



DESIGNED BY **blanchard**

**ONEFIT™ MED PUTS YOU IN CONTROL:**

Full customization when a larger diameter is needed for highly irregular, medically indicated or normal corneas.

**FITTING GUIDE**

Applications	Design Options
<p>IRREGULAR CORNEAS ECTATIC CORNEAS NIPPLE CONES OVAL CONES POST-RK, POST-LASIK PELLUCID MARGINAL DEGENERATION OCULAR SURFACE DISEASE SMALL GP AND SOFT CONTACT LENS INTOLERANT ASTIGMATISM PRESBYOPIA NORMAL PROLATE CORNEAS POST-GRAFT</p>	<p>SPHERICAL MULTIFOCAL FRONT TORIC TORIC HAPTIC OBLATE OBLATE MULTIFOCAL QUADRANT SPECIFIC LANDING ZONES QUADRANT SPECIFIC LIMBAL ZONES CONTROLLED PERIPHERAL RECESS (NOTCHING)</p>



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## INTRODUCTION

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**Onefit MED** and **Onefit MED+** are intuitive and easy to use scleral lenses that allows practitioners to customize the ideal lens for a wide range of applications — when a larger diameter is needed for a healthy, highly irregular or medically indicated cornea. Designed to put the practitioner in control of the design and fit, adjustments can be made in four (4) separate zones of the lens : Central, Mid-Peripheral, Limbal and Landing Zone (Edge). To easily find the exact location of the Mid-Peripheral and Limbal zones, the diagnostic lenses are etched with solid lines that can be observed at the slit lamp or OCT image. **Onefit MED** and **Onefit MED+** minimize both lens thickness and fluid reservoir, maximizing oxygen transmission to the cornea and stem cells. The design serves as its own platform from which Multifocal, Oblate, Front Toric, Toric Haptic, Quadrant Specific and Controlled Peripheral Recess (NOTCHING) can be ordered.

**Onefit MED** and **Onefit MED+** are very predictable and the final lens parameters can be determined, as well as visualized, using the Fitting Tools available at [www.blanchardlab.com](http://www.blanchardlab.com). A DK/T tool is also available in conjunction with the Fitting Tool to estimate oxygen transmission of the lens you are designing.

**Onefit MED** and **Onefit MED+** put you in the driver seat, are extremely easy to fit, save you chair time and provide the patient with exceptional visual acuity, comfort and optimal oxygen to the cornea for long-term corneal health.



## PARAMETERS AVAILABLE

Parameter		Range
Design	Diameter	Central / Sag Values (C)
MED	15.6 mm standard	3800 to 6200 in 50 micron steps
	16.0 mm	3800 to 6600 in 50 micron steps
	16.4 mm	4000 to 6600 in 50 micron steps
MED+	17.0 mm	4300 to 7000 in 50 micron steps
Mid-Peripheral Value (M)		+300 to -300 in 25 micron steps
Limbal Value (L)		+300 to -300 in 25 micron steps
Landing Zone / Edge (E)		+300 to -300 in 25 micron steps



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## FITTING PHILOSOPHY

**Onefit** scleral lenses are supported by the conjunctiva and the fluid under the lens. They are designed to vault the entire corneal surface including the limbal area. The fluid reservoir (FR) over the cornea varies from center to the periphery, to optimize oxygen transmission to the tissues, especially over the limbus where the stem cells are located.

**Ideal fluid reservoir (FR) after four (4) plus hours of wear are as follows for each zone:**

**Central, or point of highest elevation: 150 to 175 microns**

**Mid-Peripheral: 100 to 125 microns**

**Limbal: 50 to 75 microns**

**Landing Zone (Edge): aligned to the conjunctiva**

Note: **Onefit** lenses will recess (on average) 100 microns during a full day of wear, with roughly 50% happening within the first 30 minutes of application. Therefore, fluid reservoir evaluated at application, after 30 minutes, and 4+ hours of wear will vary accordingly. Consideration should be given to amount of time the lenses have been in-situ, when evaluating for optimal fluid reservoir.

# INITIAL LENS SELECTION

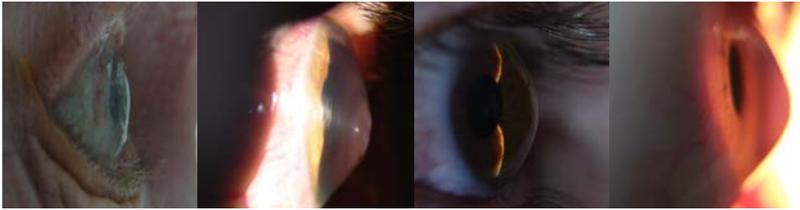
## SELECT INITIAL DIAGNOSTIC LENS BASED ON CORNEAL PROFILE:

Flatter (Normal or Refractive Surgery) – SAG: 4300 (MED) | 4800 (MED+)

Average (Moderate Cones or Irregularities) – SAG: 4600-4800 (MED) | 5100-5300 (MED+)

Steep (Highly Irregular, Steep Cone, Tilted or Proud Graft/Host Junction) – SAG: 5300 sag (MED) | 5800 (MED+)

If you have a scleral topographer, we invite to look for your instrument within our online fitting tools. Profilmometry assisted fitting can streamline the initial lens selection process for you.



## ONEFIT MED & ONEFIT MED+ SIMPLIFIED FITTING REGIMEN

Evaluating ideal clearance for optimal fit (microns)	Initial Application	30-45 Minutes	4+ Hours
Central Zone/Highest Elevation	250-300	200-225	150-175
Mid-Peripheral Zone	150-175	125-150	100-125
Limbal Zone	100-125	75-100	50-75
Landing Zone (Edge)	Aligned to Sclera	Aligned to Sclera	Aligned to Sclera

# EVALUATING YOUR FIT

## 01 DIAMETER

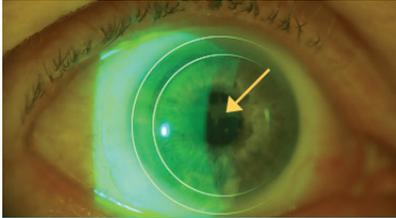
### MED

The standard 15.6 mm diameter will fit the vast majority of corneas. The larger diameters (16.0 mm and 16.4 mm) are useful when you encounter a severely protruded graft, severe keratoconus, or an unusually large cornea (12.3 mm and over). However, when a larger diameter is needed, the transition from the standard 15.6 mm is easy and does not require the patient to be trial fitted again. The Onefit MED Fitting Tool will calculate the required adjustments for you. (See page 10 for more on the Fitting Tool.)

### MED+

The 17.0 mm diameter is ideal when more of the ocular surface needs to be covered and/or a wider landing zone is needed. It is also recommended for large and/or highly irregular corneas.

## 02 CENTRAL / SAG (C VALUE)



At application, look for fluid reservoir of 250 to 275 microns at the point of highest corneal elevation. According to the fluid reservoir observed, make changes to the sag height of the lens (50 microns steps).

**TIP:** Use the diagnostic lens thickness specified with lens parameters on the diagnostic lens case as a reference to evaluate fluid reservoir.

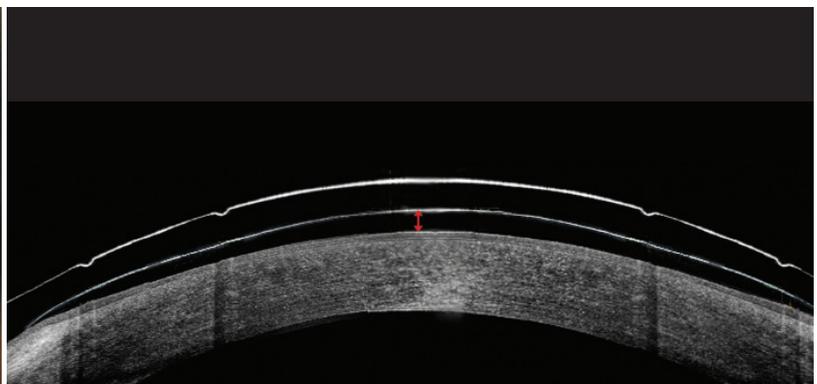
Evaluate the corneal/lens relationship under white light (optic section) at the slit lamp, at approximately a 40° angle. Using a blue filter will not help determine the actual thickness of the fluid layer under the lens. Utilizing an anterior segment OCT gives you a more accurate reading of the fluid layer thickness.

After the lens has settled for **30 minutes**, look for fluid reservoir of 200 to 225 microns at the point of highest corneal elevation.

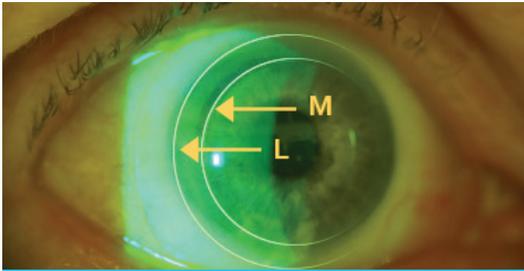
**IDEAL FLUID RESERVOIR AFTER 4 PLUS HOURS OF WEAR IS 150 TO 175 MICRONS AT THE POINT OF HIGHEST ELEVATION.**



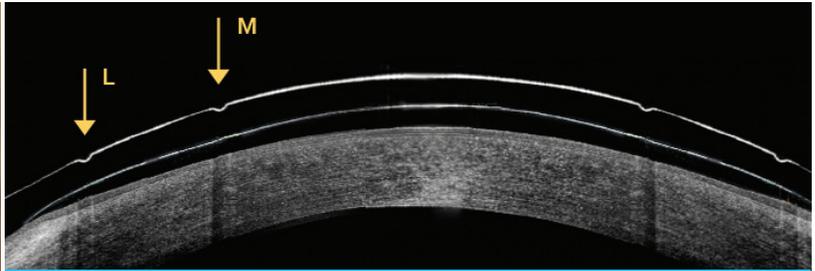
Slit Lamp view



OCT view

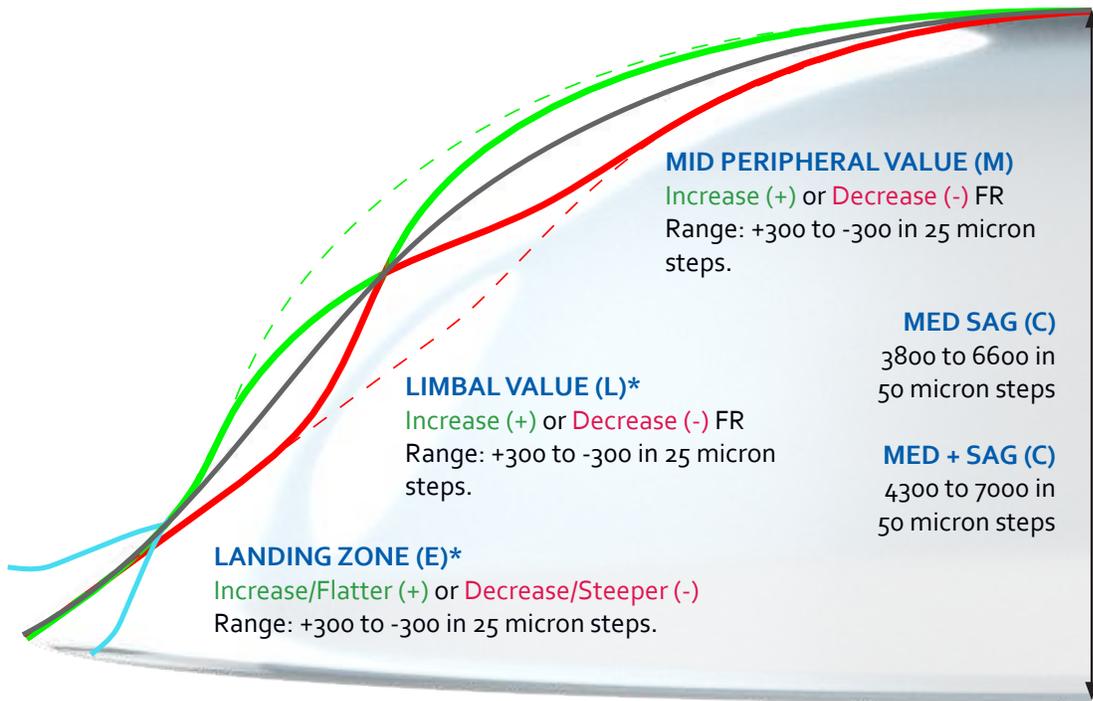


Slit Lamp view



OCT view

## MED & MED ⊕



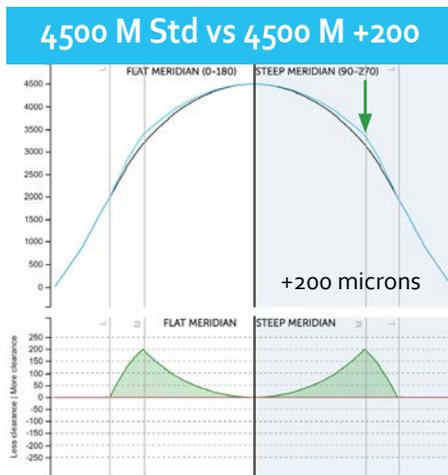
\*L & E are available in Quadrant Specific Values

Specify the Mid-Peripheral (M) and Limbal (L) fluid reservoir values in microns as follows:

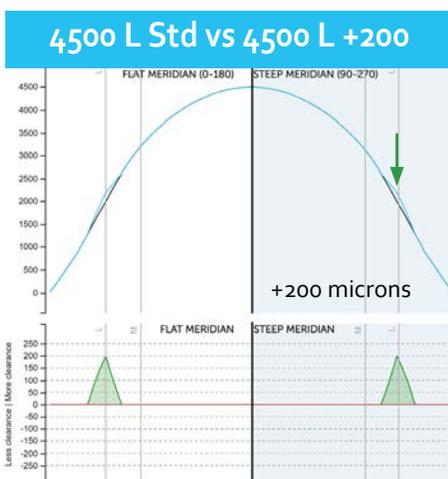
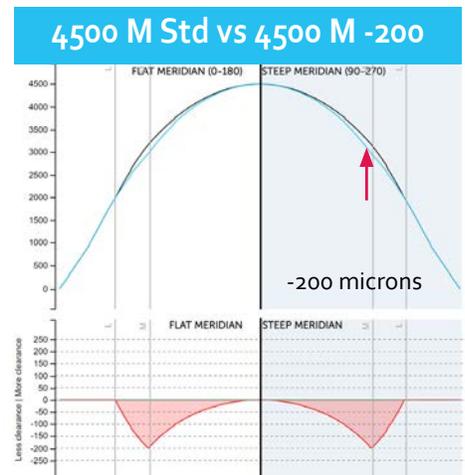
Value	Standard	Increased Fluid Reservoir (+)	Decreased Fluid Reservoir (-)
M	M Std	M+25 to M+300 25 micron steps	M-25 to M-300 25 micron steps
L	L Std	L+25 to L+300 25 micron steps	L-25 to L-300 25 micron steps

## Important

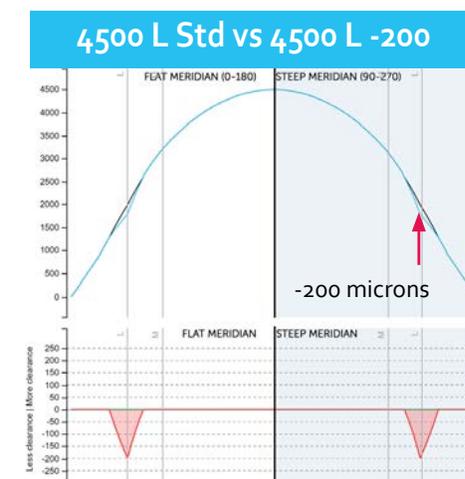
A modification of the M value, increased fluid reservoir (+) or decreased fluid reservoir (-), changes the base curve radius of the lens. Therefore, as with any rigid lenses, the power of the lens will need to be modified accordingly to reflect the new tear lens power. The **Fitting Tool**, will automatically re-calculate the final lens power according to the M value selected. (See page 14 for more on the Fitting Tool.)



Modifications of the M value changes the base curve radius of the lens, requiring an adjustment in final lens power.



Modification of the L value, increase FR(+) or decrease FR (-), does not affect final lens power, as the change is not within the optical zone.



## QUADRANT SPECIFIC LIMBAL (L) VALUES

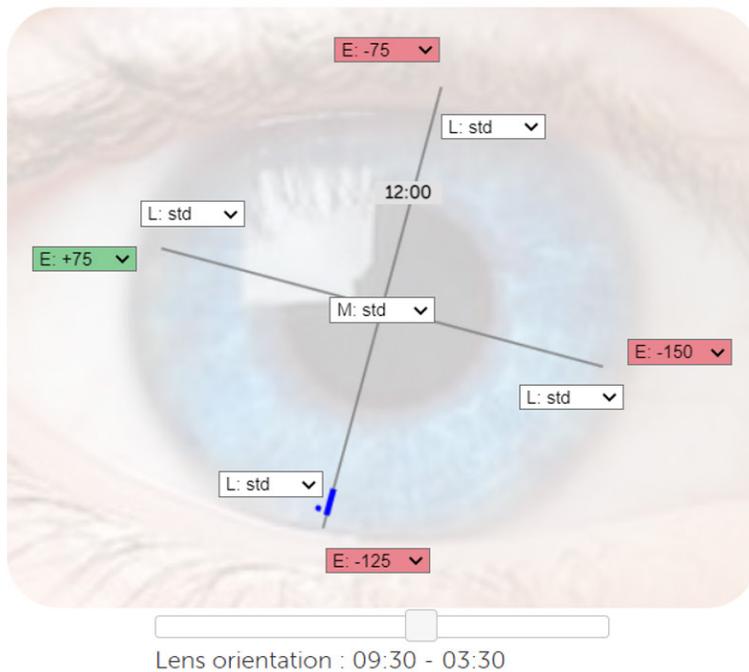
Sometimes the asymmetry of the ocular surface requires that each quadrant has their own unique specification.

To help you in designing each quadrant, we have added a Quadrant Specific Fitting Tool to the Custom Tools section at blanchardlab.com. To find the tool, click on the green **"Tools and Order Forms"** button in the upper right corner of the home page. From there, click on **"Custom Tools"**.

A quadrant specific limbal zone value can only exist with toric haptics OR a quadrant specific landing zone.

Refer to lens markings section on page 14 for visual representation of quadrant specific lens markings.

### ▾ Quadrant Specific / Lens Markings



Lens type:

Onefit MED+ ▾

Reset

Account number:

Patient name:

Prescription:

O.D.

O.S.

SAGITTAL:

DIAMETER:

17.0 ▾

SPHERE:

CYL.:

AXIS:

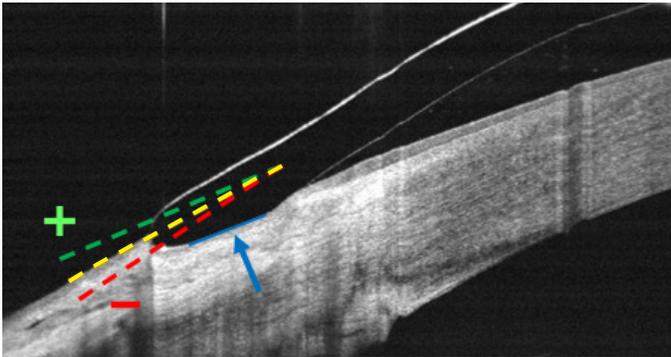
Make sure all 3 fields are filled to get the front toric marks

Note:

Parameters to order

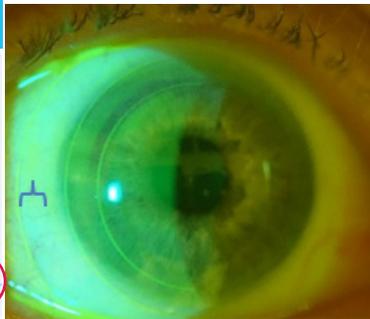
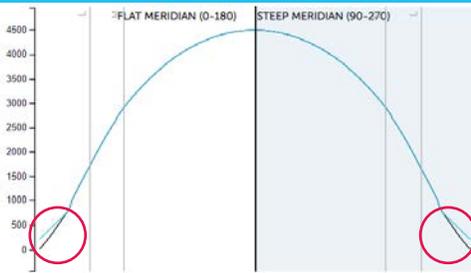
# 04 LANDING ZONE / EDGE (E) VALUE

The landing zone (aka edge or haptic) of the **Onefit MED** and **Onefit MED**  $\oplus$  are unique and is a combination of peripheral curves and tangent lathing technology, providing enhanced support within the lens peripheral landing zone beyond the limbus. Modifications of the landing zone are specified in microns of change, and these values can be quadrant specific. The range is from -300 microns decreased landing zone (E) to +300 microns increased landing zone (E) in 25 micron steps.

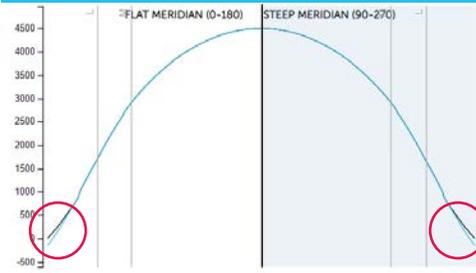


The landing zone of Onefit MED and Onefit MED  $\oplus$  combines curves and tangent lathing technology (blue arrow) to ensure a smooth landing on the conjunctiva/sclera. Look for landing zone angle to approximate conjunctiva/sclera angle (yellow dashed line). The green dashed line demonstrates the range for increasing/flatten the landing zone (+), while the red dashed line demonstrates the range for decreasing/steepen the landing zone (-).

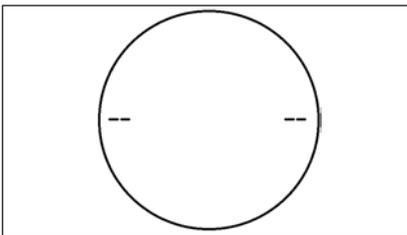
## Increased Landing Zone (E) (+)



## Decreased Landing Zone (E) (-)



## TORIC HAPTIC



Toric haptic allows the landing zone to align to scleral asymmetry for improved landing zone alignment and/or better lens centration. Lenses with a toric haptic are etched to indicate the flattest meridian.

Note: A lens with a toric haptic will find it's equilibrium on the conjunctiva (point of least resistance) which is not necessarily the 3 and 9 o'clock meridian.

Specify the landing zone (E) value in microns as follows :

Value	Standard	Increased/Flatter E (+)	Decreased/Steeper E (-)
E	E Std	<b>E+25 to E+300</b> 25 micron steps	<b>E-25 to E-300</b> 25 micron steps

Note: E Values can be quadrant specific

Note: For toric haptic, specify both the flat and steep meridian. **Example:**

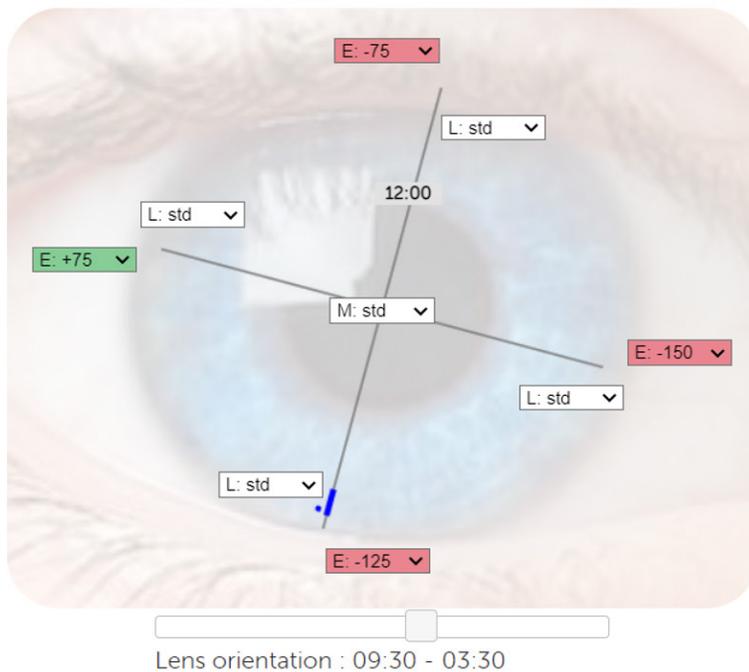
E Value	Flat Meridian Value	Steep Meridian Value
E std / -100	Standard	-100
E +100 / +25	+100	+25
E -25 / -150	-25	-150

## QUADRANT SPECIFIC LANDING ZONE (E) VALUES

When the asymmetry of the ocular surface requires quadrant specific landing zones, utilize the Quadrant Specific Fitting Tool in the Custom Tools section at blanchardlab.com to help you in designing the quadrant specific landing zones.

REMINDER: A quadrant specific limbal zone value can only exist with toric haptics OR a quadrant specific landing zone. Refer to lens markings section on page 14 for visual representation of quadrant specific lens markings.

### ▾ Quadrant Specific / Lens Markings



Lens type:

Account number:

Patient name:

Prescription:  
 O.D.  O.S.

SAGITTAL:  DIAMETER:

SPHERE:  CYL:  AXIS:

Make sure all 3 fields are filled to get the front toric marks

Note:

Use the Quadrant Specific Fitting Tool located at blanchardlab.com for ordering quadrant specific lenses. To find the tool, click on the green "Tools and Order Forms" button in the upper right corner of the home page. From there, click on "Custom Tools."

# OVER-REFRACTION

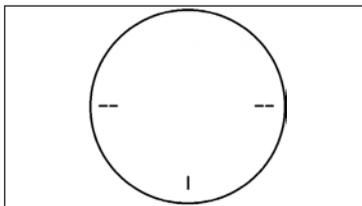
As is the case for all specialty contact lenses, you should perform over-refraction after the optimal lens is settled on the eye, to determine the appropriate parameters. Retinoscopy is recommended to begin the over-refraction, followed by sphero-cylindrical over-refraction, monocularly then binocularly. This lens is designed to mask up to  $-3.50\text{D}$  of corneal cylinder. However, some individual corneal profiles will not be completely compensated by the fluid under the lens.

## RESIDUAL ASTIGMATISM

Residual astigmatism greater than  $-0.75\text{D}$  should be incorporated into the front surface toric design. **Toric haptic** is the design option to stabilize **Onefit MED** lenses with toric optics. However, a quadrant specific E value can also be used to stabilize the lens, using the Quadrant Specific Fitting Tool

Note: When prescribing front surface toric lenses, a **minimum of 150 microns** difference between flat and steep meridian is ideal to ensure good stabilization of the lens on the eye.

For example: flat meridian with increased landing zone (E) of  $+75$  microns and the steep meridian with a decreased landing zone (E) of  $-75$  microns ( $E+75/-75$ ).



Front surface toric lenses are etched with an additional line (|) at 6 o'clock

Use **LARS** (Left Add, Right Subtract) to compensate for misaligned axis. One (1) hour of rotation represents 30 degrees of rotation. A lens that aligns at 2, 5 and 8 o'clock is rotated 30 degrees to the right. A lens that aligns at 4, 7 and 10 o'clock is rotated 30 degrees to the left. Use the Axis Compensation Tool – LARS – available in Custom Tools at [blanchardlab.com](http://blanchardlab.com)

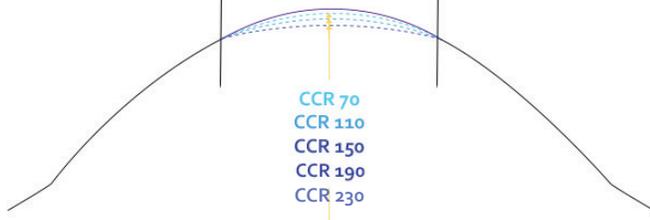
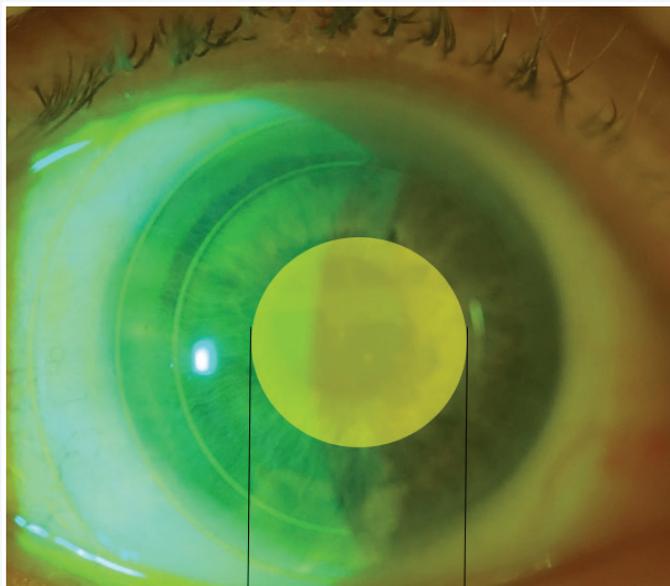
**TIP:** Trial lenses come with a toric haptic ( $\text{MED } +75/-75$  and  $\text{MED } \oplus +75/-125$ ). Apply the lens and let it settle for 10 minutes. After the lens has found its point of least resistance, locate the etch marks indicating the flattest meridian and compensate your axis accordingly using **LARS**.

# ONEFIT MED & ONEFIT MED ⊕ OBLATE LENSES

The existing Onefit MED and Onefit MED ⊕ diagnostic fitting sets serve as the platform from which oblate lenses are ordered. No additional lenses are required to order Onefit MED or Onefit MED ⊕ Oblate lenses.

## CONCEPT

Specifically designed for oblate corneas (PK, PRK, post LASIK) the Onefit Oblate geometry allows the practitioner to re-establish a healthy **central clearance level** (150-175 microns after 4+ hours of wear) by specifying one of five values of Central Clearance Reduction (CCR) (70 microns, 110 microns, 190 microns and 230 microns), **without altering** mid-peripheral, limbal clearance and the way the lens lands on the sclera.



## POWER COMPENSATION OF OBLATE LENSES

The central clearance reduction of the **Onefit MED** and **Onefit MED ⊕** Oblate lenses is achieved by flattening the radius of the central base curve.

As the tear lens power is modified with every CCR change, the power of the lens must be compensated for as follows:

CCR 70:	+2.00D
CCR 110:	+4.00D
CCR 150:	+6.00D
CCR 190:	+8.00D
CCR 230:	+10.00D

### NOTE:

Use the Fitting Tools located on the respective product pages at [blanchardlab.com](http://blanchardlab.com).

**IMPORTANT:** The power specified when ordering a Onefit MED or Onefit MED ⊕ Oblate lens must be the compensated power. For example, Onefit MED 4500 with a power of -6.00 (including over-refraction), if ordered with a CCR 110, would be ordered as -2.00 (-6.00 +4.00 = -2.00).

For more details on **Onefit MED** and **Onefit MED ⊕** Oblate lenses, please consult the Onefit fitting guide, as the fitting process is the same as the original Onefit design.

# ONEFIT MED & ONEFIT MED ⊕ MULTIFOCAL LENSES

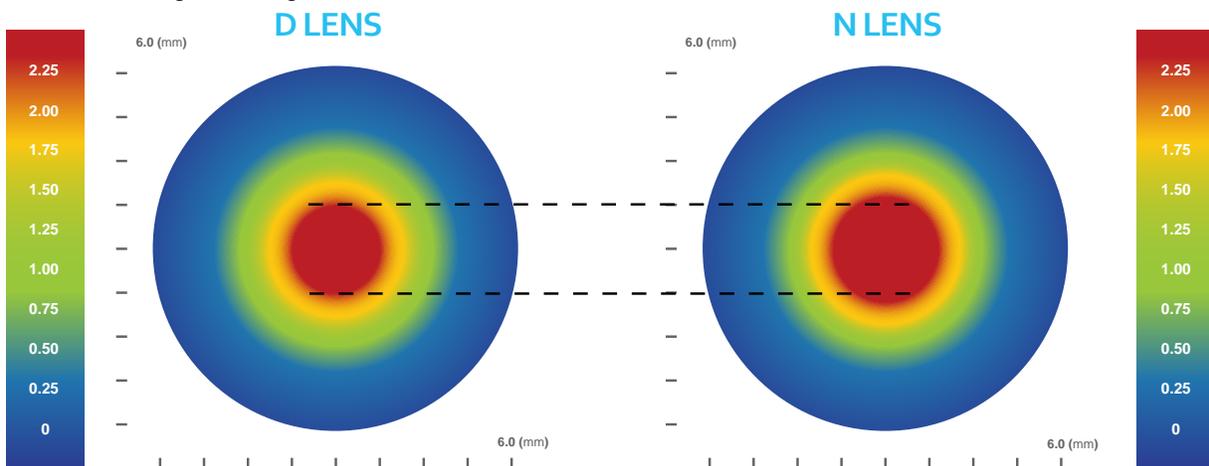
The existing Onefit MED and Onefit MED ⊕ diagnostic fitting sets serve as the platform from which multifocal lenses are ordered. No additional lenses are required to order Onefit MED or Onefit MED ⊕ Multifocal lenses.

## INTRODUCTION

Onefit MED and Onefit MED ⊕ lenses center well, have limited movement with blinking, remain stable at the center of the visual axis, and unlike soft lenses, do not dehydrate during wear. The unique characteristics of this scleral GP lens provide an excellent platform for a new generation of multifocal lenses, delivering superior comfort and excellent visual performance for today's active Presbyopic patient!

## LENS PROFILE

Onefit MED and Onefit MED ⊕ Multifocal is a simultaneous vision, near-centered, aspheric multifocal. The system combines a distance lens profile (D Lens) for the dominant eye and a near lens profile (N Lens) for the non-dominant eye. The two lenses work in tandem; the aspheric power profile, central ADD, and power distribution of each lens profile complement each other to optimize selection of the image in view, alleviating shadowing and confusion.



## FITTING PROCESS

- 01 Follow the recommendations in this guide for fitting monofocal **Onefit MED/Onefit MED ⊕**.
- 02 Use the lens fogging technique (+2.00 lens), to determine which eye is dominant at distance.
- 03 Use the information obtained from the first and second steps above to order the lenses based on the following chart:

ADD	Dominant Eye	Non-Dominant Eye
+1.00 to 1.50	D Lens	D Lens
+1.75 to 2.25	D Lens	N Lens
+2.50 and up	N Lens	N Lens

Note: Consider 2 N lenses for pupils that are 5.0mm and larger

For more information on **Onefit MED** and **Onefit MED ⊕** Multifocal lenses and fitting, please consult the Onefit Fitting Guide, as the fitting process is the same as the original Onefit design.

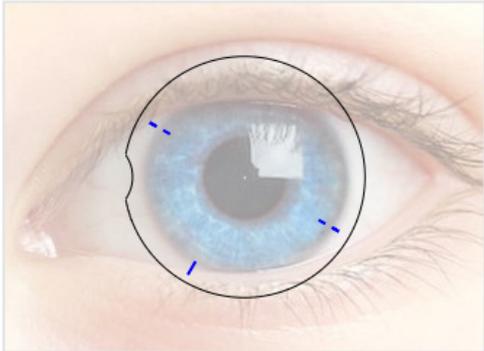
# CONTROLLED PERIPHERAL RECESS (CPR)

Controlled Peripheral Recess, or "CPR", is a manufacturing process that creates a precise, controlled and reproducible peripheral recess (NOTCH) to accommodate pingueculas, scleral shunts, and other scleral elevations that may contribute to lens discomfort and/or poor lens centration. CPR technology is available in Spherical, Toric, Toric Haptic and Quadrant Specific specifications.

The extremely user-friendly CPR Tool at blanchardlab.com **keeps you in total control** of CPR placement and size, simplifies the design and ordering process, and provides a visual representation of the lens design.

You can connect directly to the CPR Tool, along with other innovative fitting tools, by clicking on **"Tools and Order Forms"** on the blanchardlab.com home page. From there, select **"Custom Tools"**.

Controlled Peripheral Recess



1) Select lens type and diameter  
Lens type: Onefit MED | Diameter: 15.6 | Eye: OS

2) Select lens design and marks position  
Lens design: Front to... | Position the marks: 10:00 - 04:00

3) Position recess  
1 | 09:00

4) Select depth and chord specifications  
Recess depth: 0.5 | Recess chord: 3.0

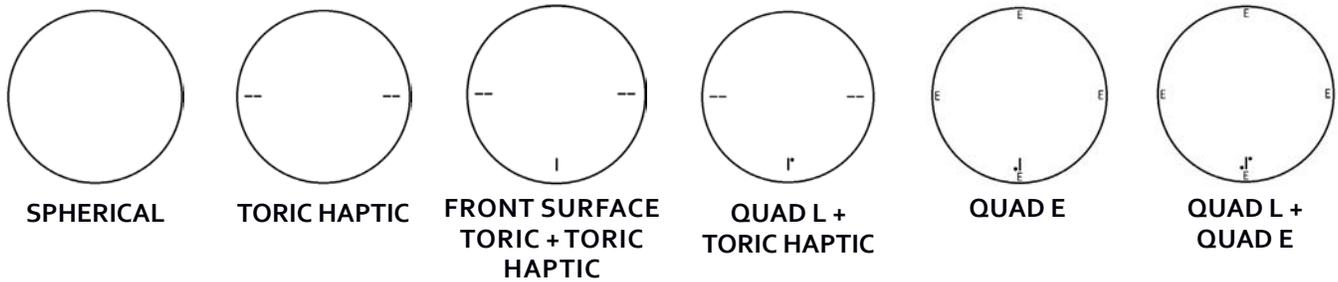
5) Do you need a second recess?  
 Yes

Parameters to order

# LENS MARKINGS

To help you easily identify the various lens designs, we have implemented standardized markings (lens etchings) across the entire family of Onefit lenses.

This design enhancement allows you to identify front surface torics and toric haptics, as well as distinguish quadrant specific landing zones and/or limbal zones. When using the "Quadrant Specific/Lens Markings" custom tool, the calculator results display exactly what lens markings you will see on the lens you are ordering.



# ONEFIT MED AND ONEFIT MED+ FITTING TOOL

To help determine the parameters of a new Onefit MED or Onefit MED+ lens, based on your observations of an existing fit, we recommend you always use the corresponding Fitting tool available on the respective product page at [www.blanchardlab.com](http://www.blanchardlab.com).



Need help? 

Navigator compatibility 

**1- Enter parameters of the Onefit MED Plus lens "in situ" - All fields are required**

	SAG	OBLATE	M	L	Toric Haptic?	EDGE	Power	DIAMETER
<b>A</b>	4700	Std Prolat	std	std	No	std	-3.50	17.0

**2- What final parameters do you want - All fields are required**

	SAG	OBLATE	M	L	Toric Haptic?	EDGE	OVER-REFRACTION	DIAMETER
<b>B</b>	4850	CCR 70	No ch	No ch	No chan	-75	-1.00 <small>(vertex 12.0mm)</small>	No char

**3- Use the button to calculate the lens to order**

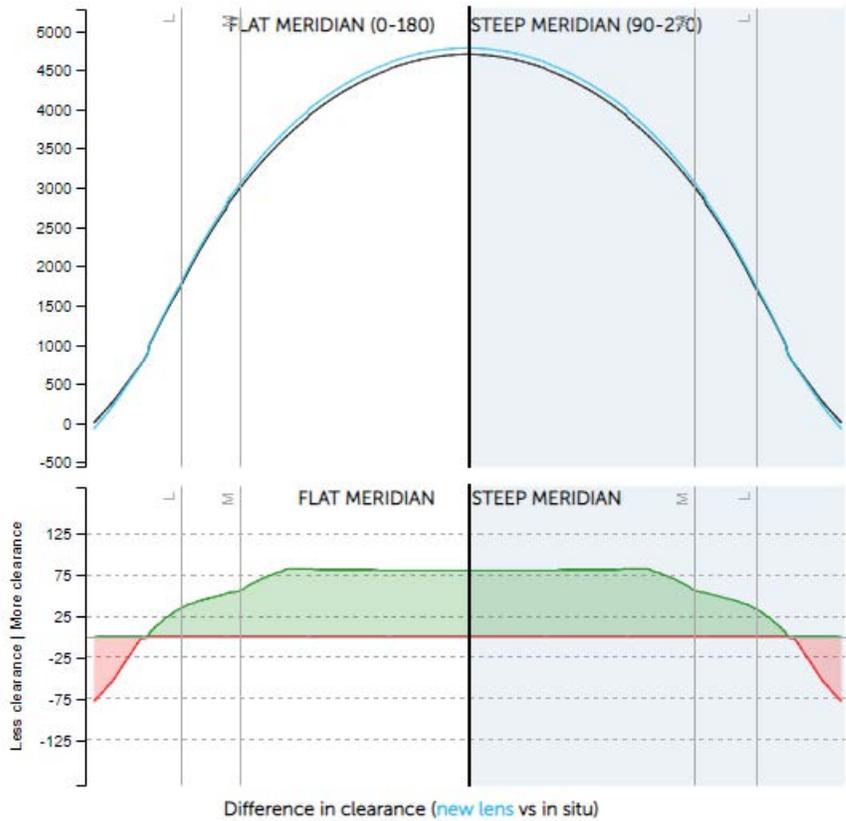
**On Line A:** Enter the exact parameters of the lens in situ (see above for examples).

**On Line B:** Enter the parameters you would like to change as well as any over-refraction. For example, among other modifications requested, a new sag at 4850 is specified.

**Hit Calculate:** You get the parameters of the new lens to order, as well as a graph comparing the lens in situ (line A), with the proposed lens (line B). See graphic on following page.

**4- New Onefit MED Lens to Order**

SAG	4850
Oblate (CCR)	70
M	std
L	std
EDGE (Spherical):	-75
DIAMETER	15.6
Power	-4.37
Center thickness	210 microns
Estimate Dk/t	<input type="button" value="Estimate"/>
Primary Functional Sagittal Depth (PFSD)	4000 microns @ 13.6



**DIAGNOSTIC LENSES**

	MED ( 20 lenses )	MED+ ( 15 lenses )
Sag Height	4000 - 4300 ( 150 microns inc. ) 4350 - 4700 ( 50 microns inc. ) 4800 - 5000 ( 100 microns inc. ) 5150 - 5900 ( 150 microns inc. )	4600 - 4900 ( 150 microns inc. ) 5000 - 5500 ( 100 microns inc. ) 5650 - 6250 ( 150 microns inc. ) 6500
Diameter	15.6mm	17.0mm
M Value	Standard	Standard
L Value	Standard	Standard
E Value	+75 / -75	+75 / -125
	Dx lenses are etched with their respective Sag, M, L and E values.	Dx lenses are etched with their respective Sag, M, L and E values.

## CONDITION DIAGNOSTIC LENSES BEFORE EACH USE

Diagnostic lenses are stored dry in their respective cases. Before each use it is imperative that you clean and condition each lens thoroughly.

## ORDERING

### 7 VALUES TO SPECIFY. EXAMPLE:

1- Sag Height	4500		
2- Oblate (CCR)	110		
3- M Value	+75		
4- L Value	Spherical	-50	
	or	@ 12 o'clock	-50
	Quadrant Specific	@ 3 o'clock	-50
		@ 6 o'clock	-100
	@ 9 o'clock	-50	
5- E Value	Spherical	+25	
	Toric Haptic	Flat	+75
		Steep	-75
	or	@ 12 o'clock	-75
	Quadrant Specific	@ 3 o'clock	-150
		@ 6 o'clock	-150
@ 9 o'clock		75	
6- Diameter	15.6		
7- Power	Spherical	-4.50	
	Front Surface Toric	-2.50 -1.75 x 180	

**IMPORTANT:** Section 4 of the Onefit MED and Onefit MED  $\oplus$  Fitting Tools gives you all seven parameters to order. We recommend you always use the Fitting Tool when ordering these lenses. Remember, any change you make in the Sag Value and/or M Value will affect the final power of the lens. Let the Fitting Tool do the math for you!

The Onefit MED and Onefit MED  $\oplus$  Fitting Tools are located on their respective product pages at [blanchardlab.com](http://blanchardlab.com).

Proflometry is available with Onefit MED and Onefit MED  $\oplus$ . Please refer to the product fitting tools for more information on the applications that are available and how to use them in conjunction with your Onefit MED and Onefit MED  $\oplus$  scleral lenses.





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