

# Onefit™ Oblate Series



## INTRODUCTION

The loss in central corneal height resulting from different refractive surgical procedures (Radial Keratometry, LASIK or Penetrating Keratoplasty) poses a challenge to the fitter (excessive central clearance).

Available in three (3) Central Clearance Reduction (CCR) options, the Onefit™ Oblate series compensates for the surgical reduction in corneal height and re-establishes appropriate central clearance at final lens settling of 160-210 microns range (+ 4 hours of wear) while maintaining the initial fitting characteristics of the Onefit™ lens.

Additional diagnostic lenses are not needed to evaluate fitting characteristics of the Onefit™ Oblate series of lenses. The existing Onefit™ diagnostic lens set is utilized to evaluate proper corneal, limbal and edge lift fitting characteristics in addition to the corresponding Oblate series CCR option to optimize the final lens fit.

## CONCEPT

When fitting the post refractive surgical or post graft cornea conventional scleral or GP lens base curve and edge selection will result in an optimized mid-peripheral and conjunctival alignment fitting relationship with excessive clearance over the central post-surgical oblate cornea. This excessive central corneal clearance can lead to: bubble(s) formation, diminished vision and reduced oxygenation of the cornea.

Compared to the regular Onefit™ series of identical base curves, the Onefit™ Oblate series offers the same mid-peripheral fit and conjunctival alignment, but with a reduced central clearance (see illustration). For this reason, the Onefit™ Oblate series is identified with the same base curve as Onefit™ lenses with a Central Clearance Reduction (CCR) value. Three are available, to provide decreases in central clearance and are represented in microns of reduction (70, 110, 150).

The reduced central clearance in the Onefit™ Oblate series is achieved by flattening the central base curve of the corresponding Onefit™. Central Clearance Reduction values (CCR) are accompanied with a corresponding power modification (flat add plus), and is irrespective of the base curve value being fitted (see chart below).

CCR Value	Power modification
70 microns	+ 2.00
110 microns	+ 4.00
150 microns	+ 6.00

## Examples:

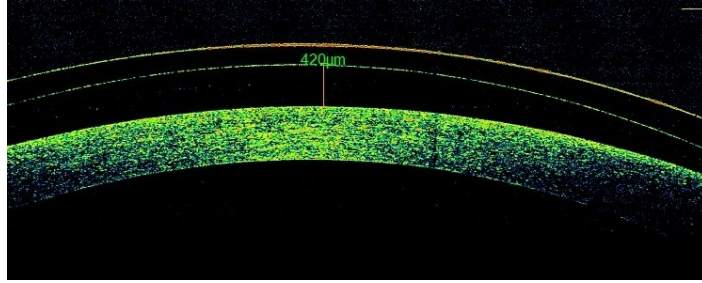
**Decreasing excessive clearance over the elevation of the central post- surgical cornea using the following CCR values create a significant decrease in minus lens power:**

CCR70 Value: Power -5.00 plus +2.00 = -3.00 (final lens power)

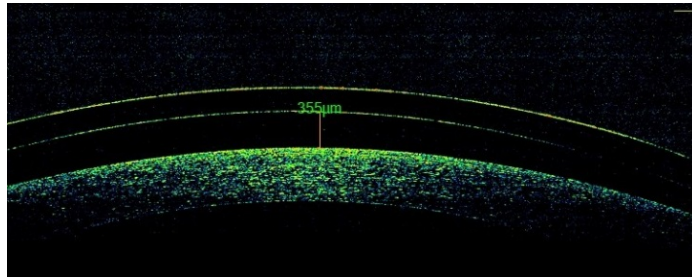
CCR110 Value: Power -7.00 plus +4.00 = -3.00

CCR150 Value: Power -9.00 plus +6.00 = -3.00

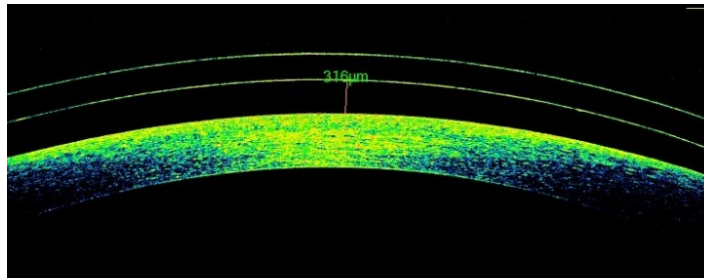
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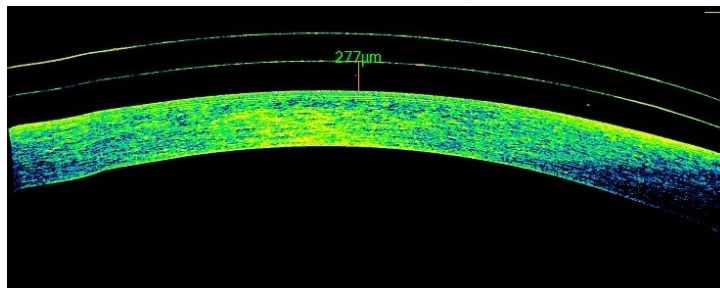
**Excessive Central Clearance**



**CCR Value 70 (65micron reduction)**



**CCR Value 110 (104 micron reduction)**



**CCR Value 150 (143 micron reduction)**

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**FITTING:** Refer to the Onefit™ fitting guide for optimal fitting characteristics.

### **Base Curve Selection: Optimum Clearance – Evaluate CCR value option**

#### **Post Refractive Surgical and Penetrating Keratoplasty**

Select the appropriate base curve (ignore central clearance at this point)

Using a Onefit™ diagnostic fitting set, select a lens that gives you the desired mid-peripheral \ limbal clearance as well as conjunctival alignment. The post refractive surgical cornea requires an initial diagnostic base curve selection corresponding to the highest corneal elevation typically found at the perimeter of the surgically altered treatment zone. From topography, this can be located approximately 4.2 mm radius from the central visual axis just outside the perimeter of the treatment zone. Base curve selection for the post graft cornea must be specific to the elevation found at the host graft junction. Ignore central clearance at this point.

When the base curve selection of the Onefit™ diagnostic trial lens selected for the post refractive surgical or post graft cornea provides optimum clearance (275 -300 microns) over the post refractive oblate cornea or host graft junction and provides good mid-peripheral and conjunctival fit it will in all likelihood generate excessive central clearance and the over-refraction and final lens power may not be optimum.

If clearance values are optimal select the appropriate CCR value to reduce excessive central corneal clearance and adjust the final lens Rx based on which CCR value you selected.

#### **Excessive Clearance – Re-evaluate Base Curve Selection - Re-evaluate CCR Option:**

If the Onefit™2.0 diagnostic trial lens selected for the post refractive surgical or post graft cornea provides excessive clearance (> 300 microns) over the post refractive treatment zone or host graft junction it will inflate central excessive clearance leading to the selection of a CCR value to great. It is imperative to first determine an optimal base curve selection and to then select the appropriate CCR value.

##### **1 Measure central clearance**

Proper base curve selection as determined above will inevitably lead to excessive central clearance (oblate cornea) when fitting the post refractive surgical cornea. When fitting the post graft patient it is imperative to maintain optimal clearance height of 160-200 microns after 4-6 hours of wear at the host graft junction.

Measure the central clearance of the host graft junction height using an optic section, comparing that to the diagnostic lens thickness listed with other lens parameters.

If clearance at the perimeter of the post refractive surgical treatment zone or at the host graft junction for the post graft cornea exceeds 300 microns (select a flatter diagnostic lens and re-evaluate clearance.

##### **2 Determine Central Clearance Reduction value (CCR)**

From your central clearance evaluation, determine what amount of central clearance reduction is needed to achieve an optimal central clearance height of 160-200 microns after 4-6 hours of wear. Select the appropriate CCR value (70, 110 or 150 microns) and re-adjust the power of the Onefit™ Oblate series lens to order.

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### 3 Over Refract

#### Example - Onefit™ lens (Diagnostic lens fitting evaluation):

7.80 Base Curve Diagnostic Lens

**-2.00 Diagnostic Lens Power**

14.9 Diameter

Standard edge

**Over-refraction -3.00D**

Final lens parameters:

7.80 Base curve

**Final lens power = -5.00**

14.9 Diameter

Standard Edge

#### Onefit™ Oblate lens to order

##### 1). Initial Diagnostic Lens Fitting (30-40 minutes of wear)

Central clearance = 285 microns. (30-40 minutes excessive clearance approximately + 70 microns) Desired clearance should be 200-220 microns at 30-40 minutes of wear)

7.80/70<sup>2</sup> Lens Base Curve and CCR value with a non-compensated lens power of -5.00.

Compensated lens power equals -3.00<sup>3</sup>. (CCR value of 70 yields +2.00 power change)

14.9 Diameter

Standard edge

<sup>2</sup> CCR value required to achieve central clearance of 200 - 220 microns (30 - 40 minutes of wear)

<sup>3</sup> Trial lens power + over-refraction equals -5.00D, compensated for the 70 CCR value

(-5.00D +2.00D = -3.00D)

##### 2). Follow up or dispensing evaluation of Rx lenses

###### Onefit™ lens (+4-6 hours wear)

7.80 Base Curve Rx Lens

-5.00 Lens Power

14.9 Diameter

Standard edge

Central clearance = 285 microns (+4 -6 hours excessive clearance approximately + 110 microns). Desired clearance should be 160 – 200 microns at 4-6 hours of wear)

7.80/110<sup>4</sup> Lens Base Curve and CCR value with a non-compensated lens power of -5.00.

Compensated lens power equals -1.00<sup>5</sup>. (CCR value of 110 yields +4.00 power change)

14.9 Diameter

Standard edge

<sup>4</sup> CCR value required to achieve central clearance of 160 - 200 microns (4-6 hours of wear)

<sup>5</sup> Lens Rx power -5.00D, compensated for 110 CCR value of +4.00D = -1.00D

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### **Fitting Pearl: Normal Prolate - Non Surgically altered cornea**

When fitting normal prolate corneas with HVID in excess of 12.5mm, or conjunctival shapes approaching spherical the fitting challenge is typically found to be insufficient limbal clearance.

If change in fitting parameters (steeper base curve and/or larger diameter) eliminate limbal bearing they may create excessive central clearance. Evaluate excessive clearance of the initial diagnostic lens (> 300 microns) and select the appropriate CCR value (70, 110 or 150 microns) and re-adjust the power of the Onefit™ Oblate series lens to order.

### **Pricing: Per lens**

Onefit™ Oblate: \$140.00 (Warranted)<sup>6</sup>

Onefit™ Oblate Multifocal \$185.00 (Warranted)<sup>7</sup>

<sup>6</sup> One (1) no charge exchange within 90 days of original invoice date, \$35.00 cancellation fee within 90 days of original invoice, \$35.00 unlimited exchanges beyond one no charge warranty exchange within 90 days of original invoice date.

<sup>7</sup> Two (2) no charge exchange within 90 days of original invoice date, \$35.00 cancellation fee within 90 days of original invoice, \$35.00 unlimited exchanges beyond one no charge warranty exchange within 90 days of original invoice date.

### **Add On Charges:**

Anterior Toric \$30.00 (Not available with multifocal lenses)

Toric PC \$20.00<sup>8</sup>

<sup>8</sup>Toric PCs have minimal effectiveness on lens orientation in diameters less than 15.8mm. However, they can have influence when applied with fittings on smaller corneal diameters when the lens presents >2.0mm overall clearance beyond the limbus. Evaluate smaller diameters first then consider Toric PCs.