

EDOBURG

PEX Piping Systems

Canada & USA – CSA B137.5 & ASTM F876 / ASTM F877

About Edoburg

Edoburg is a structured, multi-category global supplier of certified infrastructure materials, serving contractors, distributors, and institutional buyers across regulated global markets. A division of **Edoburg Downes Pvt. Ltd.**, the company operates with a clear focus on tested quality, export compliance, and long-term delivery consistency.

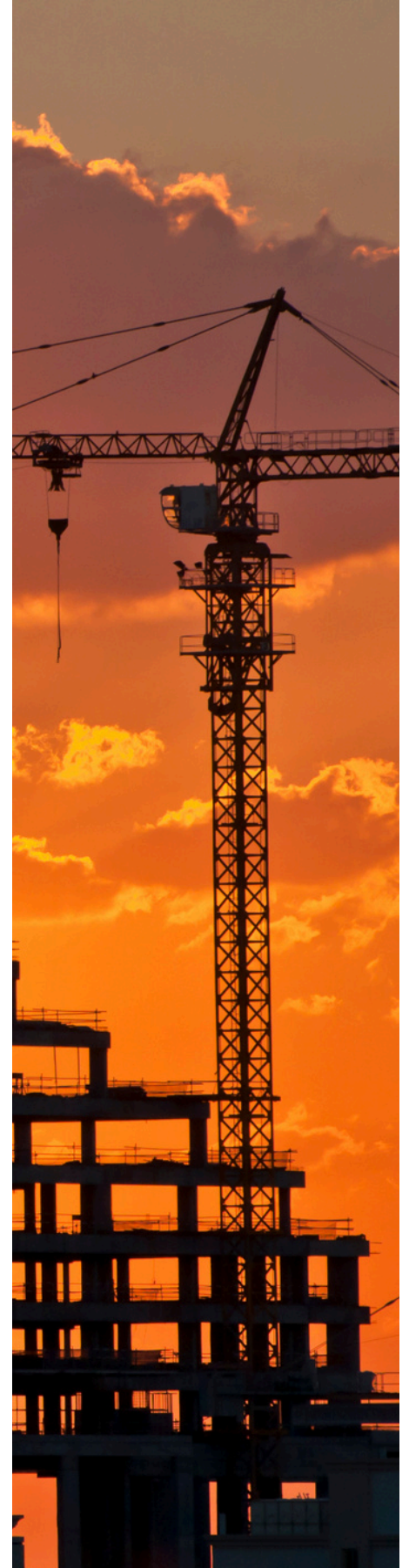
Our product portfolio spans over 10,000 SKUs across a wide range of categories including plastic piping systems, thermoplastic and composite pipelines, metal pipes and sections, drainage and utility systems, industrial components, and specialized engineered solutions for global projects.

All Edoburg-supplied products are manufactured in audited facilities and conform to international standards such as ASTM, CSA, ISO, IS, AS/NZS, and EN, depending on the target market. Each order is backed by full documentation support — including batch test reports, packing lists, Certificates of Origin, and private labelling when required.

We operate with export-ready processes, offering mixed container loads, low or no minimum order quantity, and market-specific packaging and compliance labelling. Our systems are designed to meet the expectations of professional buyers who require traceability, repeatability, and standardization across multiple geographies.

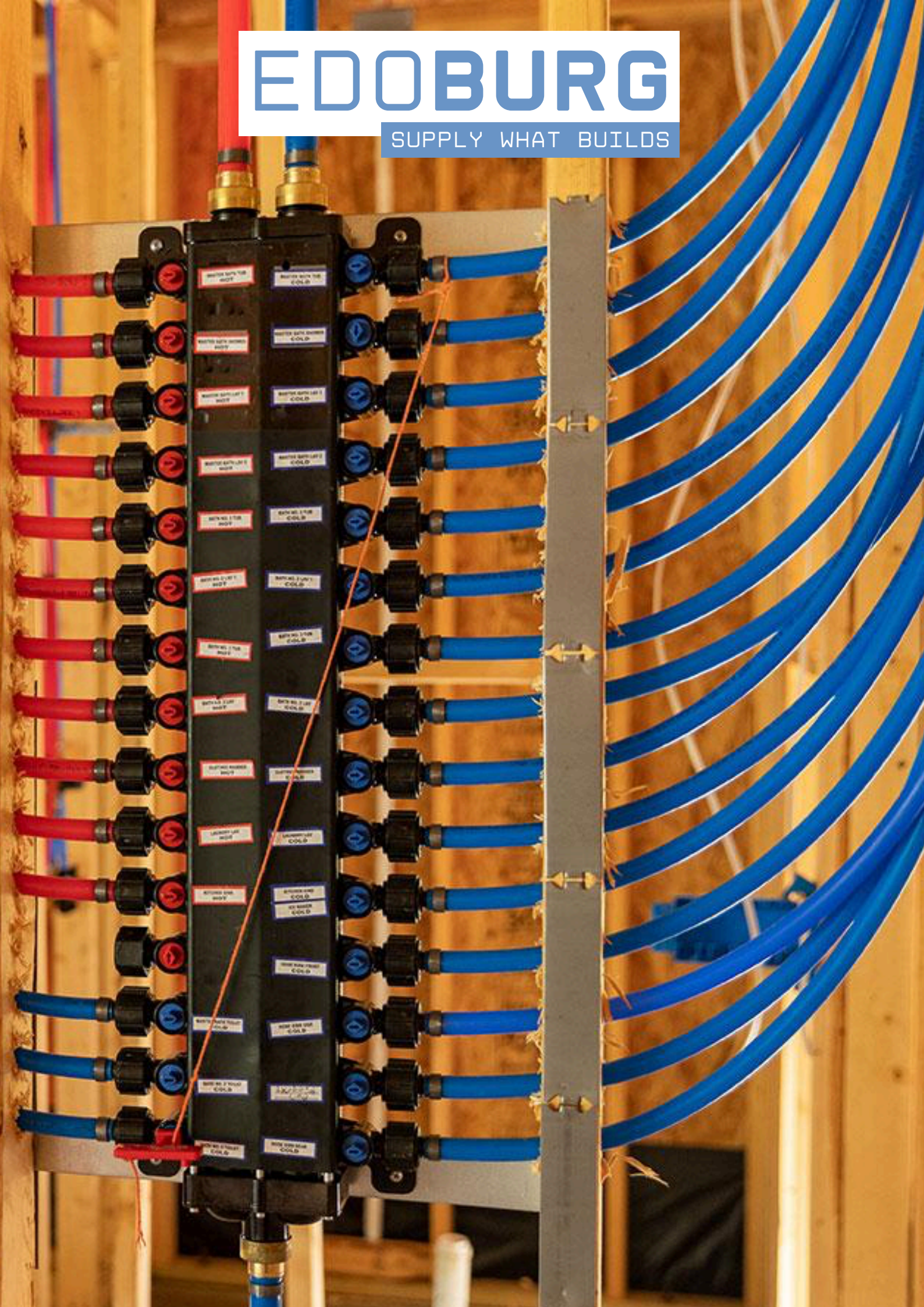
With clients across North America, Europe, the Middle East, Africa, and Asia-Pacific, Edoburg is positioned as a dependable global supplier — combining technical competence with structured commercial execution.

We don't just deliver material. **We supply what builds.**



EDOBURG

SUPPLY WHAT BUILDS



Technical & Properties Sheet

PEX Piping Systems – CSA B137.5 & ASTM F876 / ASTM F877

Manufacturing Origin: China

Standards & Approvals

- CSA B137.5 — PE-X pressure pipe systems (design, performance, marking)
- NSF/ANSI 14 & NSF/ANSI/CAN 61 — plastic piping system components & potable water health effects (as listed)
- DIN 4726 — oxygen diffusion performance (applies to EVOH barrier variants for hydronic circuits)
- ASTM F876 / ASTM F877

Materials & Construction

- Material family: PEX-b (silane/moisture-cure crosslinking)
- Barrier variants: PEX-b EVOH — multi-layer with co-extruded EVOH oxygen barrier; tie-layers per product drawing
- Form: Coils & straight lengths; colour coding per product line

Key Compliance & Tests

- Dimensions, materials, marking, and performance: ASTM F876/F877; CSA B137.5.
- NSF/ANSI 14 & 61 for product certification/listing (potable).
- ASTM F2023 chlorine-resistance classification (rating stated on product data where applicable).
- Long-term hydrostatic strength: ISO 1167 series (as referenced by product evaluations).
- Degree of crosslinking: ISO 10147 (method ref. in type testing).
- Joint performance with fittings: per applicable ASTM fitting standards (below).

Dimensional Series & SDR (metric OD)

- Series: CTS SDR 9 (nominal sizes 3/8" to 1")
- *Values are nominal from SDR relations. Production tolerances and exact marking are per ASTM F876 / CSA B137.5.*

Nominal	OD (in)	OD (mm)	Wall e (mm)	ID (mm)	Mass (kg/m)
3/8"	0.5	12.7	1.41	9.88	0.047
1/2"	0.625	15.875	1.76	12.35	0.074
5/8"	0.75	19.05	2.12	14.82	0.106
3/4"	0.875	22.225	2.47	17.29	0.144
1"	1.125	28.575	3.17	22.23	0.238

Physical & Mechanical Properties

Values are typical at -23 °C for commercial PEX-b compounds and provided for engineering guidance. Acceptance for potable/plumbing use is per ASTM F876/F877, CSA B137.5, and the product's NSF listings.

Material: Cross-linked polyethylene PEX-b (silane/moisture-cure). PEX-b EVOH includes a co-extruded EVOH oxygen-barrier layer; base mechanicals are the same.

Property	Unit	PEX-b	PEX-b EVOH
Density	g/cm ³	0.94-0.95	0.94-0.95
Tensile strength (approx. yield/ultimate)	MPa	20-27	20-27
Elongation at yield	%	~10	~10
Elongation at break	%	≥200 (often 250-400)	≥200 (often 250-400)
Secant tensile modulus	MPa	550-700	550-700
Impact strength (Charpy, un-notched)	—	No break	No break
Notched impact strength (Charpy)	kJ/m ²	8-12	8-12
Shore hardness	D	55-60	55-60
Ball indentation hardness	MPa	35-45	35-45
Mean coeff. of linear thermal expansion, α	K ⁻¹	(1.5-2.0)×10 ⁻⁴	(1.5-2.0)×10 ⁻⁴
Thermal conductivity	W/(m·K)	~0.35	~0.35
Dielectric strength	kV/mm	25-35	25-35
Surface resistivity	Ω	≥1×10 ¹⁵	≥1×10 ¹⁵
Combustibility	—	Combustible thermoplastic	Combustible thermoplastic
Chemical resistance	—	Good vs. potable water, glycols; verify media	Same
Recommended service temperature*	°C	0...95 (application- dependent)	0...95 (application- dependent)

* Observe temperature/pressure limits per ASTM F876/F877 / CSA B137.5 and the product's pressure-temperature ratings. EVOH oxygen barrier: performance statement appears on EVOH SKUs (see Technical & Properties Sheet).

PEX-b Pipes

Standard: CSA B137.5 & ASTM F876 / ASTM F877

Certification:



PEX-b Pipes – CSA B137.5 & ASTM F876 / ASTM F877

Spec.	Length (feet)		Color
	Roll	Straight	
3/8"	300/500	20	Blue/Red/White/Purple
5/8"	100/300	20	Blue/Red/White/Purple
2"	100/300	20	Blue/Red/White/Purple
3/4"	100/300	20	Blue/Red/White/Purple
1"	100	20	Blue/Red/White/Purple

EVOH PEX-b Pipes – CSA B137.5 & ASTM F876 / ASTM F877

Spec.	Length (feet)		Color
	Roll	Straight	
3/8"	300/500	20	Blue/Red/White/Purple
5/8"	100/300	20	Blue/Red/White/Purple
2"	100/300	20	Blue/Red/White/Purple
3/4"	100/300	20	Blue/Red/White/Purple
1"	100	20	Blue/Red/White/Purple

Storage, Handling & Transportation

(Applicable to PEX-a, PEX-b, and EVOH oxygen-barrier variants)

Storage

- Environment: Dry, clean, shaded; avoid ozone sources (motors, welders), solvents, open flame, and radiant heat.
- Temperature conditioning: Keep between +5 °C and +40 °C for storage; if product has been below +5 °C, allow 12–24 h at room temperature before uncoiling.
- UV exposure: Store under cover; if outdoor staging is unavoidable, use opaque tarps with air gaps. (Follow product label for any time limits.)
- Stacking (coils): Keep pallets level; “eye-to-sky”; do not cantilever. Max 2 pallets high unless packaging says otherwise.
- Racking (sticks): Full-length support at ≤ 1.5 m spacing; end caps on; no point loads.
- Segregation: Keep EVOH coils separate; avoid sharp edges or abrasive contact that could scuff the barrier.

Handling

- Lifting: Move palletized product only; use fork tines long enough to fully support the pallet width; no hooks through coil eyes.
- Uncoiling (recommended): Use an uncoiler. If manual, lay coil flat, cut ties one at a time, pull from the center, rotate coil as pipe pays out.
- Bending: Respect minimum cold bend radius (use the more conservative of your product spec or $\geq 8 \times OD$). Do not bend within $8 \times OD$ of a fitting.
- Kinks:
 - PEX-a: Limited heat-memory repair is possible with a controlled hot-air gun (no open flame) per product instructions.
 - PEX-b: Cut out kinked section and couple—do not heat-repair.
- Cleanliness: Keep ends capped until jointing; prevent dirt, grit, or moisture from entering.
- Abrasion/impact: Use corner/edge protectors where strapping touches; do not drag across concrete, steel, or scaffolding.

Transportation

- Palletization: Ship in original packaging; shrink-wrap intact; corner boards on coil pallets.
- Load securement: Use wide fabric straps with corner protectors; tighten to prevent movement without deforming the pipe.
- Orientation: Coils vertical (“eye-to-sky”); sticks fully supported—no overhang beyond tray/racks.
- Cover: Protect from sun, road grime, and exhaust heat; maintain airflow under tarps to avoid heat build-up.
- Mixed loads: Separate from solvents, fuels, adhesives, or chemicals that could attack polymers or the EVOH layer.

EVOH Oxygen-Barrier — special care

- Do not sand, scrape, or score the barrier surface.
- Avoid adhesive tapes directly on the barrier layer; use low-tack film or banding over protective wrap.
- If barrier is visibly breached, treat as damaged: cut back to sound material.

Quick DO / DON'T

- DO: store under cover; keep ends capped; use uncoilers; protect edges; follow bend radii.
- DON'T: expose to prolonged UV; stack unevenly; strap too tightly; heat with open flame; attempt kink heat-repair on PEX-b; drag coils/sticks over abrasive surfaces.

Note: Numerical limits above are conservative best practice for thermoplastic pressure pipe. Where your product sheet specifies different values (e.g., tighter bend radius, permitted pallet stacks, UV limits), the product sheet governs.



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