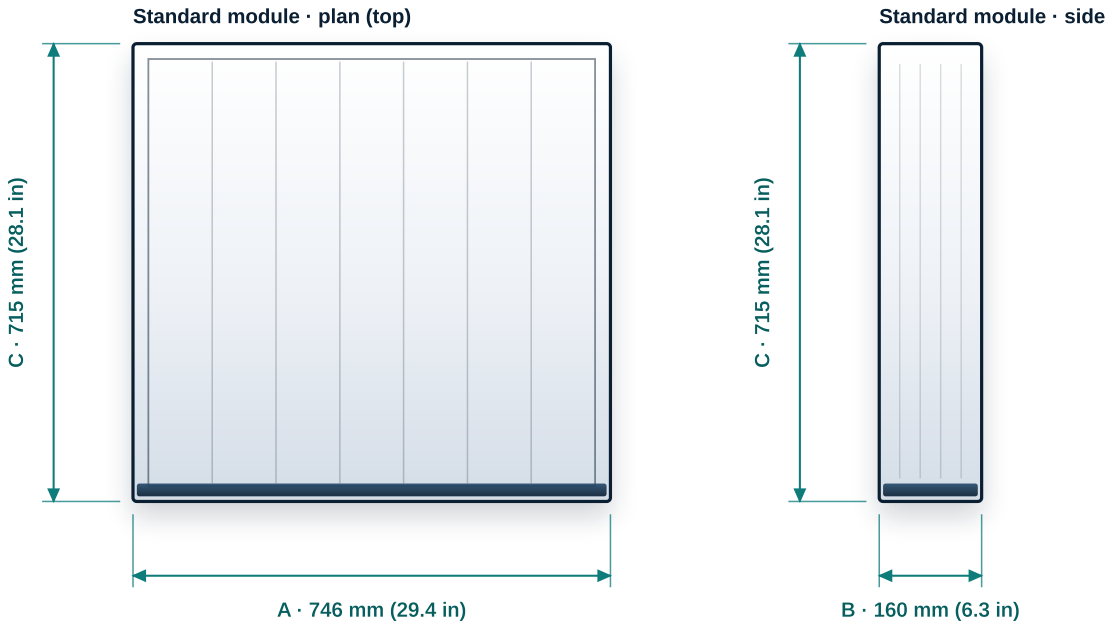
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Ceramic SiC Flat Sheet

Ceramic SiC flat-sheet module drawing

Ceramic MBR and UF module dimensions

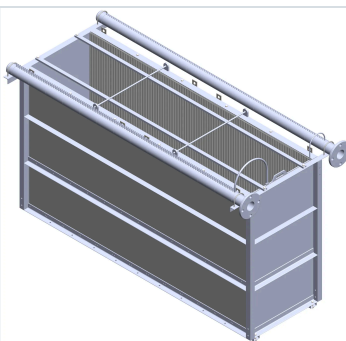
Standard SiC flat sheet module: 42 sheets, 7.5 m2, 44.8 kg (99 lb) net dry weight. Towers to 10 modules, 75 m2.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
 Zyramic, Inc. www.zyramic.com

Palisade 130

Plate-type flat-sheet MBR · Single deck · 130 plates



Product overview

Palisade 130 is a single deck plate-type flat-sheet MBR cassette: PES on rigid polypropylene plates, each with its own detachable scour manifold so air reaches the root of every channel.

Key features

- PES membrane welded to solid polypropylene plates
- Targeted scour: detachable manifold at the base of every plate, check valves keep sludge out of the air path
- Independent CFD: about 4× the liquid shear at the channel base vs. a bottom plenum
- 0.04 µm UF standard · 0.4 µm MF optional · store wet or dry, no glycol
- Cut, welded, assembled and packed in Poughkeepsie, NY · BABA at the module
- 304 stainless frame standard, 316 optional · buy or rent

Technical specifications

Parameter	Value	Unit
Plates	130	
Membrane area	≈136.5 (1,469 ft²)	m²
Permeate (design)	≈41–69	m³/d
Module scour air	≈82 Nm³/h (48 scfm)	
Envelope L × W × H	2,106 × 959 × 1,346	mm
Plate panel	1,047 × 502 × 7.6 thick · 6.4 channel gap	mm
Area per plate	≈1.05 (both faces)	m²
Membrane	PES, permanently wetted · 0.04 µm UF (0.4 µm MF optional)	
Design flux	12.5–21	LMH
MLSS range	3,000–12,000	mg/L
Filtration cycle	8 min filtration / 2 min relaxation	
Scour intensity	10	L/min·m²
Cleaning	CIP; recipe issued per project	
Key connection	2.5 in Schedule 40	
Frame	304 SS standard · 316 optional	

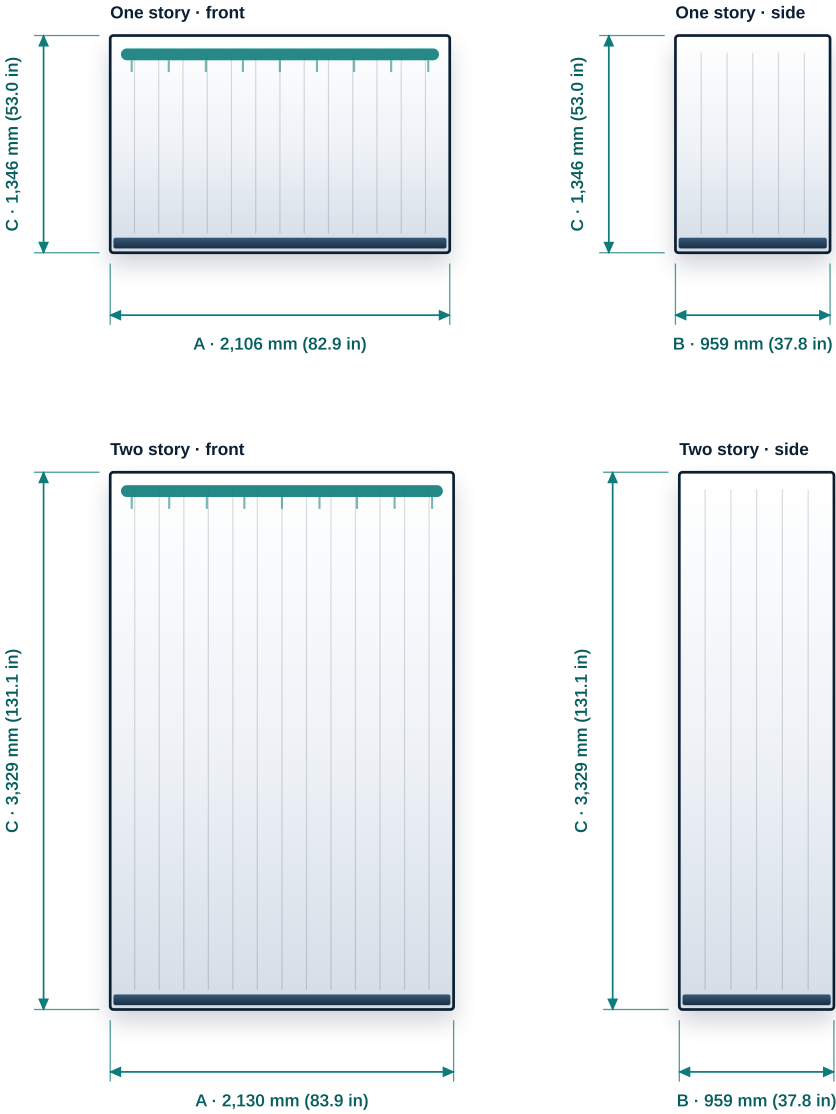
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Palisade 130

Palisade dimensional drawing (one story = 130 plates, two story = 260 plates)

Palisade MBR module dimensions

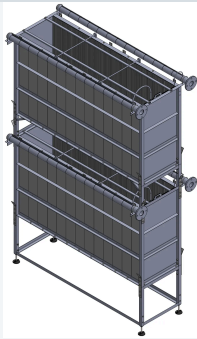
Net dry weight 150 to 450 kg per module.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
 Zyramic, Inc. www.zyramic.com

Palisade 260

Plate-type flat-sheet MBR · Double deck · 260 plates



Product overview

Palisade 260 is a double deck plate-type flat-sheet MBR cassette: PES on rigid polypropylene plates, each with its own detachable scour manifold so air reaches the root of every channel.

Key features

- PES membrane welded to solid polypropylene plates
- Targeted scour: detachable manifold at the base of every plate, check valves keep sludge out of the air path
- Independent CFD: about 4× the liquid shear at the channel base vs. a bottom plenum
- 0.04 µm UF standard · 0.4 µm MF optional · store wet or dry, no glycol
- Cut, welded, assembled and packed in Poughkeepsie, NY · BABA at the module
- 304 stainless frame standard, 316 optional · buy or rent

Technical specifications

Parameter	Value	Unit
Plates	260	
Membrane area	≈273 (2,938 ft²)	m²
Permeate (design)	≈82–136	m³/d
Module scour air	≈163 Nm³/h (96 scfm)	
Envelope L × W × H	2,130 × 959 × 3,329	mm
Plate panel	1,047 × 502 × 7.6 thick · 6.4 channel gap	mm
Area per plate	≈1.05 (both faces)	m²
Membrane	PES, permanently wetted · 0.04 µm UF (0.4 µm MF optional)	
Design flux	12.5–21	LMH
MLSS range	3,000–12,000	mg/L
Filtration cycle	8 min filtration / 2 min relaxation	
Scour intensity	10	L/min·m²
Cleaning	CIP; recipe issued per project	
Key connection	2.5 in Schedule 40	
Frame	304 SS standard · 316 optional	

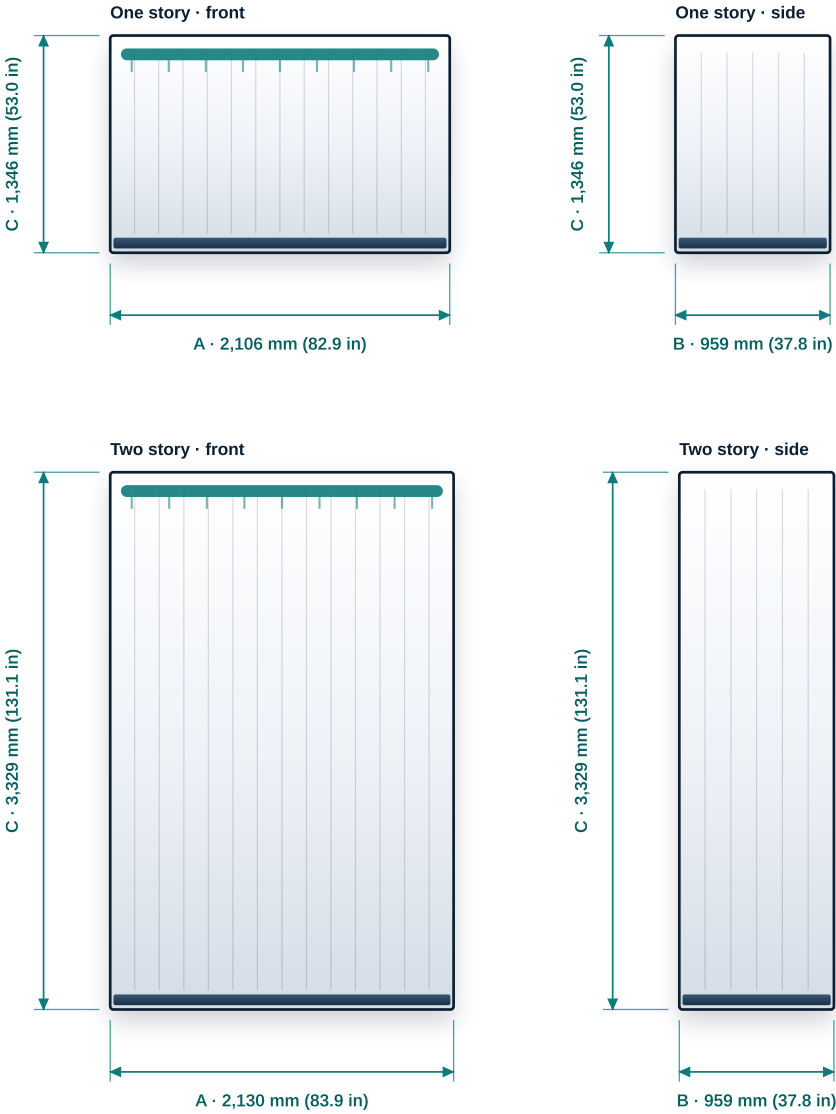
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Palisade 260

Palisade dimensional drawing (one story = 130 plates, two story = 260 plates)

Palisade MBR module dimensions

Net dry weight 150 to 450 kg per module.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
 Zyramic, Inc. www.zyramic.com

Rental Units

Swing · Palisade · Ceramic · Scrub UF, to rent



Product overview

Every Zyramic module is available to rent as well as buy: storm flows, events and seasons, construction, or a demonstration on your own mixed liquor. Convert a rental to a purchase at any time.

Key features

- Swing MBR modules and cartridges (full Swing-8 range, incl. Swing-8-2-4)
- Palisade 130 / 260 cassettes, the same cassette we sell
- Scrub-UF80 packaged unit
- Ceramic UF/MF modules quoted against the stream
- Term and freight quoted with sizing · US projects

Technical specifications

Parameter	Value	Unit
Swing-8-2-4	100 m ² · 1,250 × 700 × 1,830 mm · 35 m ³ /d municipal	
Swing-8-2.5-8	250 m ² · 87.5 m ³ /d municipal	
Palisade 130	≈136.5 m ² · ≈41–69 m ³ /d	
Palisade 260 (double deck)	≈273 m ² · ≈82–136 m ³ /d	
Scrub-UF80	80 m ² · 2–4 m ³ /h	
Plant supplies	Blowers, controls, piping, installation	
Zyramic supplies	Module, sizing, field support on request	

Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Replacement Membranes

Swing cartridges · Palisade plates · other-brand flat-sheet plates



Product overview

Replacement flat-sheet membranes cut and welded on our own machines in Poughkeepsie: Swing cartridges, Palisade plates, and plates sized to fit other-brand flat-sheet cassettes.

Key features

- Two membrane cutting machines and two welding machines in Poughkeepsie
- Other-brand plates cut and welded to your dimensions and port style
- US assembly and packing, domestic content documented
- Field change-out arranged on the same quote

Technical specifications

Parameter	Value	Unit
S-20 Swing 8-0.5 cartridge	6.25	m ²
S-21 Swing 8 cartridge (114 sheets)	12.5	m ²
S-22 Swing 8-1.5 cartridge	18.75	m ²
S-23 Swing 9-0.5 cartridge	11.5	m ²
S-24 Swing 9 cartridge (208 sheets)	23	m ²
P-10-U Palisade plate	PES 0.04 µm UF · ≈1.05 m ²	
P-10-M Palisade plate	PES 0.4 µm MF · ≈1.05 m ²	
Other-brand plates	Cut and welded to plate dimensions, port type and quantity	

Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Scrub-UF260-1

Packaged thin-film UF unit · 260 m² · rubber-media cleaning

Product overview

The Scrub-UF260-1 is a Zyramic Scrub UF packaged ultrafiltration unit: thin-film UF sheets kept clean by circulating, screen-retained rubber media. UF duty without an MBR tank or a backwash system.

Key features

- Thin-film UF sheets in a packaged tank
- Screen-retained rubber media circulates and scrubs the sheet continuously
- UF duty, no backwash, no MBR tank needed
- Handles sticky or fluctuating suspended solids with a short pretreatment train
- Ships as a packaged unit · buy or rent

Technical specifications

Parameter	Value	Unit
Membrane area	260	m ²
Envelope L × W × H	1,200 × 2,200 × 2,250	mm
Permeate (design)	7.8–10.4	m ³ /h
Membrane	Thin-film UF flat sheet	
Cleaning	Circulating rubber media + CIP; no backwash	
Duty	Ultrafiltration (not MBR biomass)	
Related family	4.0 mm sheet: Scrub-UF210 / UF280	

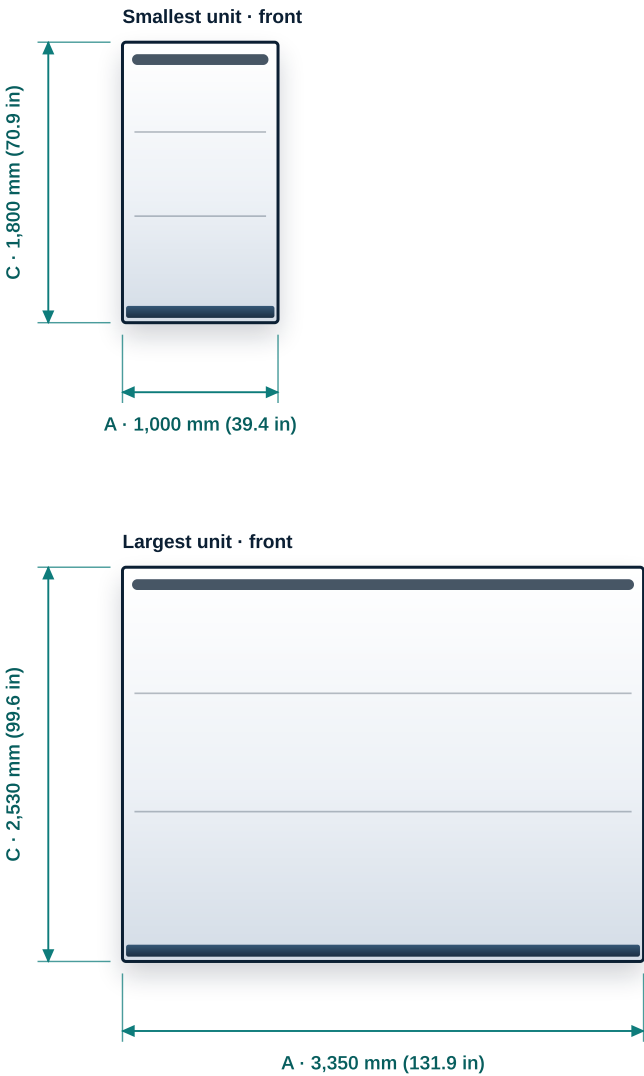
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Scrub-UF260-1

Scrub UF family dimensional drawing (smallest and largest units shown)

Scrub UF packaged unit dimensions

Unit envelope range. Thin film cassette with media retention screens.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Scrub-UF260-2

Packaged thin-film UF unit · 520 m² · rubber-media cleaning

Product overview

The Scrub-UF260-2 is a Zyramic Scrub UF packaged ultrafiltration unit: thin-film UF sheets kept clean by circulating, screen-retained rubber media. UF duty without an MBR tank or a backwash system.

Key features

- Thin-film UF sheets in a packaged tank
- Screen-retained rubber media circulates and scrubs the sheet continuously
- UF duty, no backwash, no MBR tank needed
- Handles sticky or fluctuating suspended solids with a short pretreatment train
- Ships as a packaged unit · buy or rent

Technical specifications

Parameter	Value	Unit
Membrane area	520	m ²
Envelope L × W × H	2,300 × 2,200 × 2,250	mm
Permeate (design)	15.6–20.8	m ³ /h
Membrane	Thin-film UF flat sheet	
Cleaning	Circulating rubber media + CIP; no backwash	
Duty	Ultrafiltration (not MBR biomass)	
Related family	4.0 mm sheet: Scrub-UF210 / UF280	

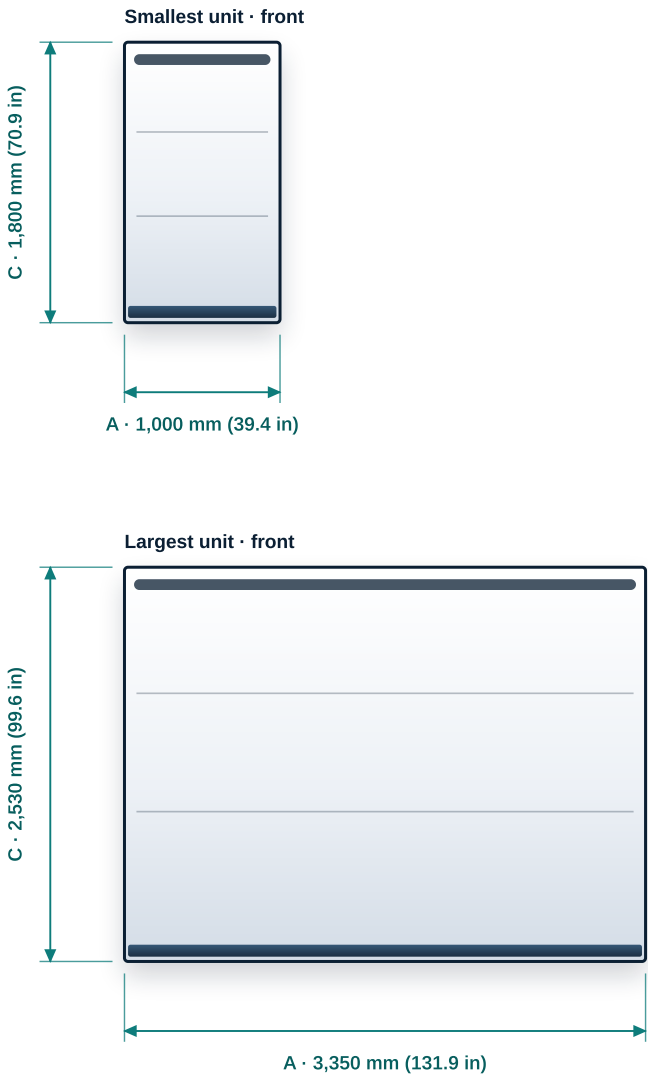
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Scrub-UF260-2

Scrub UF family dimensional drawing (smallest and largest units shown)

Scrub UF packaged unit dimensions

Unit envelope range. Thin film cassette with media retention screens.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Scrub-UF350-1

Packaged thin-film UF unit · 350 m² · rubber-media cleaning

Product overview

The Scrub-UF350-1 is a Zyramic Scrub UF packaged ultrafiltration unit: thin-film UF sheets kept clean by circulating, screen-retained rubber media. UF duty without an MBR tank or a backwash system.

Key features

- Thin-film UF sheets in a packaged tank
- Screen-retained rubber media circulates and scrubs the sheet continuously
- UF duty, no backwash, no MBR tank needed
- Handles sticky or fluctuating suspended solids with a short pretreatment train
- Ships as a packaged unit · buy or rent

Technical specifications

Parameter	Value	Unit
Membrane area	350	m ²
Envelope L × W × H	1,200 × 2,200 × 2,530	mm
Permeate (design)	10.5–14.0	m ³ /h
Membrane	Thin-film UF flat sheet	
Cleaning	Circulating rubber media + CIP; no backwash	
Duty	Ultrafiltration (not MBR biomass)	
Related family	4.0 mm sheet: Scrub-UF210 / UF280	

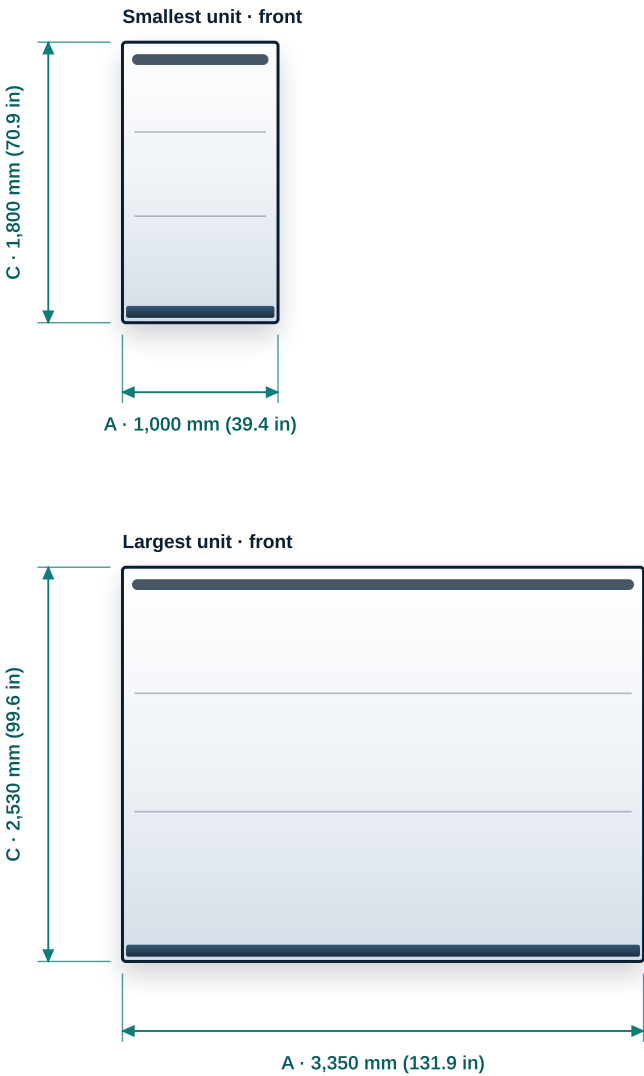
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Scrub-UF350-1

Scrub UF family dimensional drawing (smallest and largest units shown)

Scrub UF packaged unit dimensions

Unit envelope range. Thin film cassette with media retention screens.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Scrub-UF350-3

Packaged thin-film UF unit · 1,050 m² · rubber-media cleaning

Product overview

The Scrub-UF350-3 is a Zyramic Scrub UF packaged ultrafiltration unit: thin-film UF sheets kept clean by circulating, screen-retained rubber media. UF duty without an MBR tank or a backwash system.

Key features

- Thin-film UF sheets in a packaged tank
- Screen-retained rubber media circulates and scrubs the sheet continuously
- UF duty, no backwash, no MBR tank needed
- Handles sticky or fluctuating suspended solids with a short pretreatment train
- Ships as a packaged unit · buy or rent

Technical specifications

Parameter	Value	Unit
Membrane area	1,050	m ²
Envelope L × W × H	3,350 × 2,200 × 2,530	mm
Permeate (design)	31.5–42.0	m ³ /h
Membrane	Thin-film UF flat sheet	
Cleaning	Circulating rubber media + CIP; no backwash	
Duty	Ultrafiltration (not MBR biomass)	
Related family	4.0 mm sheet: Scrub-UF210 / UF280	

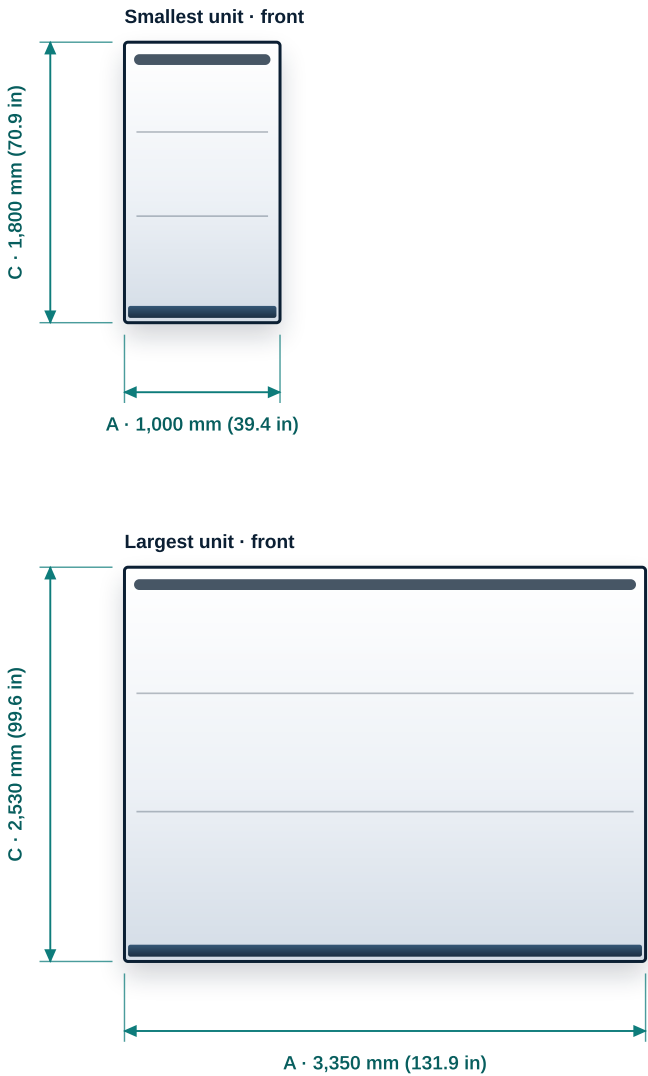
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Scrub-UF350-3

Scrub UF family dimensional drawing (smallest and largest units shown)

Scrub UF packaged unit dimensions

Unit envelope range. Thin film cassette with media retention screens.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
 Zyramic, Inc. www.zyramic.com

Scrub-UF80

Packaged thin-film UF unit · 80 m² · rubber-media cleaning

Product overview

The Scrub-UF80 is a Zyramic Scrub UF packaged ultrafiltration unit: thin-film UF sheets kept clean by circulating, screen-retained rubber media. UF duty without an MBR tank or a backwash system.

Key features

- Thin-film UF sheets in a packaged tank
- Screen-retained rubber media circulates and scrubs the sheet continuously
- UF duty, no backwash, no MBR tank needed
- Handles sticky or fluctuating suspended solids with a short pretreatment train
- Ships as a packaged unit · buy or rent

Technical specifications

Parameter	Value	Unit
Membrane area	80	m ²
Envelope L × W × H	1,000 × 1,000 × 1,800	mm
Permeate (design)	2–4	m ³ /h
Membrane	Thin-film UF flat sheet	
Cleaning	Circulating rubber media + CIP; no backwash	
Duty	Ultrafiltration (not MBR biomass)	
Related family	4.0 mm sheet: Scrub-UF210 / UF280	

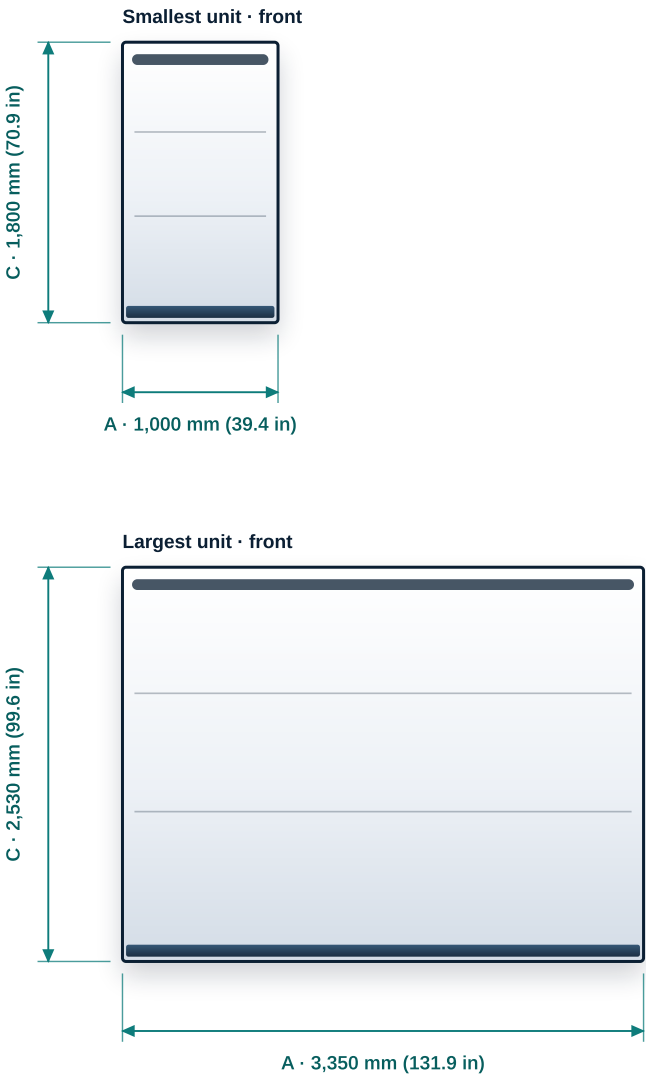
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Scrub-UF80

Scrub UF family dimensional drawing (smallest and largest units shown)

Scrub UF packaged unit dimensions

Unit envelope range. Thin film cassette with media retention screens.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Swing-8-1-1

Swing MBR module · 12.5 m² · thin-film composite flat sheet



Product overview

The Swing-8-1-1 is a Zyramic Swing flat-sheet MBR module: 1 Swing-8 cartridge in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

Parameter	Value	Unit
Cartridge type	Swing-8 (12.5 m ² , 114 sheets, 528 × 520 × 252 mm, 11.3 kg)	
Decks × columns	1 × 1	
Cartridges	1	
Membrane area	12.5	m ²
Envelope L × W × H	500 × 700 × 1,230	mm
Dry weight (uncrated)	46 kg	
Municipal net capacity	4.4	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~13.5	L/min·m ²
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-8-2-4

Swing MBR module · 100 m² · thin-film composite flat sheet



Product overview

The Swing-8-2-4 is a Zyramic Swing flat-sheet MBR module: 8 Swing-8 cartridges in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

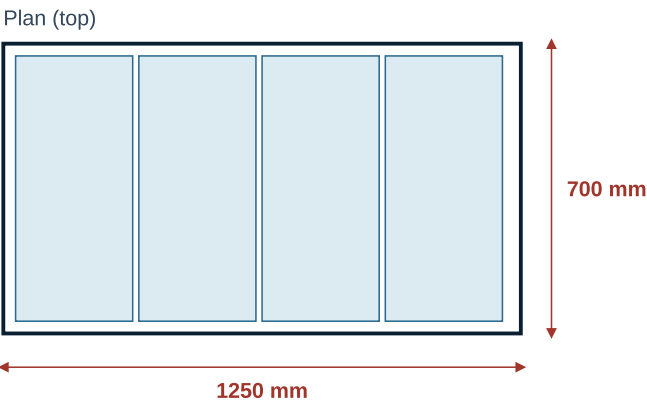
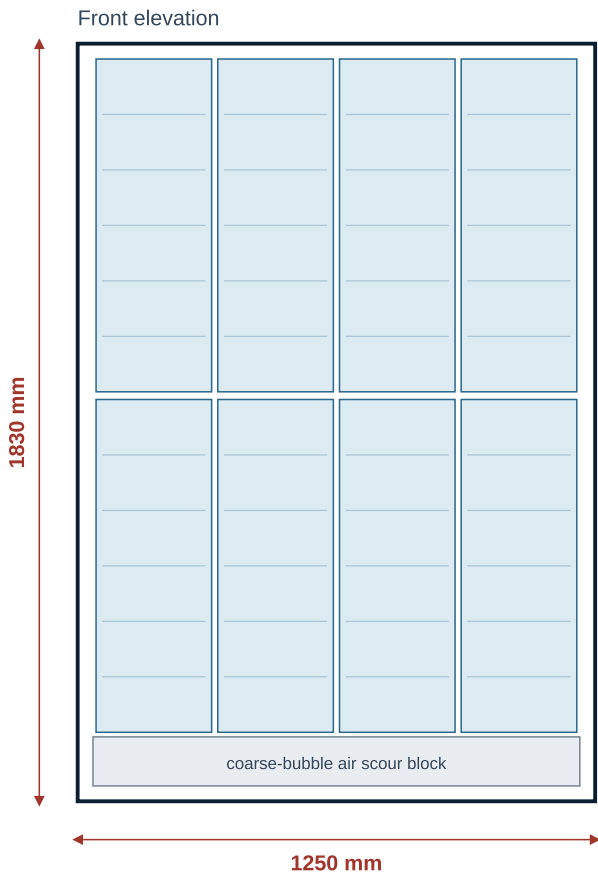
Parameter	Value	Unit
Cartridge type	Swing-8 (12.5 m ² , 114 sheets, 528 × 520 × 252 mm, 11.3 kg)	
Decks × columns	2 × 4	
Cartridges	8	
Membrane area	100	m ²
Envelope L × W × H	1,250 × 700 × 1,830	mm
Dry weight (uncrated)	171.76 kg	
Municipal net capacity	35	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~9.0	L/min·m ²
Air / filtrate connections	DN40 ANSI / DN40 ANSI (1½ in)	
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-8-2-4

Dimensional drawing

Swing-8-2-4 · overall dimensions (schematic)



Key data

Model	Swing-8-2-4
Decks × columns	2 × 4 = 8 cartridges
Membrane area	100 m ² (12.5 m ² per cartridge)
Sheets per cartridge	114
Envelope L × W × H	1250 × 700 × 1830 mm
Dry weight, uncrated	≈172 kg
Air / filtrate	DN40 ANSI / DN40 ANSI
Frame	SUS304 stainless

Other Swing-8-X-Y builds scale by decks (X) and columns (Y): area = 12.5 × X × Y m².
Schematic for selection only. Certified drawings issued with the quotation. © 2026 Zyramic, Inc.

Swing-8-2.5-8

Swing MBR module · 250 m² · thin-film composite flat sheet



Product overview

The Swing-8-2.5-8 is a Zyramic Swing flat-sheet MBR module: 20 Swing-8 cartridges in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

Parameter	Value	Unit
Cartridge type	Swing-8 (12.5 m ² , 114 sheets, 528 × 520 × 252 mm, 11.3 kg)	
Decks × columns	2.5 × 8	
Cartridges	20	
Membrane area	250	m ²
Envelope L × W × H	2,300 × 700 × 2,160	mm
Dry weight (uncrated)	373 kg	
Municipal net capacity	87.5	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~7.5	L/min·m ²
Air / filtrate connections	DN65 / DN50 · min. installed height 2.0 m	
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

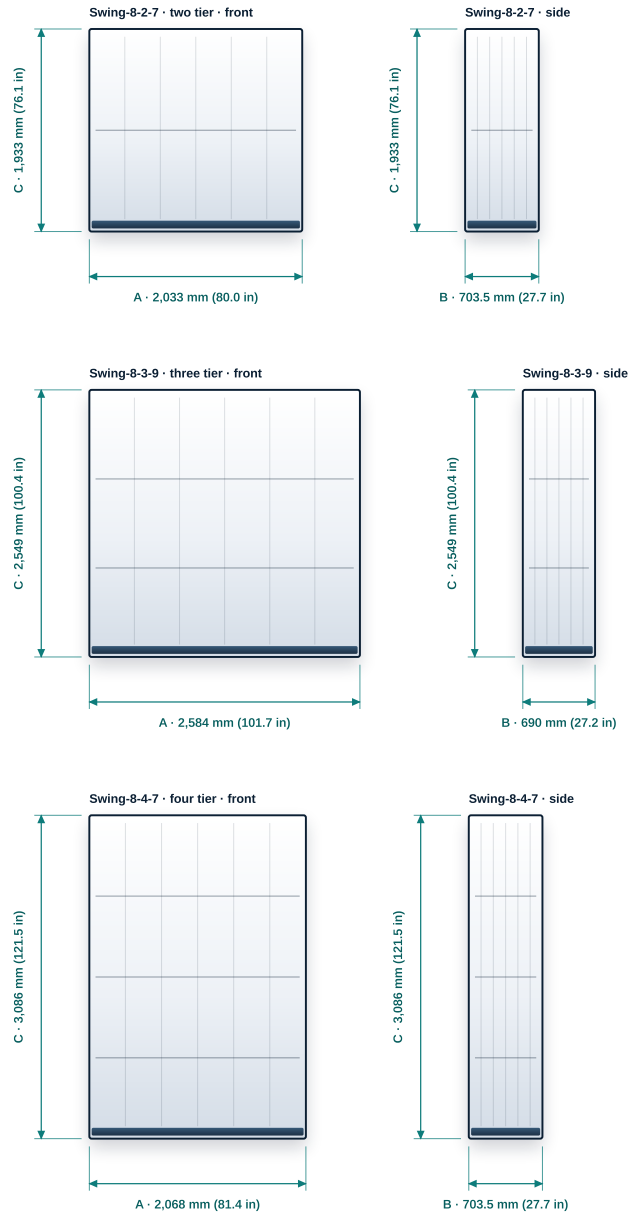
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-8-2.5-8

Swing family dimensional drawing (Swing-8-2-7 and 8-3-9 shown; model envelope in spec table)

Swing MBR module dimensions

Cartridge-only net dry weights. See data sheet.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Swing-8-3-8

Swing MBR module · 300 m² · thin-film composite flat sheet



Product overview

The Swing-8-3-8 is a Zyramic Swing flat-sheet MBR module: 24 Swing-8 cartridges in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

Parameter	Value	Unit
Cartridge type	Swing-8 (12.5 m ² , 114 sheets, 528 × 520 × 252 mm, 11.3 kg)	
Decks × columns	3 × 8	
Cartridges	24	
Membrane area	300	m ²
Envelope L × W × H	2,300 × 700 × 2,430	mm
Dry weight (uncrated)	442 kg	
Municipal net capacity	105	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~6.5–7	L/min·m ²
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

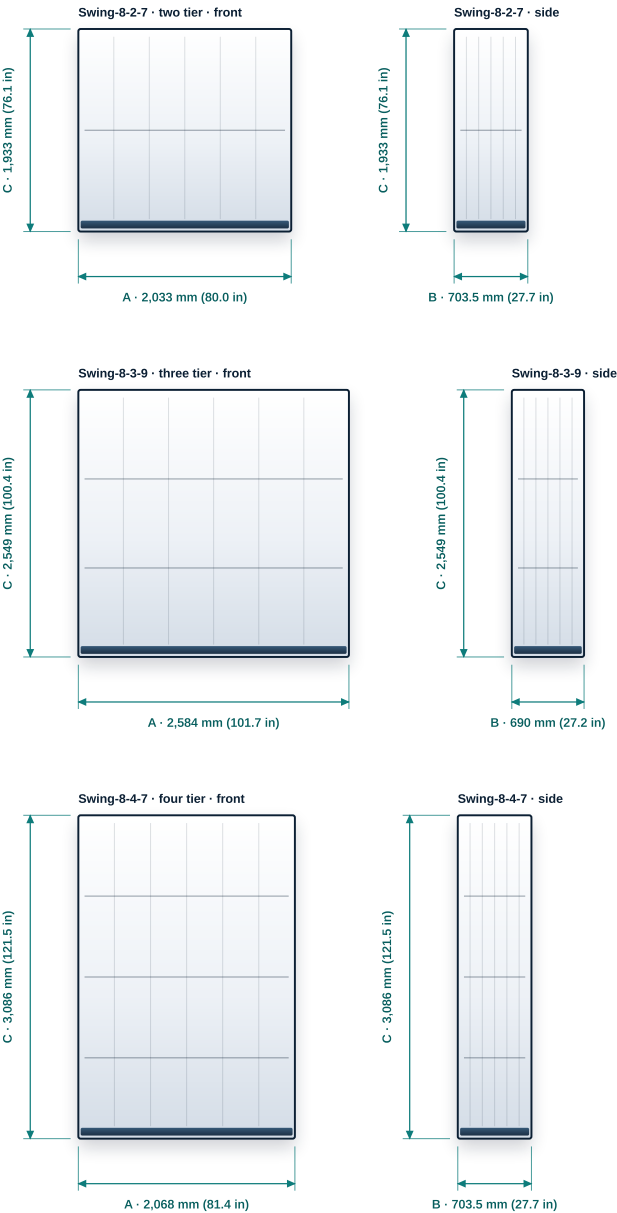
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-8-3-8

Swing family dimensional drawing (Swing-8-2-7 and 8-3-9 shown; model envelope in spec table)

Swing MBR module dimensions

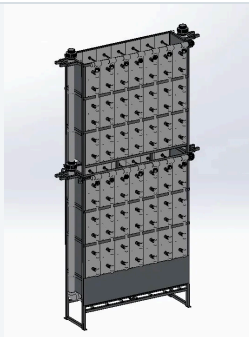
Cartridge-only net dry weights. See data sheet.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Swing-8-6-8

Swing MBR module · 600 m² · thin-film composite flat sheet



Product overview

The Swing-8-6-8 is a Zyramic Swing flat-sheet MBR module: 48 Swing-8 cartridges in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

Parameter	Value	Unit
Cartridge type	Swing-8 (12.5 m ² , 114 sheets, 528 × 520 × 252 mm, 11.3 kg)	
Decks × columns	6 × 8 (two 3-deck sections, gap + 4-sided enclosure)	
Cartridges	48	
Membrane area	600	m ²
Envelope L × W × H	2,400 × 700 × 4,250	mm
Dry weight (uncrated)	670 kg	
Municipal net capacity	210	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~5.5–6 (per 3-deck section, two sections)	L/min·m ²
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

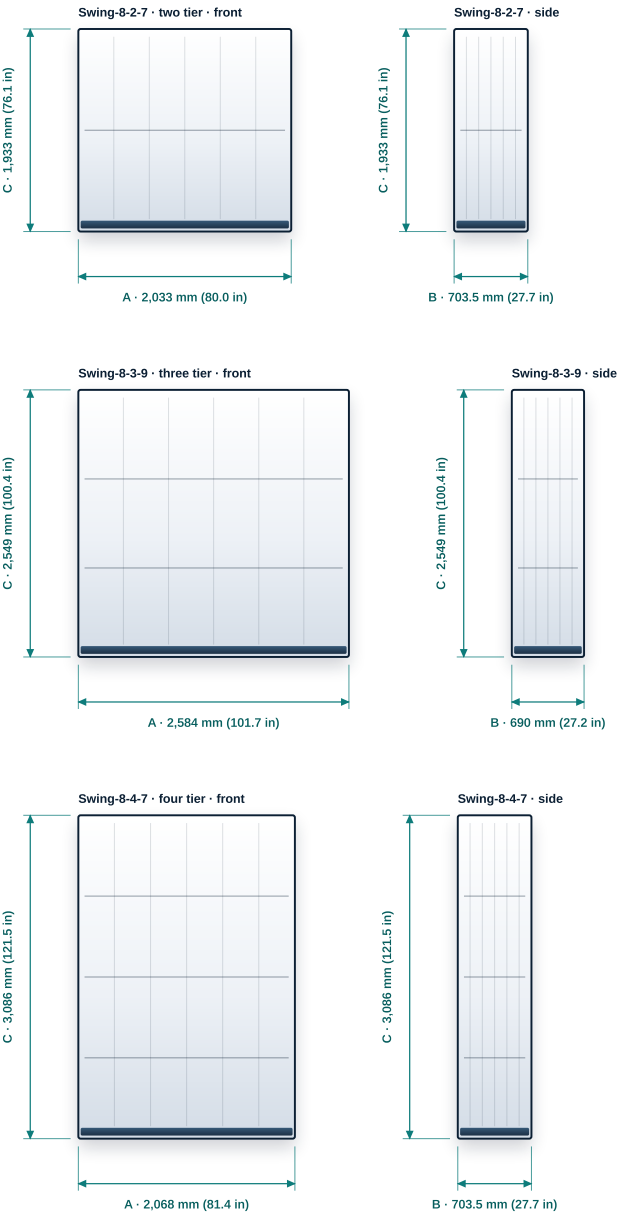
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-8-6-8

Swing family dimensional drawing (Swing-8-2-7 and 8-3-9 shown; model envelope in spec table)

Swing MBR module dimensions

Cartridge-only net dry weights. See data sheet.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com

Swing-9-1-1

Swing MBR module · 23 m² · thin-film composite flat sheet



Product overview

The Swing-9-1-1 is a Zyramic Swing flat-sheet MBR module: 1 Swing-9 cartridge in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

Parameter	Value	Unit
Cartridge type	Swing-9 (23 m ² , 208 sheets, 528 × 920 × 252 mm, 17.4 kg)	
Decks × columns	1 × 1	
Cartridges	1	
Membrane area	23	m ²
Envelope L × W × H	400 × 1,100 × 1,230	mm
Dry weight (uncrated)	On quotation	
Municipal net capacity	8.1	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~13.5	L/min·m ²
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-9-4-12

Swing MBR module · 1104 m² · thin-film composite flat sheet



Product overview

The Swing-9-4-12 is a Zyramic Swing flat-sheet MBR module: 48 Swing-9 cartridges in a SUS304 frame, built for coarse-bubble scour and cartridge-level service. Footprint is close to hollow fiber, so existing tanks often take Swing one-for-one with new permeate plumbing and guide rails.

Key features

- Thin-film composite flat-sheet membranes (permanently wetted dry film)
- PVDF or PVDF with graphene
- Heavy-duty thick membrane, reinforced weld area and small sheet size: very safe from delamination
- Footprint close to hollow fiber; often a 1:1 retrofit with new plumbing and guide rails
- Coarse-bubble air scour (not fine bubble)
- CIP with NaClO + citric acid in reverse flow + relaxation; no pressurized backwash
- Service a cartridge, not a module: swap in about two hours
- Can be BABA compliant at the module · SUS304 frame

Technical specifications

Parameter	Value	Unit
Cartridge type	Swing-9 (23 m ² , 208 sheets, 528 × 920 × 252 mm, 17.4 kg)	
Decks × columns	4 × 12	
Cartridges	48	
Membrane area	1,104	m ²
Envelope L × W × H	3,300 × 1,100 × 3,000	mm
Dry weight (uncrated)	On quotation	
Municipal net capacity	386	m ³ /d
Membrane	PVDF or PVDF + graphene, thin-film composite flat sheet	
Specific air (approx.)	~5.5–6	L/min·m ²
Air scour	Coarse bubble, continuous (MBR)	
Design flux, municipal	15–25 (15 long life / 20 average / 25 peak; ~20% net derate)	LMH
Industrial flux	Sized to the feed, typically <15	LMH
Filtration cycle	8 min on / 2 min relaxation	
CIP maintenance, municipal	NaClO 300–500 mg/L or citric 500–1,000 mg/L · 2.0 L/m ² · >30 min · every 7–10 d	
CIP recovery, municipal	NaClO 3,000–5,000 mg/L then citric 1–2% · each 2.5 L/m ² · >4 h · ~20 kPa TMP or 6 mo	
Submergence	>50 cm liquid above membrane top (>30 cm small modules)	
Module spacing	40–60 (outer legs)	cm

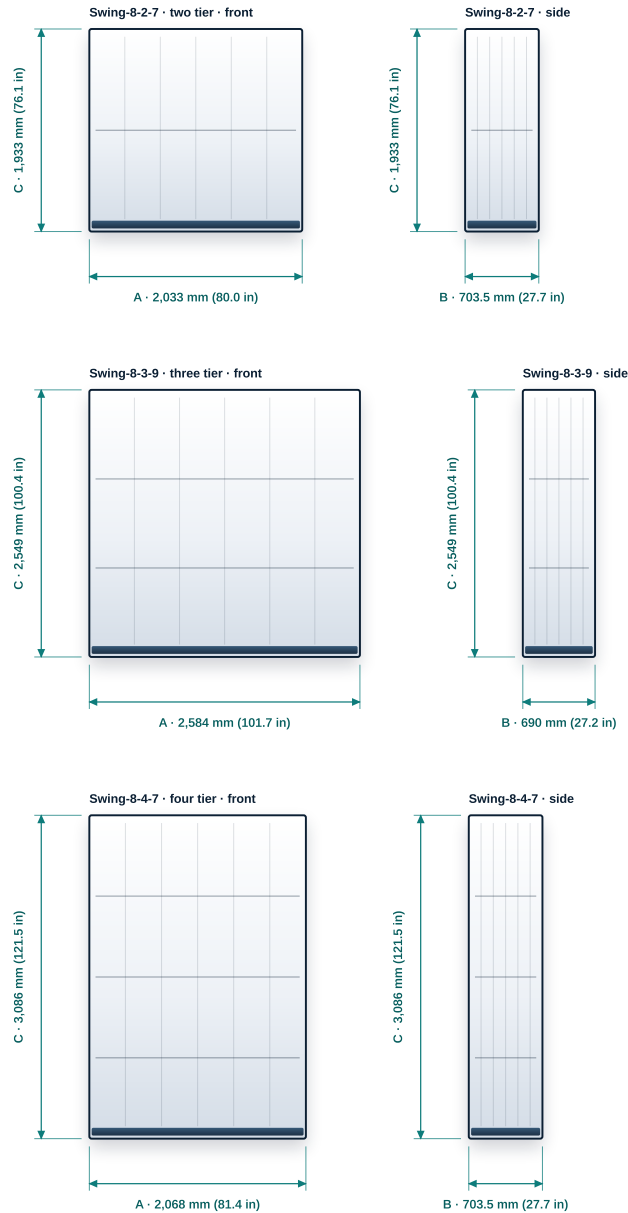
Manufacturer: Zyramic, Inc., Poughkeepsie, NY. Flux and capacity are Zyramic design values; your proposal sets the design point for your feed. Call 845-402-6318.

Swing-9-4-12

Swing family dimensional drawing (Swing-8-2-7 and 8-3-9 shown; model envelope in spec table)

Swing MBR module dimensions

Cartridge-only net dry weights. See data sheet.



Overall dimensions for planning. A overall length, B overall width, C overall height. Certified dimensional drawings are issued with the project quotation and submittal package.
Zyramic, Inc. www.zyramic.com