



# Fitting the Peli Lens™

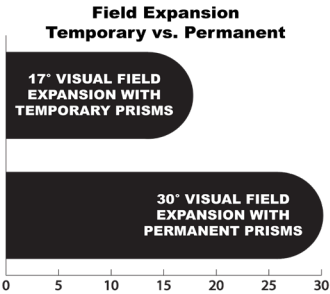


## A Guide to Helping Your Patient Succeed with Peripheral Prisms

# This is just the 1st step! Make your patient aware of the Benefits of Permanent Prisms.

## More Field

Permanent prisms offer **76% more field expansion** than temporary prisms!

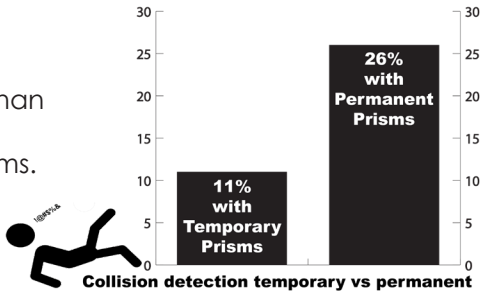


## Quality

Permanent Prisms are made from a top quality PMMA acrylic, giving better contrast, and more visual field. And they're glued into the lens using a resilient UV-cured adhesive. They simply won't peel off or fall out.

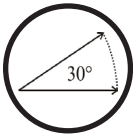
## Increased Collision Detection

Permanent Prisms offer more than double the potential collision detection over temporary prisms. Walk confidently through a grocery store or a mall.



## Oblique Option for Driving

If you drive or plan to drive, be sure to get the **oblique option**. The oblique prism configuration gives you more awareness of your midline. Ability to drive varies based on your state's legislation.



30° visual field expansion



Better for mobility



Easy to clean



Driving possible



Various frame options



26% collision detection



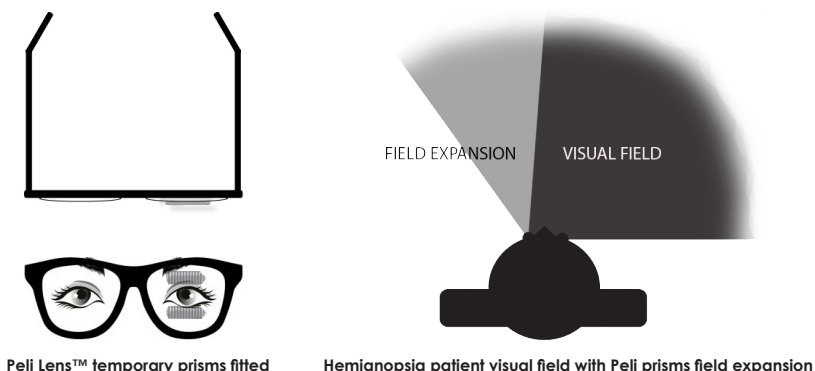
Brighter image

## Peli Lens™ Real Field Expansion for Hemianopsia

The Peli Lens™ provides field expansion for patients with visual field loss from homonymous hemianopsia. The folks at Chadwick are here to help you.

The Peli Lens™ has been clinically proven in multiple multi-site clinical trials. Time and time again, the studies show roughly 50% of the patients still wear the prisms after one year. Some more experienced practitioners' reports success rates in excess of 80% or more!

The permanent Peli Lens™ can increase the patient's visual field expansion by up to 30° by superimposing images from the blind side onto the seeing side of the patient's peripheral vision. See illustration below.



If your patient's goals include mobility or driving, then fitting them with temporary peripheral prisms is a great start. There is no other option that gives a comparable benefit. Supplementing the peripheral fitting with vision training/therapy sessions have been shown to dramatically improve the patient's recognition and understanding of the expanded visual field.

Many patients hope to drive with hemianopsia. Rules on driving vary from state to state, province to province, and country to country. If the state allows patients to drive with a horizontal visual field of 120 degrees or less, permanent peripheral prisms may be able to help the patient meet the visual field requirement. Give us a call to discuss your specific case so we can help you determine the best course of action.

# Maximize the Success of Your Peli Lens Fitting

- Don't be a spork. The Peli Lens is for distance wear only, and is most helpful in mobility situations. Trying to use a hybrid approach the patient can wear full time, such as a single prism on top with bifocals on the bottom, will work much like a spork (spoon/fork hybrid) - it works ok, but it's not particularly good for anything.
- Give the patient freedom. It is important that the patient have the opportunity to choose when to wear the lens. The peripheral prisms can act as an obstacle to patients during certain activities such as reading and watching TV. Fitting peripheral prisms on a pair of glasses the patient wears all the time is not advised.

Based on the kind of glasses the patient currently wears, any of the following options will allow the patient to choose when to wear their mobility glasses:

Wears Single Vision Glasses for Distance	Wears Full-time Bifocal, Trifocal, or No-line bifocal	Does Not Currently Wear Distance Glasses
Fitover to be worn over glasses	Fitover to be worn over glasses	Pair of non-Rx safety glasses
Old Pair of Single Vision Distance Glasses	Old Pair of Glasses (OK if they have bifocal)	Fitover - can be worn without glasses underneath
Separate Pair of Single Vision Distance Glasses*	Separate Pair of Single Vision Distance Glasses*	Pair of glasses made with no Rx.*

**\*If you're making a new pair of glasses for the prisms, please refer to the Frame Selection for Permanent Prisms on Page 12.**

Use the chart below to guide you to the best fitting scenario to fit your patient's needs and proceed to the desired page.

	Mobility most important to patient	Driving (Obliques) most important to patient
Using the Chadwick Fitting Kit	Page 4	Page 5
Using the DIY method	Page 6	Page 7

## Option 1 - Horizontal prisms with Fitting Kit

*\*Please follow this step by step. Each step is important. You can do it!*

Items you will need to supply:

- **Glasses (Patient's not everyday glasses or fitovers)**



**1. Observe** patient's normal head posture and walking stance.

### **2. Placing the template -**

- Place the template on the eye with the temporal field defect (left hemi = left eye, right hemi = right eye).
- Place an occluder on the opposite eye. If you do not have an occluder, you can use the yellow cling provided with the fitting kit.
- Position the red dot in the center of the template directly over the patient's pupil. If black part of the template overlaps the frame rim, adjust the frame and re-apply template to reduce or eliminate overlap.
- Have the patient walk around again to ensure the template has not changed their gait. If patient's gait changed because of template, adjust placement of template accordingly.



### **3. Placing the prisms -**

- On the rear surface of the lens, firmly place the Peli press-on prisms, with pointed end towards temple, directly over the black portions of the template.
- Verify that there is 12mm of separation between the prisms.
- If prisms overlap the edge of the frame, trim off the excess.
- Remove template
- Go to page 8 for the final fitting instructions.



## Option 2 - Oblique Prisms with Fitting Kit

*\*Please follow this step by step. Each step is important.  
You can do it!*

Items you will need to supply:

- **Glasses (Patient's not everyday glasses or fitovers)**



1. **Observe** patient's normal head posture and walking stance.

### 2. Placing the template -

- o Place the template on the eye with the temporal field defect (left hemi = left eye, right hemi = right eye).
- o Place an occluder on the opposite eye. If you do not have an occluder, you can use the yellow cling provided with the fitting kit.
- o Position the red dot in the center of the template directly over the patient's pupil. If black part of the template overlaps the frame rim, adjust the frame and re-apply template to reduce or eliminate overlap.
- o Have the patient walk around again to ensure the template has not changed their gait. If patient's gait changed because of template, adjust placement of template accordingly.



### 3. Placing the prisms -

- o On the rear surface of the lens, firmly place the Peli press-on prisms, with pointed end towards temple, directly over the black portions of the template.
- o Top Prism: 30° Base Out & Base Down - More Out than Down
- o Bottom Prism: 30° angle Base Out & Base Up - More Out than Up
- o Verify that there is 12mm of separation between the prisms.
- o If prisms overlap the edge of the frame, trim off the excess.
- o Remove template
- o Go to page 8 for the final fitting instructions.



## Option 3 - Horizontal prisms with DIY method

*\*Please follow this step by step. Each step is important.  
You can do it!*

Items you will need to supply:

- **Occluder and/or tape**
- **Sheet of 40 diopter Fresnel press-on prism**
- **Washable marker**
- **Glasses (Patient's not everyday glasses or fitovers)**
- **Tape**
- **Ruler**
- **Scissors**



**1. Observe** patient's normal head posture and walking stance.

### **2. Marking placement -**

- Using a washable marker, dot the front of the lens where the patient's pupil is.
- Make a dot 6mm above and below the pupil mark, on the eye with the temporal field defect (left hemi = left eye, right hemi = right eye).



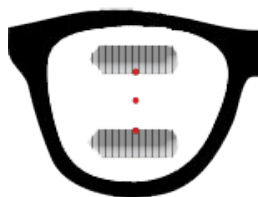
### **3. Placing occluder -**

- Place an occluder on the opposite eye. If you do not have an occluder, an opaque tape can be used.
- Also occlude from the top dot to the top of the frame, and then from the bottom dot to the bottom of the frame.
- Have the patient walk around again to ensure the template has not changed their gait.



### **4. Cut & place the prisms -**

- Cut two prisms from the sheet of fresnel.
- Cut them in an asymmetrical manner so the base can be distinguished from the apex of the prism. This will make it easier to replace if it comes off the glasses.
- The prisms should be approximately 25mm wide by 8mm tall.
- On the rear surface of the lens, firmly place the prisms directly above the upper mark and directly below the lower mark.
- Verify that there is 12mm of separation between the prisms.
- If prisms overlap the edge of the frame, trim off the excess.
- See page 8 for cutting template & final fitting instructions.



## Option 4 - Oblique Prisms with DIY method

*\*Please follow this step by step. Each step is important. You can do it!*

Items you will need to supply:

- **Occluder and/or tape**
- **Sheet of 40 diopter Fresnel press-on prism**
- **Washable marker**
- **Glasses (Patient's not everyday glasses or fitovers)**
- **Tape**
- **Ruler**
- **Scissors**



**1. Observe** patient's normal head posture and walking stance.

**2. Marking placement -**

- Using a washable marker, dot the front of the lens where the patient's pupil is.
- Make a dot 6mm above and below the pupil mark, on the eye with the temporal field defect (left hemi = left eye, right hemi = right eye).



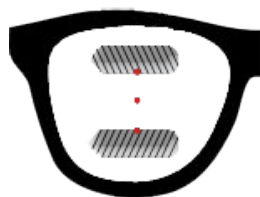
**3. Placing occluder -**

- Place an occluder on the opposite eye. If you do not have an occluder, an opaque tape can be used.
- Also occlude from the top dot to the top of the frame, and then from the bottom dot to the bottom of the frame.
- Have the patient walk around again to ensure the template has not changed their gait.



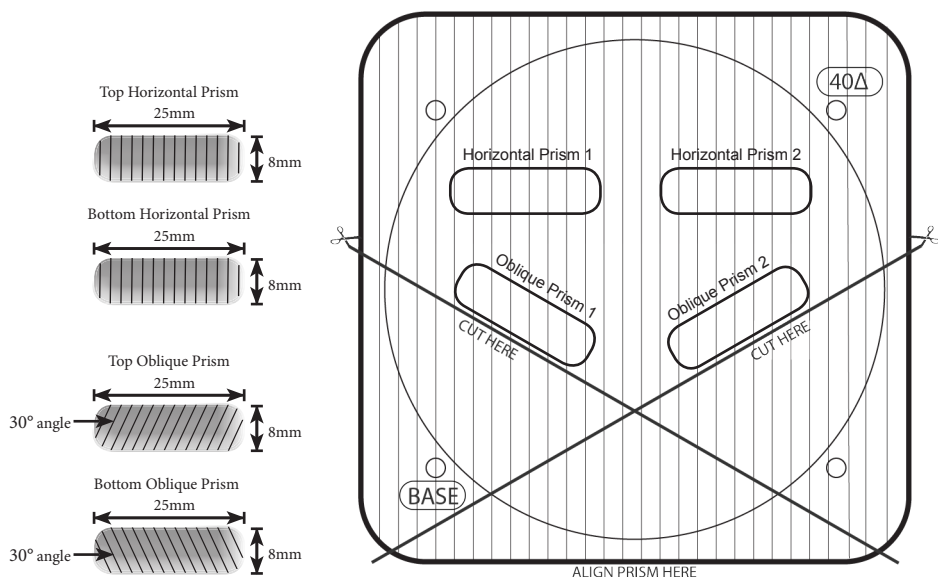
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- Top Prism: 30° Base Out & Base Down - More Out than Down
- Bottom Prism: 30° angle Base Out & Base Up - More Out than Up
- The prisms should be approximately 25mm wide by 8mm tall.
- On the rear surface of the lens, firmly place the prisms directly above the upper mark and directly below the lower mark.
- Verify that there is 12mm of separation between the prisms.
- If prisms overlap the edge of the frame, trim off the excess.
- See page 8 for cutting template & final fitting instructions.





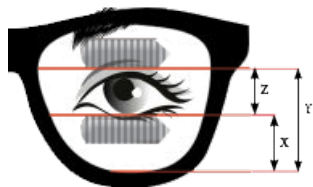
# DIY Fresnel Sheet Prism Cutting Template



## Last Step

### Final fitting -

- Remove the marks, occluder and press any air bubbles out of the temporary prisms.
- Record the final fitting positions and return glasses to the patient.
- Go to training exercises on page 9



$$Y - X = Z \text{ or } X + Z = Y$$

\_\_\_\_\_:X = Lower Height (measurement from the top of the bottom prism to the bottom of the lens)

\_\_\_\_\_:Y = Upper Height (measurement from the bottom of the top prism to the top of the lens)

\_\_\_\_\_:Z = Separation (measurement from bottom of top prism to the top of the bottom prism)

## Use & Training Instructions - Visit our website for a video of the training process.

- **Overview of use with the patient.**

- It is very important that they look between the prisms to get the benefits of the expanded visual field. Looking directly through the prism will cause double vision. This is undesirable.



Incorrect



Correct

- **Demonstrate the field expansion to the patient.**

- Tell the patient to focus on your nose, and to tell you when they see your hand come into view.
- Starting from past the shoulder on the patient's blind side, wiggle your fingers and move them in towards the patient's nose. For horizontal prisms, the expanded field will be slightly below or above the midline. For oblique prisms, the expanded field will be along the midline.
- When the patient sees the hand, tell them to point to your hand, and then find your hand in central vision. Often times, the patient will point to your face, because that's where they see the image of your hand in their visual field.

- **Importance of Training & Recommended Exercises**

- When first worn, peripheral prisms create a certain level of visual confusion. The patient tries to distinguish what information is in their blind field, and what information is in their seeing field. The goal of training is to minimize this confusion. A pilot study done at Schepens Eye Research Institute showed patients to be 95% accurate in distinguishing the confusing images after just six one-hour training sessions in their driving simulator.
- Reach and Touch Training
  - While the patient is fixating on your nose reach your hand into the patient blind side and have patient grab at your hand as they detect it through the prism. This should be practiced at home with a loved one, or by one's self.
  - In a vision therapy or occupational therapy setting, many doctors or therapists will set up a reach and touch program on a Sanet Vision Integrator or similar reach/touch device.
- Training Walk - Lead patient from uncluttered areas such as a hallway to progressively cluttered areas such as a waiting room filled with chairs as potential obstacles. Constantly ask patient to report his/her observations.

## Before the Patient Leaves

### ● Cleaning Instructions



Rinse spectacle lenses under gentle stream of warm water. If contaminants remain, use a toothbrush or similar cleaning implement to clean grooves.



Pat or blot with a soft, lint-free cloth.

### ● What to Do if the Prism Falls Off

- Depending on your confidence in the patient, you can give them instructions on how to reapply the prisms. If you do this, make sure they understand the importance of the base and apex positioning.
  - Photocopy the glasses with the prisms on them. Give a copy to the patient, and keep one for your records.
- Follow 3M manufacturer instructions for adhesion of fresnel prisms

### ● Give Them the Brochure or Website for Permanent Prisms and a Brief Description.

- Permanent Prisms offer 30 degrees of field expansion versus 17 degrees with the temporary prisms.
- Permanent Prisms cover 26% of potential pedestrian collisions, versus 11% detected by the temporary prisms

- **Reiterate That the Lenses are For Mobility.** Sunglasses are for outdoor use. They're not useful in a dimly lit restaurant. If you wear sunglasses in a dimly lit restaurant, you may come away thinking that sunglasses aren't helpful. Similarly, peripheral prisms are helpful for mobility. They are not helpful for reading or watching TV. Make sure the patient is aware of the conditions in which the prisms will be helpful, and the conditions in which they won't be helpful.

## Follow-up: Ordering Permanent Prisms for the Patient

- **Picking a Permanent Set-up**

- **Fitover**

- Fitovers are the most affordable permanent option, but they don't fit everyone. They also have a tendency to block the far peripheral field. Check Chadwick Optical's website for current fitover options

- **Single Vision Distance Glasses**

- **Bifocal Glasses**

- **Magnetic Clip-on Version**

- **Spork Versions (1 Prism Only, multi-purpose glasses)**

- Even though it's potentially dangerous, and often times even illegal, many patients choose to drive with hemianopsia. Studies show that the oblique prism configuration helps patients detect on-road obstacles more reliably. If you suspect a patient may be driving despite your recommendations to the contrary, it is important to make the patient aware of the oblique option while simultaneously protecting your own potential liability.
- If the patient found a benefit from the temporary prisms, they should experience roughly double the benefit from the permanent prisms.

\*The Peli Lens can be manufactured in CR-39, mid and high index. The lenses are made with a minimum center thickness of 3mm. This extra thickness is required to maintain rigidity through the lens milling process. We cannot use polycarbonate or Trivex because they are soft, flexible materials and do not hold up in the milling and gluing process.

\*\*Photochromic and polarized lenses are available, but the PMMA insert cannot be tinted. If a sunglass solution is important to the patient, we would recommend a configuration that involves the magnetic clip-ons.

# Maximize Your Function with Permanent Prisms

Peripheral Prisms are most helpful when you're walking or driving. But really, how much of the time are you walking or driving? Chances are, not too much. But when you are, you need something quick to give you awareness of your blind field.

With that in mind, we have many combinations of options to help fit both your lifestyle and your budget. Go to [chadwickoptical.com](http://chadwickoptical.com) or visit your doctor for a current list of available fitovers and frames.



## Fitovers

Fitovers are designed to be worn over your glasses. They are the most affordable and can be used over any pair of glasses, so there's no need to update them if your prescription changes. Some are concerned by their aesthetics and their portability.



## Magnetic Clip-ons

Chadwick Optical's magnetic clip-on frames allow for a variety of design options and offers the best portability and aesthetics. For the best aesthetics, a tinted lens is fit over the top of the frame to hide the prisms. Some patients with limited dexterity may have difficulty attaching the clip-on, so ask your doctor for a demo to see if the magnetic clip-ons are right for you.



## Frame with Single Vision Distance Rx

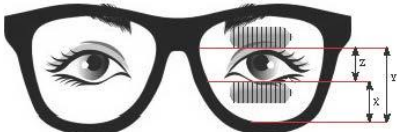
The best balance of portability, aesthetics, and investment, a standard frame with a single vision Rx gets the job done.

	Portability	Ease of Use	Aesthetics	Investment
	Will it fit in your shirt pocket?	for patients with limited dexterity	How does it look?	How much does it cost?
Fitovers	☹️	😊	☹️	😊
Mag Clip w/ Prism in frame	😊	☹️	😊	☹️
Mag Clip w/ Prism in Clip-on	😊	☹️	😐	☹️
SV Distance Rx	😊	😊	😐	😐

Chadwick Optical Inc.  
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**Rx ONLY**  
**Peli Lens™ Order Form**

Local: 267-203-8665  
Phone: 800-410-1618  
Fax: 800-468-9301  
csr@chadwickoptical.com  
www.chadwickoptical.com  
www.hemianopia.org

Organization: _____  Doctor: _____  Street Address: _____ City, ST Zip: _____  Patient: _____		<b>Frame Specifications: NO RIMLESS</b> Manufacturer: _____  Style: _____ Color: _____  A/DBL _____ / _____ B/ED _____ / _____ <small>Full metal w/nose pads is recommended</small>  Supply ( ) CR-39 (3MM thick) ( ) Enclosed ( ) Mid-Index ( ) To Come ( ) Hi-Index ( )					
PD Distance _____ / _____ Near _____ / _____		OD	Sphere	Cyl	Axis	Prism/Base	
Tint _____		OS					
Add _____  Bifocal Height (measure under lower prism) _____		OD	SV	Spectacle Lens Style			
Prisms will not tint		OS	Vertical Frame dimension: Must be 36MM or greater	Bifocal Style	Progressive	Available with Upper Prism Only	
Peli Lens™ Specifications  Always BASE OUT unless noted in special instructions		(Please see illustration below) Lower Height (X) _____ Separation (Z) _____ Upper Height (Y) _____		Lens with Peli Δ (check one) ( ) OD ( ) OS			Check One ( ) 40Δ Horizontal ( ) 57Δ Horizontal ( ) 57Δ Oblique Vertex
Special Instructions:   Final Fitting Positions: $Y - X = Z$ or $X + Z = Y$ X = Lower Height Y = Upper Height Z = Separation			Lenses				
			Tint				
			PHI				
			Total				

Download full size form from:  
<http://chadwickoptical.com/peli-lens-order-form-download/>

The Peli Lens™ is a trademark of Chadwick Optical Inc.

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