

Mateenbar™ Bends

Detailing Guide

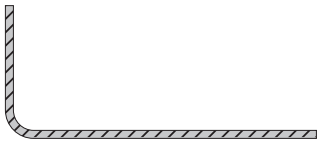
Mateenbar™ Bends provide reliable performance for residential, commercial and infrastructure projects. Highly durable, corrosion-resistant and lightweight, they are factory-formed and ready to install, offering dimensional consistency and ease of use.

Available in standard and custom configurations, Mateenbar™ Bends suit a wide range of applications. For more complex layouts, made-to-order shapes including U-bars, stirrups, hooks and pile cages are available.

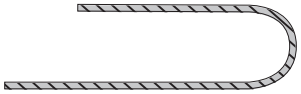
Precision Formed.
Faster Install.

Standard Bends

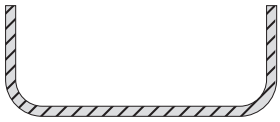
11 – 90° Bends



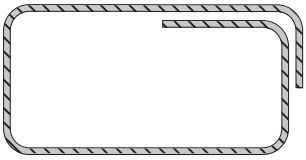
13 – Hook



21 – Stirrup



51 – Ligature



Code Compliant

Mateenbar™ Bends are engineered and tested to comply with the following industry standards, codes, and specifications for GFRP reinforcement.

MATERIAL STANDARDS: Australian Standard AS5204, ASTM D7957, and CSA S807 Grade III

TRANSPORT MAIN ROADS AUSTRALIA: Approved by TMR to MRTS 271

RESIDENTIAL & COMMERCIAL CONCRETE: ICC EER-5548, ICC ESR-5548, ACI 117, and ACI 440.11

MASONRY: TMS 402/602-22

Mateenbar™ Bends Technical Data

	Unit	6mm	10mm	12mm	16mm	20mm	22mm	24mm
Guaranteed Tensile Force	kN	27	59.2	97	130	182	241	297
Guaranteed Tensile Strength	MPa	840	830	740	650	640	620	580
Elastic Modulus	GPa	50						
Guaranteed Transverse Shear Capacity	MPa	150						
Weight	g/m	97	170	315	415	590	780	1030
Nominal Cross-sectional Area	mm^2	32	71	129	199	284	387	510
Outer Diameter (including ribs)	mm	8.2	10.3	14.0	16.0	19.0	21.8	25.0
Glass Transition Temperature	100 °C							
Primary Materials	Epoxy Backboned Vinylester and Corrosion-resistant E-CR Glass							

Infrastructure-Grade Quality Assurance

Every Mateenbar™ product is manufactured under ISO-certified quality control systems. This reduces engineering, procurement, and asset risk. Mateenbar™ is approved in Australia by TMR to MRTS 271.

Mateenbar™ is certified under the Environmental Product Declaration (EPD) system, giving professionals the information required to make informed decisions that support both structural integrity and sustainability goals.

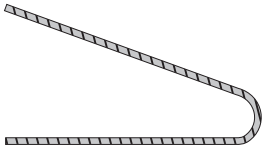
Global technical support and backed by Pultron's structural performance warranty.

Order Details

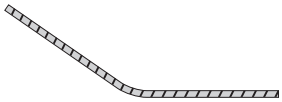
Mateenbar™ Bends are manufactured by Pultron Composites in New Zealand and supplied to projects in New Zealand, Australia and the Pacific Islands. Lead times for custom bends will be determined once the final bar is approved. Minimum quantities may apply for custom bend production. Speak to your Mateenbar™ representative about custom shape requirements and for technical support.

Custom Bends

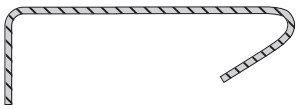
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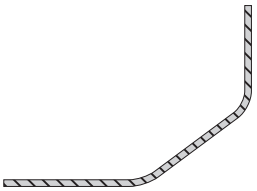
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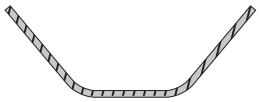
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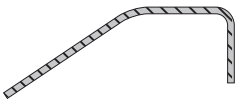
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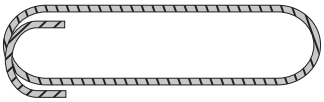
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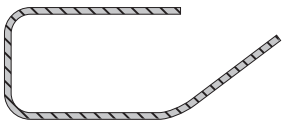
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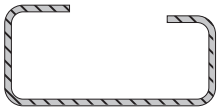
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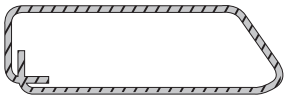
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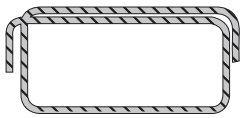
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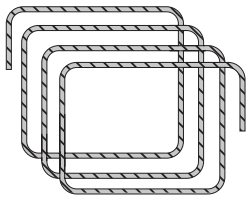
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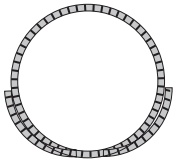
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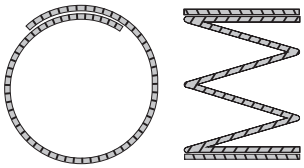
74 – Rectangular Slinky



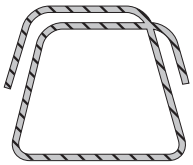
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99 – All shapes not covered



Sample shape only

NOTES:

1. This guide intends to capture the majority of our bent bar capabilities. Please check with your Mateenbar™ representative for size and shape limitations, or to discuss alternative options.
2. All Mateenbar™ bends are manufactured with a tolerance ± 10mm based on an outside-to-outside measurement.
3. Inner bend radii equal to 3x Bar Diameter, as per AS 5204 requirements.
4. All dimensions are outside-to-outside.

Contact us for orders and technical support

We work in partnership with engineers, contractors, and asset owners providing technical guidance, code-compliant infrastructure products and reliable supply for critical infrastructure projects.

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mateenbar™
Leading the World in Durable Fibreglass Rebar

ISO 9001 SYSTEM CERTIFICATION SGS

EPD
INTERNATIONAL EPD SYSTEM

Manufactured in New Zealand

Testing, Standards & Warranty: All Mateenbar™ products are tested in accordance with recognised international standards, including ASTM and ACI methodologies, and are supplied subject to Pultron Composites' standard warranty terms. Information provided reflects current production data and is believed to be reliable. Pultron Composites reserves the right to make improvements to products and processes that may result in changes to physical or mechanical properties.