

Lifestyle Designs



CROSSBOWS
optical

Custom Junior Soft

BUILT IN
SMOOTH OPTICS
TECHNOLOGY

- > NEW and improved design to offer maximum comfort for children
- > Designed to help reduce the onset of myopia (ages 8-16)
- > Child-specific features

CBJS042024

crossbowsoptical.com

Custom Junior Soft



This mild progressive design was created in response to clinical studies* regarding the use of multifocals in young children to slow down the progression of early onset myopia. The studies*, which were performed in both Asia and the USA conclude that lenses such as Custom Junior will reduce the onset of myopia. Recommended for 8-16 year olds based on indications that myopia stabilizes by the late teens or early twenties.

The Junior design offers a large stable reading area and excellent peripheral clarity in the distance zone.

* Cooper, J., Schulman, E., Jamal, N. Current Status on the Development and Treatment of Myopia. Optometry. 2012;83(5):179-199.

- Gwiazda J, Hyman L, Hussein M, Everett D, Norton TT, Kurtz D, Leske MC, Manny R, Marsh-Tootle W, Scheiman M, and the COMET Group: A randomized clinical trial of progressive addition lenses versus single vision lenses on the progression of myopia in children. IOVS 44: 1492-1500, 2003.

- Kading, D, Mayberry, A. Slowing Myopia Progression in Children. Review of Optometry 2012

- <https://nei.nih.gov/news/statements/comet>

Power Range	Not limited by CrossbowsRx
Corridor	13mm
Additions	+1.50D, +1.75D and +2.00D (recommended)
Index	All indices are available



Fields of Vision



Ideal For

Myopic kids (8 to 16 years) with an active lifestyle.

Additional Features

- > SoftTransition
- > OptiEdge
- > Variable Decentration
- > Child Specific Inset
- > OptiPrism

Performance



Designed For Children

Custom Junior Soft comes with variable decentration and OptiEdge to reduce edge thickness and select flatter lens curves based on the prescription. Thin, light-weight lenses are important for children's small frames. Blocked or surfaced prescribed prism may be added if needed.

The corridor has been kept short at 13mm, which allows this lens to have a minimum fitting height of 14mm allowing the frames to be smaller than typical adult frames.

It is not a full range progressive, addition should be prescribed at 2.0, other additions are available.



Custom Junior Soft

SO

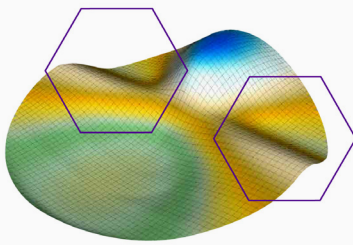
CF

SO SMOOTH OPTICS

Smooth Optics is the unique innovation in the house brand lens sector. The process for creating Smooth Optics designs starts by defining the lens surface in terms of its optical properties. This approach reverses the normal design process, so rather than create a surface and analyse to determine its optical performance, the starting point is describing the Mean Power required by the eye at all points of the lens and then deriving the surface to match this ideal. The Mean Power profile is more even and smooth, not only in the principal viewing zones, but also the peripheral areas.

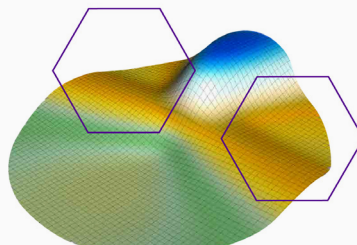


Without Smooth Optics



Regions of uneven mean power variation

With Smooth Optics



Much smoother power variation

Key Features

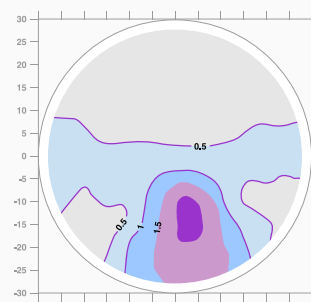
- > Fantastic patient comfort
- > Sharp viewing in all directions
- > Minimises blurring experienced with traditional progressives
- > Fast patient adaptation times and great customer satisfaction

CF CUSTOMFORM

CustomFORM is a cohesive approach to lens design, which considers a progressive lens as a single entity rather than an accumulation of individual points. It utilizes geometric building blocks (continuous splines and ellipses instead of separate points) at the time of creation to define the whole lens surface rather than simply minimizing distortion in primary parts of the lens. The intrinsically natural design results in a strong overall performance, high adaptation rates due to increased patient comfort and smooth contours making it easier to produce lenses.



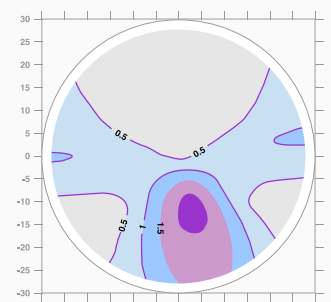
Point Cloud Optimisation



Mean power profiles

- > Good distance, good reading, good intermediate
- > Uneven boundaries, particularly in peripheral zones

CUSTOMFORM



- > Good distance, good reading, good intermediate
- > Smooth contours, easier to manufacture, increased comfort