On behalf of Vision Expo, we sincerely thank you for being with us this year.

Vision Expo Has Gone Green!

We have eliminated all paper session evaluation forms. Please be sure to complete your electronic session evaluations online when you login to request your CE Letter for each course you attended! Your feedback is important to us as our Education Planning Committee considers content and speakers for future meetings to provide you with the best education possible.

vision expo

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Jesse Walters, ABOM

- No Financial interests to disclose
- Account Representative and Optical Trainer for an independent OD owned national lab: Summit Optical
- CE Author, content editor and advisor for the Optical Training Institute
- CE contributor for Quantum Optical
- All relevant relationships have been mitigated

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The Bevel's Advocate

Jesse Walters, ABOM
1-hour ABO

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Frame Types

- Full Frame Plastic & Metal
- Semi-rimless Grooved
- Full Frame Metal Groove
- Wrap Sunglass
- Drilled Rimless

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What could go wrong?

- Thickness
- Curling plastic frames
- Loose fit
- Stress fractures
- Delamination
- Temple splay
- Frame damage
- Gapping
- Poor cosmetics

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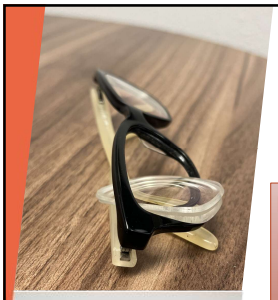

Full rim frames: using the common V-bevel

- Hide-a-bevel
- 1/3-2/3
- 50%
- Flush front
- Metal/Zyl edge

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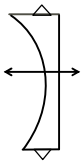
Hide-a-Bevel



Named for its ability to disguise lens thickness by having a shallow V with the rest of the edge thickness flat against the frame side.

Sometimes called:

- 1/3-2/3
- V-bevel

(most labs default to this for all full frames)

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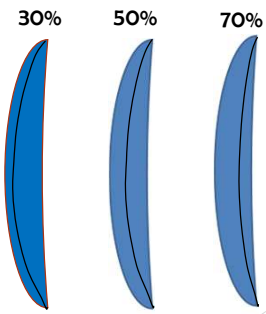
Specified Percentage



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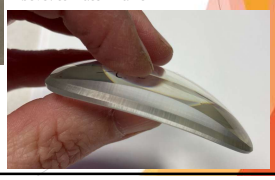
Base Curve vs. Bevel Curve

Minus: Flat B.C. for Rx, steeper curve for bevel to match frame

Plus: Higher B.C. for Rx, flatter bevel to match frame



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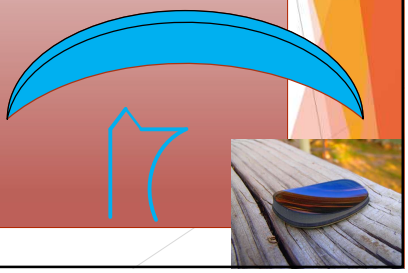
Front Bevels

Any bevel that runs along the front edge of a lens following the front base curve.

Also called:

- Flush Front
- Follow Front
- Forward Bevel



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When do we move the bevel forward?

- All polarized lenses
- Tinted lenses (if they are tinted as an uncut)
- Double eyewire frames
- Specialty frames that have any obstruction to lens thickness in front of the bevel channel
- Wrap frames
- Specialty sport/wrap bevels
- Frames with clip-ons

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Grooving

Groove Types:

- Semi-Rimless/Nylor
- Full Metal Groove
- Combination Groove/ V-bevel

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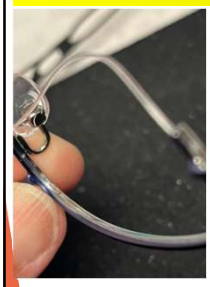
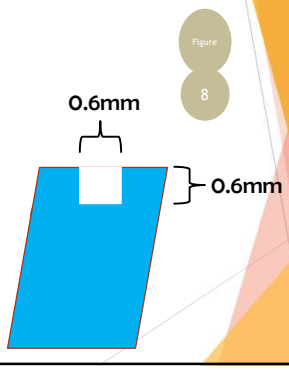
Width & Depth

Figure-8 liners & nylon cord





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Wider Grooves

Any time a grooved lens does not mount fully into a standard nylon cord combined with a lens liner/figure-8, a wider-than-standard groove is needed

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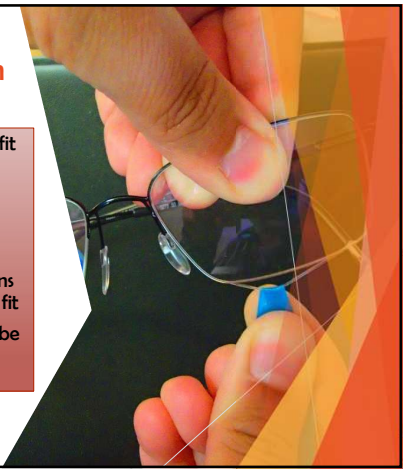
Groove Depth

- Determines secure fit
- Can weaken lens durability
- Changes frame aesthetics
- Adjusts ultimate lens circumference and fit
- Groove bands can be used for fit



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Groove Placement

1/3-2/3 groove

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Groove-worthy Materials

Best
- Trivex
- Polycarbonate*

OK
- 1.60
- 1.67

Worst
- 1.71, 1.74
- CR-39
- Glass

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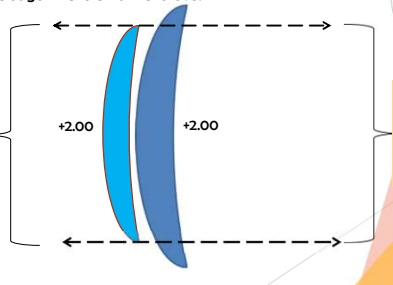
Lens Thickness & Edge-Type

Plus Lenses:
- Thickest at optical center
- Thinnest at edge furthest from the O.C.

- 50mm eye size
- V-bevel



- 50mm eye size
- Wide groove

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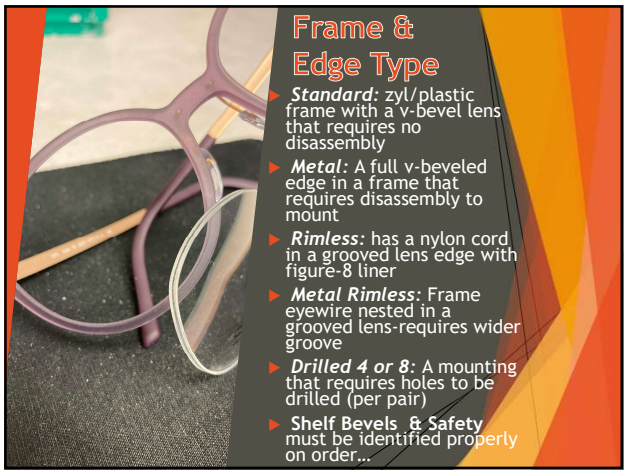
Frame & Edge Type
Standard: zyl/plastic frame with a v-bevel lens that requires no disassembly
Metal: A full v-beveled edge in a frame that requires disassembly to mount
Rimless: has a nylon cord in a grooved lens edge with figure-8 liner
Metal Rimless: Frame eyewire nested in a grooved lens-requires wider groove
Drilled 4 or 8: A mounting that requires holes to be drilled (per pair)
Shelf Bevels & Safety must be identified properly on order…

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Minimum Edge Thickness
Zyl/metal/v-bevel/standard: 1.3mm min edge (can be specified as 1.0)
Drill: 1.7mm
Groove/rimless/nylor: 2.2mm
Shelf Bevel: 2.2mm
Rimless Metal: 2.4mm
Safety: 3.0

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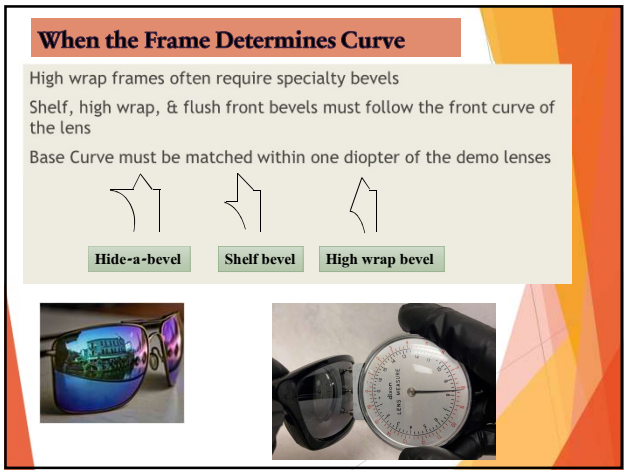
When the Frame Determines Curve
High wrap frames often require specialty bevels
Shelf, high wrap, & flush front bevels must follow the front curve of the lens
Base Curve must be matched within one diopter of the demo lenses
Hide-a-bevel
Shelf bevel
High wrap bevel

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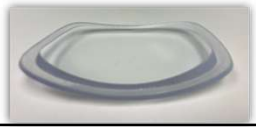
Identifying Special Bevels

Remove demo to see back bevel of frame



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Incline Bevels

- Angles back lens thickness behind the v-bevel
- Can be machine edged or hand-edged
- Used for high-wrap frames to reduce lens thickness and temple splay

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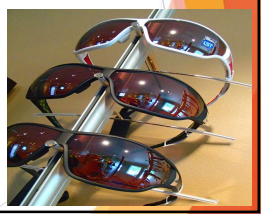
T- Bevels

- Meant for square channels
- Can weaken lens durability
- Sometimes used for frames that are not intended for Rx



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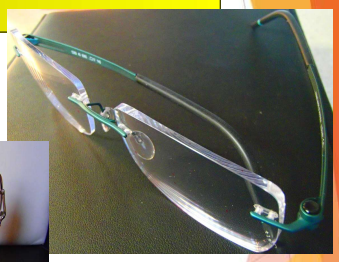
Rimless Drilled



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Edge Finishing

To polish or not to polish?

- High luster edge polish can create reflections and rainbows
- Matte finishes can create white rings or accentuate lens thickness
- Satin polish is a smoothed out semi-gloss

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Rolled Edges

To Roll...

or not to Roll?

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Getting What You Ordered
Understand lab capabilities and terminology
Understand lens menu options of edge type and frame type categories
Lab will determine best bevel placement and type as long as the frame is provided
Making notes specific and clear
Shelf/Notch/Wrap Bevels
Note & Include Clip
Note & Include Gasket/Foam Inserts/Side Shields

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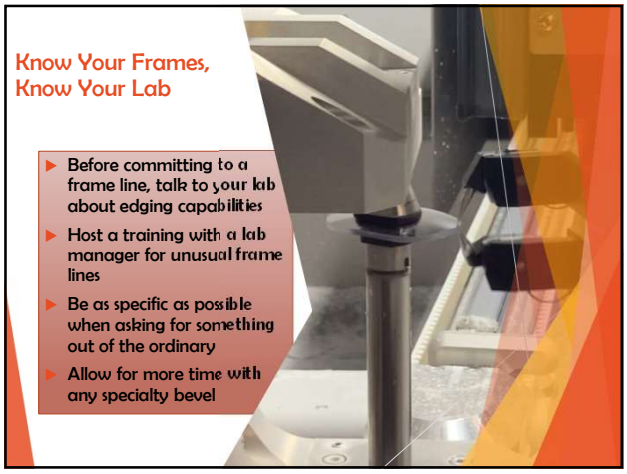
Know Your Frames, Know Your Lab
Before committing to a frame line, talk to your lab about edging capabilities
Host a training with a lab manager for unusual frame lines
Be as specific as possible when asking for something out of the ordinary
Allow for more time with any specialty bevel

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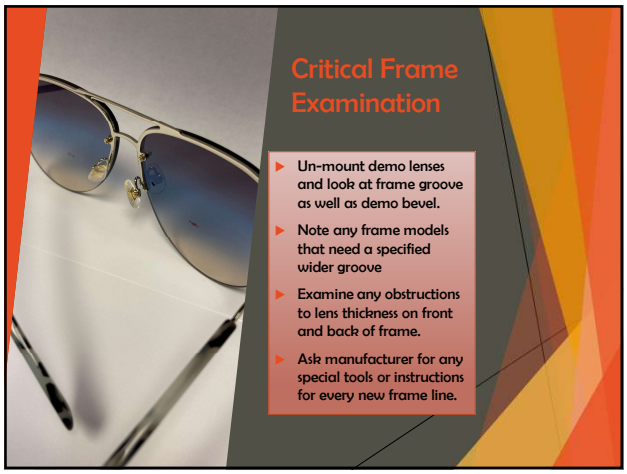
Critical Frame Examination
Un-mount demo lenses and look at frame groove as well as demo bevel.
Note any frame models that need a specified wider groove
Examine any obstructions to lens thickness on front and back of frame.
Ask manufacturer for any special tools or instructions for every new frame line.

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The Bevel's Advocate

Jesse Walters, ABOM jesse@summitoptical.com

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