Kestrel Model MX-Z.

The Kestrel MX-Z applies Kestrel design and engineering expertise to the unique demands of high-performance off-road riding. By incorporating technologies pioneered on our Model 4000 road racing frameset, Kestrel has produced the first workable composite frame for off-road use. The result offers significant improvement in virtually every aspect of off-road performance.

GRAPHITE/SPECTRA® HYBRID

The Model Z combines graphite (carbon fiber) with Spectra, an exceptionally light, ultra high-strength fiber used for high-impact applications from whitewater kayaks to military battle armor. This proprietary hybrid is uniquely suited to the rigors of off-road abuse, with a specific strength more than **four times** that of steel, aluminum, or titanium.

UNIFRAME™ CONSTRUCTION

Each MX-Z frame is handbuilt as a single piece. No separate tubes. No lugs. No glue joints. Continuous fiber flow throughout the frame, with reinforced steel inserts at head tube and bottom bracket.

SUSPENSION ENGINEERING

Unlike metals, composites are **anisotropic** structures: they can be made stiffer in one plane than another. Spectra—with the highest coefficient of shock absorption of any framebuilding material—is ideally suited to applications requiring both anisotropic properties and impact damping. By incorporating Spectra molded over foam-core stays, the Z-frame couples exceptional lateral stiffness with suspension. handling, and downhill tracking characteristics far beyond the capabilities of metal frames.

TEXTURED BALLISTIC FINISH

Most bicycle frames are finished in paint which is easily scratched or chipped. The MX-Z is finished in a textured coating process developed by Kestrel—the rugged ballistic finish actually forms part of the composite matrix.

PERFORMANCE FEATURES

- ▶ **Detachable dropouts** can be replaced after a crash. Interchangeable 130/135 mm spacing.
- ▶ **Elevated rear triangle** with chainstays **above** the chain for a shorter, stiffer rear end. . . and an end to chain slap.
- ▶ **Increased straddle clearance** at top tube.
- ▶ **Compound seat angle** is modified at top tube to correct rider weight distribution with changes in saddle height.
- ▶ **Nothing to rust.** Ever.
- ▶ **Faster uphill,** with a stiffer rear end and weight savings of up to 30% over metal frames.
- ▶ **Faster downhill,** thanks to suspension engineering and the anisotropic properties of advanced composite.

SPECIFICATIONS

MATERIALS AND CONSTRUCTION
Proprietary advanced composite Carbon/Spectra hybrid in a continuous fiber, One-piece Uniframe format.

SIZES
18 & 20 inch

FINISH
Kestrel Textured Ballistic or Custom Finish.

GEOMETRIES

SIZE	18 INCH	20 INCH
Seat Tube (total)	19.0	21.1
Top Tube	22.4	22.8
Head Angle	71.0	71.0
Seat Angle*	73/70	73/70
BB Height	11.7	11.7
Chainstay	16.9	16.9
Rake	1.74	1.74
Trail	2.7	2.7
Front Center	24.39	24.87
Wheelbase	41.3	41.8

The Kestrel MX-Z is available as a frameset, or as a complete bicycle with Shimano Deore XT II components.

***Note:** All angles are virtual: TT slopes 7 degrees. Seat angle changes at top tube.

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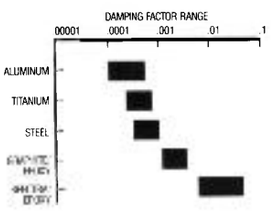
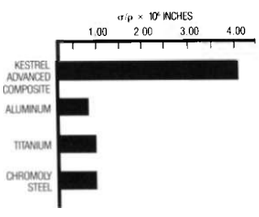
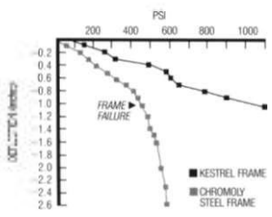
▼ **Damping characteristics of materials (Data provided by Allied-Signal Inc.)**



▼ **Specific strength (Material strength for a given weight)**



▼ **Compressive strength (PSI applied at head tube)**



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