

# DISPENSING PROGRESSIVE EYEWEAR



A Comprehensive Guide for Opticians and Eyecare Professionals

# Introduction to Progressive Lenses

- **What are progressive addition lenses (PALs)?**
  - Multifocal lenses with a seamless, gradual change in power.
- Three distinct viewing zones: distance, intermediate, and near.
- Elimination of the "image jump" and visible lines found in traditional bifocals and trifocals.
- Provides a more natural vision correction for presbyopic patients.

# Patient Selection and Consultation

- **Identifying ideal candidates:**
  - Presbyopic patients, early presbyopes, and previous bifocal wearers.
- **Discussing lifestyle and visual needs:**
  - Computer use, reading, driving.
- **Setting realistic expectations:**
  - Regarding the adaptation period and peripheral blur (astigmatism inherent in PAL design).
- **Identifying challenging candidates:**
  - Those with severe motion sickness, inner ear issues, or highly specific occupational visual demands requiring specialized occupational lenses.

# Proper Frame Selection

- **Importance of frame depth (B-measurement):**
  - Ensuring adequate room for the reading zone (typically a minimum of 28-30mm frame vertical measurement depending on the corridor length).
- **Frame shape considerations:**
  - Avoiding extreme aviators or shapes that cut off the nasal reading area.
  - Refrain from selecting oversized eyewear; it will reduce the ability to accommodate.
- **Nose pads:**
  - Frames with adjustable nose pads are highly recommended for progressive lenses as they allow for vertical adjustments to fine-tune the fitting height.
- **Stability:**
  - Ensure the frame sits securely on the patient's face without slipping, as movement will disrupt the optical center alignment.

# Taking Accurate Measurements

- **Monocular Pupillary Distance (PD):**
  - Crucial for aligning the optical center of each lens with the patient's visual axis. Do not use binocular PD.
- **Fitting Height:**
  - Measured from the center of the pupil to the deepest part of the frame's lower rim.
- **Patient positioning:**
  - Ensure the patient and optician are at eye level during measurement to avoid parallax errors.
- **Posture:**
  - Ask the patient to assume their natural, comfortable head posture when taking the fitting height.

# Pre-fitting Frame Adjustments

- **Pantoscopic Tilt:**
  - The frame front should angle downward towards the cheeks, typically between 8 to 12 degrees, to maximize the field of view in the reading zone.
- **Vertex Distance:**
  - Keep the lenses as close to the eyes as comfortably possible (usually 12-14mm) to increase the field of vision and reduce peripheral distortion.
- **Face Form (Wrap):**
  - The frame should follow the natural curve of the face, aligning the lenses perpendicular to the visual axis at various angles of gaze.

# Lens Verification and Dispensing

- Locating engraved markings: Use a good light source to find the semi-visible laser engravings (usually 34mm apart) to verify the add power and lens brand/material.
- Re-marking the lenses: Use a progressive lens template or layout chart to mark the distance and near reference points.
- Verifying the prescription in the lensometer at the correct reference points:
  - Distance: fitting cross
  - Prism: Prism reference point 4mm below the fitting cross
  - Near Point Convergence: towards the bottom near the nasal
- On-face verification: Check the fitting cross alignment with the patient's pupil center when they are wearing the finished glasses.

# Patient Education and Adaptation

- Teaching the patient how to use the lenses: "Point your nose where you want to look."
- Navigating stairs: Remind patients to tilt their head down rather than just dropping their eyes to avoid looking through the reading zone while walking downstairs.
- Reading posture: Encourage holding reading material at an appropriate angle and distance, moving the head slightly rather than just the eyes.
- Reassurance: Emphasize that a short adaptation period (a few days to a couple of weeks) is completely normal.

# Troubleshooting Non-Adaptation

- **Patient complains of narrow reading area:**
  - Check pantoscopic tilt
    - Increase if necessary
    - Vertex Distance: Decrease
- **Patient must lift their head to read:**
  - Fitting height may be too low, or the frame has slipped down the nose.
    - Adjust nose pads
    - Increase retroscopic tilt
- **Distance vision is blurry:**
  - Check if the fitting height is too high or if there is an incorrect distance prescription.
- **Feeling "swim" or dizziness:**
  - Often related to incorrect PD, base curve changes, or simply the need for more adaptation time. Recheck all measurements.

# Conclusion

- Dispensing progressive lenses requires precision, careful frame selection, and accurate measurements.
- Patient education is just as important as the physical fit.
- A structured approach to dispensing and troubleshooting guarantees high patient satisfaction and successful adaptation.