

Global-OK HYPEROPIA (H & HP) LENSES

REFERENCE TABLE

KM/ S.E.	+1.50	+2.00	+2.50	+3.00	+3.50	+4.00	+4.50	+5.00
Standard OAD 11.2 mm		(OAD = 95~97% of HVID)			HP Add: +1.00 ~ +3.00			
A 39.87~40.11 (40.00)	40.00/+1.5	40.00/+2.0	40.00/+2.5	40.00/+3.0	40.00/+3.5	40.00/+4.0	40.00/+4.5	40.00/+5.0
B 40.12~40.36 (40.25)	40.25/+1.5	40.25/+2.0	40.25/+2.5	40.25/+3.0	40.25/+3.5	40.25/+4.0	40.25/+4.5	40.25/+5.0
C 40.37~40.61 (40.50)	40.50/+1.5	40.50/+2.0	40.50/+2.5	40.50/+3.0	40.50/+3.5	40.50/+4.0	40.50/+4.5	40.50/+5.0
D 40.62~40.86 (40.75)	40.75/+1.5	40.75/+2.0	40.75/+2.5	40.75/+3.0	40.75/+3.5	40.75/+4.0	40.75/+4.5	40.75/+5.0
E 40.87~41.11 (41.00)	41.00/+1.5	41.00/+2.0	41.00/+2.5	41.00/+3.0	41.00/+3.5	41.00/+4.0	41.00/+4.5	41.00/+5.0
F 41.12~41.36 (41.25)	41.25/+1.5	41.25/+2.0	41.25/+2.5	41.25/+3.0	41.25/+3.5	41.25/+4.0	41.25/+4.5	41.25/+5.0
G 41.37~41.61 (41.50)	41.50/+1.5	41.50/+2.0	41.50/+2.5	41.50/+3.0	41.50/+3.5	41.50/+4.0	41.50/+4.5	41.50/+5.0
H 41.62~41.86 (41.75)	41.75/+1.5	41.75/+2.0	41.75/+2.5	41.75/+3.0	41.75/+3.5	41.75/+4.0	41.75/+4.5	41.75/+5.0
I 41.87~42.11 (42.00)	42.00/+1.5	42.00/+2.0	42.00/+2.5	42.00/+3.0	42.00/+3.5	42.00/+4.0	42.00/+4.5	42.00/+5.0
J 42.12~42.36 (42.25)	42.25/+1.5	42.25/+2.0	42.25/+2.5	42.25/+3.0	42.25/+3.5	42.25/+4.0	42.25/+4.5	42.25/+5.0
Standard OAD 10.8 mm		(OAD = 93~95% of HVID)			HP Add: +1.00 ~ +3.00			
K 42.37~42.61 (42.50)	42.50/+1.5	42.50/+2.0	42.50/+2.5	42.50/+3.0	42.50/+3.5	42.50/+4.0	42.50/+4.5	42.50/+5.0
L 42.62~42.86 (42.75)	42.75/+1.5	42.75/+2.0	42.75/+2.5	42.75/+3.0	42.75/+3.5	42.75/+4.0	42.75/+4.5	42.75/+5.0
M 42.87~43.11 (43.00)	43.00/+1.5	43.00/+2.0	43.00/+2.5	43.00/+3.0	43.00/+3.5	43.00/+4.0	43.00/+4.5	43.00/+5.0
N 43.12~43.36 (43.25)	43.25/+1.5	43.25/+2.0	43.25/+2.5	43.25/+3.0	43.25/+3.5	43.25/+4.0	43.25/+4.5	43.25/+5.0
O 43.37~43.61 (43.50)	43.50/+1.5	43.50/+2.0	43.50/+2.5	43.50/+3.0	43.50/+3.5	43.50/+4.0	43.50/+4.5	43.50/+5.0
P 43.62~43.86 (43.75)	43.75/+1.5	43.75/+2.0	43.75/+2.5	43.75/+3.0	43.75/+3.5	43.75/+4.0	43.75/+4.5	43.75/+5.0
Standard OAD 10.4 mm		(OAD = 92~94% of HVID)			HP Add: +1.00 ~ +3.00			
Q 43.87~44.11 (44.00)	44.00/+1.5	44.00/+2.0	44.00/+2.5	44.00/+3.0	44.00/+3.5	44.00/+4.0	44.00/+4.5	44.00/+5.0
R 44.12~44.36 (44.25)	44.25/+1.5	44.25/+2.0	44.25/+2.5	44.25/+3.0	44.25/+3.5	44.25/+4.0	44.25/+4.5	44.25/+5.0
S 44.37~44.61 (44.50)	44.50/+1.5	44.50/+2.0	44.50/+2.5	44.50/+3.0	44.50/+3.5	44.50/+4.0	44.50/+4.5	44.50/+5.0
T 44.62~44.86 (44.75)	44.75/+1.5	44.75/+2.0	44.75/+2.5	44.75/+3.0	44.75/+3.5	44.75/+4.0	44.75/+4.5	44.75/+5.0
U 44.87~45.11 (45.00)	45.00/+1.5	45.00/+2.0	45.00/+2.5	45.00/+3.0	45.00/+3.5	45.00/+4.0	45.00/+4.5	45.00/+5.0
V 45.12~45.36 (45.25)	45.25/+1.5	45.25/+2.0	45.25/+2.5	45.25/+3.0	45.25/+3.5	45.25/+4.0	45.25/+4.5	45.25/+5.0
W 45.37~45.61 (45.50)	45.50/+1.5	45.50/+2.0	45.50/+2.5	45.50/+3.0	45.50/+3.5	45.50/+4.0	45.50/+4.5	45.50/+5.0
X 45.62~45.86 (45.75)	45.75/+1.5	45.75/+2.0	45.75/+2.5	45.75/+3.0	45.75/+3.5	45.75/+4.0	45.75/+4.5	45.75/+5.0
Y 45.87~46.11 (46.00)	46.00/+1.5	46.00/+2.0	46.00/+2.5	46.00/+3.0	46.00/+3.5	46.00/+4.0	46.00/+4.5	46.00/+5.0
Z 46.12~46.36 (46.25)	46.25/+1.5	46.25/+2.0	46.25/+2.5	46.25/+3.0	46.25/+3.5	46.25/+4.0	46.25/+4.5	46.25/+5.0
ZA 46.37~46.61 (46.50)	46.50/+1.5	46.50/+2.0	46.50/+2.5	46.50/+3.0	46.50/+3.5	46.50/+4.0	46.50/+4.5	46.50/+5.0
ZB 46.62~46.86 (46.75)	46.75/+1.5	46.75/+2.0	46.75/+2.5	46.75/+3.0	46.75/+3.5	46.75/+4.0	46.75/+4.5	46.75/+5.0
ZC 46.87~47.11 (47.00)	47.00/+1.5	47.00/+2.0	47.00/+2.5	47.00/+3.0	47.00/+3.5	47.00/+4.0	47.00/+4.5	47.00/+5.0
ZD 47.12~47.36 (47.25)	47.25/+1.5	47.25/+2.0	47.25/+2.5	47.25/+3.0	47.25/+3.5	47.25/+4.0	47.25/+4.5	47.25/+5.0
ZE 47.37~47.61 (47.50)	47.50/+1.5	47.50/+2.0	47.50/+2.5	47.50/+3.0	47.50/+3.5	47.50/+4.0	47.50/+4.5	47.50/+5.0

Patent protection by US Patents: # 6,543,897 & # 6,652,095 & # 6,361,169 & #7,070,275 & #6,997,553

China patent: ZL 01818951.2 & ZL 03818340.4 & ZL200580024766.2

To order lenses: www.usam4.com & For technical support: <http://www.gokla.org/>

GOV[®] H lenses Base curve table

K-code	+1.50	+2.00	+2.50	+3.00	+3.50	+4.00	+4.50	+5.00
OAD 11.2 mm								
40.00 (A)	7.98	7.89	7.79	7.69	7.60	7.51	7.42	7.33
40.25 (B)	7.94	7.84	7.74	7.65	7.56	7.47	7.38	7.29
40.50 (C)	7.89	7.79	7.70	7.61	7.52	7.43	7.34	7.25
40.75 (D)	7.84	7.75	7.66	7.57	7.48	7.39	7.30	7.21
41.00 (E)	7.80	7.71	7.61	7.52	7.43	7.34	7.26	7.17
41.25 (F)	7.75	7.66	7.57	7.48	7.39	7.31	7.22	7.13
41.50 (G)	7.71	7.62	7.53	7.44	7.35	7.27	7.18	7.09
41.75 (H)	7.67	7.58	7.49	7.40	7.31	7.23	7.14	7.06
42.00 (I)	7.62	7.53	7.45	7.36	7.27	7.19	7.10	7.02
42.25 (J)	7.58	7.49	7.40	7.32	7.23	7.15	7.07	6.98
OAD 10.8 mm								
42.50 (K)	7.54	7.45	7.36	7.28	7.20	7.11	7.03	6.95
42.75 (L)	7.50	7.41	7.32	7.24	7.16	7.08	6.99	6.91
43.00 (M)	7.45	7.37	7.28	7.20	7.12	7.04	6.96	6.88
43.25 (N)	7.41	7.33	7.25	7.16	7.08	7.00	6.92	6.84
43.50 (O)	7.37	7.29	7.21	7.13	7.05	6.97	6.89	6.81
43.75 (P)	7.33	7.25	7.17	7.09	7.01	6.93	6.85	6.77
OAD 10.4 mm								
44.00 (Q)	7.29	7.21	7.13	7.05	6.97	6.89	6.82	6.74
44.25 (R)	7.25	7.17	7.09	7.02	6.94	6.86	6.78	6.71
44.50 (S)	7.21	7.14	7.06	6.98	6.90	6.83	6.75	6.67
44.75 (T)	7.18	7.10	7.02	6.94	6.87	6.79	6.72	6.64
45.00 (U)	7.14	7.06	6.98	6.91	6.83	6.76	6.68	6.61
45.25 (V)	7.10	7.02	6.95	6.87	6.80	6.72	6.65	6.58
45.50 (W)	7.06	6.99	6.91	6.84	6.76	6.69	6.62	6.54
45.75 (X)	7.03	6.95	6.88	6.80	6.73	6.66	6.58	6.51
46.00 (Y)	6.99	6.92	6.84	6.77	6.70	6.62	6.55	6.48
46.25 (Z)	6.95	6.88	6.81	6.74	6.66	6.59	6.52	6.45
46.50 (ZA)	6.92	6.85	6.77	6.70	6.63	6.56	6.49	6.42
46.75 (ZB)	6.88	6.81	6.74	6.67	6.60	6.53	6.46	6.39
47.00 (ZC)	6.85	6.78	6.71	6.64	6.57	6.50	6.43	6.36
47.25 (ZD)	6.81	6.74	6.67	6.60	6.53	6.47	6.40	6.33
47.50 (ZE)	6.78	6.71	6.64	6.57	6.50	6.43	6.37	6.30

GOV[®] HP lenses Base curve table (Add: +2.00)

K-code	+1.50	+2.00	+2.50	+3.00	+3.50	+4.00	+4.50	+5.00
OAD 11.2 mm								
40.00 (A)	7.75	7.66	7.57	7.48	7.39	7.31	7.22	7.13
40.25 (B)	7.71	7.62	7.53	7.44	7.35	7.27	7.18	7.09
40.50 (C)	7.67	7.58	7.49	7.40	7.31	7.23	7.14	7.06
40.75 (D)	7.62	7.53	7.45	7.36	7.27	7.19	7.10	7.02
41.00 (E)	7.58	7.49	7.40	7.32	7.23	7.15	7.07	6.98
41.25 (F)	7.54	7.45	7.36	7.28	7.20	7.11	7.03	6.95
41.50 (G)	7.50	7.41	7.32	7.24	7.16	7.08	6.99	6.91
41.75 (H)	7.45	7.37	7.28	7.20	7.12	7.04	6.96	6.88
42.00 (I)	7.41	7.33	7.25	7.16	7.08	7.00	6.92	6.84
42.25 (J)	7.37	7.29	7.21	7.13	7.05	6.97	6.89	6.81
OAD 10.8 mm								
42.50 (K)	7.33	7.25	7.17	7.09	7.01	6.93	6.85	6.77
42.75 (L)	7.29	7.21	7.13	7.05	6.97	6.89	6.82	6.74
43.00 (M)	7.25	7.17	7.09	7.02	6.94	6.86	6.78	6.71
43.25 (N)	7.21	7.14	7.06	6.98	6.90	6.83	6.75	6.67
43.50 (O)	7.18	7.10	7.02	6.94	6.87	6.79	6.72	6.64
43.75 (P)	7.14	7.06	6.98	6.91	6.83	6.76	6.68	6.61
OAD 10.4 mm								
44.00 (Q)	7.10	7.02	6.95	6.87	6.80	6.72	6.65	6.58
44.25 (R)	7.06	6.99	6.91	6.84	6.76	6.69	6.62	6.54
44.50 (S)	7.03	6.95	6.88	6.80	6.73	6.66	6.58	6.51
44.75 (T)	6.99	6.92	6.84	6.77	6.70	6.62	6.55	6.48
45.00 (U)	6.95	6.88	6.81	6.74	6.66	6.59	6.52	6.45
45.25 (V)	6.92	6.85	6.77	6.70	6.63	6.56	6.49	6.42
45.50 (W)	6.88	6.81	6.74	6.67	6.60	6.53	6.46	6.39
45.75 (X)	6.85	6.78	6.71	6.64	6.57	6.50	6.43	6.36
46.00 (Y)	6.81	6.74	6.67	6.60	6.53	6.47	6.40	6.33
46.25 (Z)	6.78	6.71	6.64	6.57	6.50	6.43	6.37	6.30
46.50 (ZA)	6.75	6.68	6.61	6.54	6.47	6.40	6.34	6.27
46.75 (ZB)	6.71	6.64	6.58	6.51	6.44	6.37	6.31	6.24
47.00 (ZC)	6.68	6.61	6.54	6.48	6.41	6.34	6.28	6.21
47.25 (ZD)	6.65	6.58	6.51	6.45	6.38	6.31	6.25	6.18
47.50 (ZE)	6.61	6.55	6.48	6.42	6.35	6.28	6.22	6.16

GOV[®] H & HP Ortho-K lens fitting guide

A. Lens codes and specifications

- Lens type: H, HP
- KM code: 38.00 ~ 50.00 (selectable every 0.25 D)
- Target Power: +0.25 ~ +10.00 (selectable every 0.25 D)
- HP Add: +0.50~+5.00 (default Add for HP lens is +2.00)
- OAD: 9.6~12.4 mm (every 0.2mm)

B. Default overall lens diameter (Varied with cornea curvatures or K-code):

38.00 ~ 42.25 / **11.2 mm**

42.50 ~ 43.75 / **10.8 mm**

44.00 ~ 47.50 / **10.4 mm**

47.75 ~ 50.00 / **10.0 mm**

C. Trial sets

31 H trial lenses: 40.00 ~ 47.50 / +3.00 (see reference table for H lens)

- KM-codes : 40.00 ~ 47.50 (0.25 stepwise Increment)
- Target power: +3.00
- The lens power is - 0.75 (Over target -0.75 D)

1. 31 HP trial lenses: 40.00 ~ 47.50 / +3.00 / ADD +2.00 (see reference table for H lens)

- KM-codes : 40.00 ~ 47.50 (0.25 stepwise Increment)
- Target power: +3.00, and near ADD +2.00
- The lens power is -2.00 (Zero over target, with -2.00 D to neutralize +2.00 ADD)

General rules of fitting GOV[®] lenses

1. General fitting tips for all kinds of GOV[®] lenses:

- a. **Mean K** instead of Flat K is used for selection of trial lenses.
- b. Any calibrated device such as manual type K, auto-K or Sim-K of a topography could be acceptable. Both the steepest and flattest Ks are required.
- c. Calculate mean K to select the first **K-code** for initial trial lens.
- d. Fine tuning, by observing fluorescein pattern, to obtain the **final K-code**.
- e. Typical Bull's eye with proper edge lift should be the goal of trial fit. (Whereas central pooling is standard for H & HP lens.)
- f. **Spherical equivalent** and **corneal astigmatism** is used to determine targeted power
- g. Over refract or calculate to acquire the **Power-code**
- h. **Determine lens diameter** (OAD) by about 93~97% of **HVID**.
- i. **Default OAD** varied with K-code
 - 38.00 ~ 42.25 / **11.2 mm**
 - 42.50 ~ 43.75 / **10.8 mm**
 - 44.00 ~ 47.50 / **10.4 mm**
 - 47.75 ~ 50.00 / **10.0 mm**
- j. It is **unnecessary** to compensate for, nor to alter the K-code when ordering a larger or smaller OAD. The system will adjust lens specs automatically & precisely.

GOV[®] H & HP lenses

Introduction

The GOV[®] H & HP lenses, incorporating the US patented Dual geometric (DG) design (US#: 6,652,095 & #7,070,275) to enhance the peripheral flattening and highlight the central steepening, is fabulous for hyperopia & presbyopia correction. The H lens is good up to +6.00 hyperopia. Higher hyperopia could be tried up to +10. The back optical zone radius, or BOZR of a GOV[®] H lens is designed steeper than the central cornea curvature, by +0.25 to +6.00 D (or hyperopia target power), plus an over target of -0.75 D to ensure sufficient reduction. The optical zone is set aspheric for faster molding. An aspheric alignment curve ensures proper centration of the lens.

The HP lens is good from plano to +6.00 (or hyperopia target power) with an Add of +0.50~+3.00. Higher hyperopia & presbyopia could be tried up to +10 with and ADD up to +5.00. The back optical zone radius, or BOZR of a GOV[®] HP lens is designed steeper than the central corneal curvature for the targeted far power as well as the ADD but not any over target. The optical zone is set aspheric for molding faster with precision control for achieving central-near simultaneous vision.

The dual geometric H & HP lenses may exert a positive force on mid-peripheral portion of the cornea to form a flat mid-peripheral ring for highlighting the central steepening, which is much more effective than exerting negative force over the corneal apex for traditional molding. The DG design ensures a wide & precisely formed far zone to be a base for progressive presbyopia molding.

The fluorescein pattern for DG lens is similar to a bull's eye for Myopic Ortho-K except the obvious central pooling. The force exerted by the flat (secondary) plateau zone is the key for precision control of the hyperopia molding, which ensures a wide far zone for protrusion of the reading button by HP design.

An aspheric alignment curve and precisely determined lens size ensure proper centration of the lens, which is critical for HP progressive molding.

- Both H and HP lens, the back surfaces of optical zone (BOZR) are aspheric.

Whereas the front surfaces are created differently:

- a. The front surface of an H lens is figured to **neutralize** the ADD effect of the aspheric BOZR for better far vision with the lens.
 - b. The front surface of an HP lens is figured to **enhance** the ADD effect of the aspheric BOZR for better near vision with the lens. That is to say, HP lens, with full ADD on peripheral portion of the lens, can be used as **multi-focal RGP** for far and near.
- Unlike reverse geometric lenses for myopia Ortho-K, dual geometric H and HP lenses are **less likely to seal off** wearing it during awakening hours. It would be safer, when better vision is required, to wear the H or HP lenses for awakening hours such as driving at night. Practitioners still have to monitor the lens movement for the initial 6-8 hours to determine whether daywear schedule is allowable.
 - The HP lens will reshape the central cornea steeper for a reading button. Just like the central-near multi-focal soft contact lenses, the wearers may experience more or less interference with the far vision especially in nighttime, which should be properly warned for all drivers.

H & HP Step by step fitting guide

1. Measure KM and Manifest refraction. Both near & far corrections are required for HP lens.
 - Compute mean K to determine the K-code.
(Flat K + Steep K) / 2
 - Compute spherical equivalent to determine the P-code
SE=(far refractive error) + (cornea cylinder) / 2
2. Take topography of original cornea (Optional)
 - Obtain HVID (grey to grey distance)
 - Cornea eccentricity is NOT required, which has been figured into H & HP lenses
 - Trial fitting for corneas with **high e-values**, approximate or over **0.6**, is recommended
3. Trial fitting (Optional)
 - Select initial H or HP trial lens by the K-code obtained in step 1.
 - Fine tuning by moving to a steeper or flatter K-code as in RGP fitting
 - Typical Bull's eye with a central pooling button, a narrow band of tear zone, 360 degrees Alignment zone touch and proper edge lift should be the goal of trial fit.
 - Determine final **K-code** after fine-tuning.
 - Over refract or compute to determine **power-code**
4. Determine OAD from measured HVID (corneal size) or accept the default OAD.
 - Estimate HVID, in Topography by grey to grey distance, or by GOV[®] HVID ruler
 - Compute OAD by the preset percentage of HVID, which goes with the K-code.

KM range	Default OAD	OAD as % of HVID
40.00 ~ 42.25	11.2 mm	95~97%
42.50 ~ 43.75	10.8 mm	93~95%
44.00 ~ 47.50	10.4 mm	92~94%

- ArtMost[®] Platform will determine appropriate OAD by the HVID and KM inputted.
5. Order lenses
Order form ArtMost[®] designer Platform
 - Lens type (H) / K-code / Power code/ OAD / material / color
 - Lens type (HP) / K-code / Power code/ OAD / ADD / material / color
 6. Dispense lenses and hygienic education (see details)
 7. Schedule follow up visit

Fine tuning the K-code

The initial trial fit (Ex. by H or HP / (43.00) / +3.00) could be fine tuned according to the fluorescein pattern. Typical Bull's eye with proper edge lift and a shallow but definite central pooling should be the goal of trial fit. A thin and well-defined tear ring underneath the fitting zone should also be observed. The alignment zone has to appear 360 degrees widely bearing on the cornea. The peripheral zone forms a proper edge lift. (See demo)

A. Loose fit:

- Observation: Excessive edge lift with incomplete bearing of alignment zone (not uniformly or less than 360 degrees bearing zone) or fluffy & wider tear ring is a sign of loose fit.
- Reason: Cornea e-value exceptionally being lower than 0.3, or the central K measured for too flat.
- Action: The next tighter lens with a **Steeper** K-code should be tried. When fine-tuning lenses, 0.50D steeper would be required before changes in fluorescein pattern could be observed.

Ex.: If initial trial fit H or HP / (43.00) / +3.00 is too loose, next trial lens is H or HP / (43.50) / +3.00. (Of course, 0.25D tighter could be applied empirically.)

B. Tight fit:

Observation: Insufficient edge-lift, alignment zone being 360 degrees tightly compressed on the cornea and possibly (Central pooling of fluorescent is essential for H lens and is **NOT** a sign of tight fit.)

- Observation: Insufficient edge lift with 360 degrees tightly compressed alignment zone, and centrally wider tear ring are signs of tight fit. (Central pooling or “bridging” is normal and not a tight fit finding for a H lens.)
- Reason: Cornea e-value exceptionally being higher than 0.5, or the central K measured for too steep.
- Action: The next looser lens with a **flatter** K-code should be tried. When fine-tuning lenses, 0.50D flatter would be required before changes in fluorescein pattern could be observed.

Ex.: If initial trial fit H or HP / (43.00) / +3.00 is too tight, next trial lens is H or HP / (42.50) / +3.00. (Of course, 0.25D looser could be applied empirically.)

Rule of thumb: The cornea e-value obtained from topography can be a reference for selection of next trial lens. The rule of thumb for next K-code = initial K-code - [(e-value) - 0.5] x 10.

Ex: If cornea e value = **0.6** and the initial trial fitting of (43.00) by mean-K shows lens bridging, the next K-code selected shall be $43.00 - (0.6 - 0.5) \times 10 = 42.00$.

Determine the Power-code

1. Determine power-code empirically:

Without trial fit, only using spherical equivalent derived from spherical error and corneal astigmatism, practitioners can determine Power-code empirically.

For example: KM 42.5 / 43.5 @ 90, refraction +4.00 - 1.50x 180 (in minus cylinder).

- The mean K is (43.00) and the corneal astigmatism is $(43.5-42.5) / 2 = 0.50D$. The estimated power-code becomes $+4.00 - (\text{corneal astigmatism}) = +4.00 - 0.50 = +3.50$.
- Without trial fit, or if the initial trial fit by H/(43.00) is satisfactory, the power-code could be determined empirically to be +3.50, and the prescription is H or HP/(43.00) / +3.50.

2. Determine power-code empirically but with trial fit

- It is not uncommon for an experienced practitioner to estimate and prescribe a slightly tighter or looser H or HP lens empirically based upon the initial trial fit. The power-code can be determined empirically without over refraction to save chair time. The method is to look upon the paired "K-code / Power-code" of a H or HP lens as the "Base curve / Lens power" of a regular RGP, and obtain the new power-code by compensating "tear lens effect".
- For example: In previous case, if the initial trial fit by the trial lens of H or HP/(43.00)/+3.00 is slightly tight or loose, another suitable final K-code can be determined empirically. The power-code can also be estimated without over refraction.
- Selection of a 0.50D steeper K-code may induce a +0.50 D tear lens effect, and a -0.50 D should be added to the Power-code to neutralize the plus (or less minus) tear lens effect. Now the final prescription is H or HP / (43.50) / +3.00.
- Selection of a 0.50D flatter K-code may induce a -0.50 D tear lens effect, and a +0.50 D should be added to the Power-code to neutralize the minus (or less plus) tear lens effect. Now the final prescription is H or HP / (42.50) / +4.00.

3. Determine power-code by over refract the selected trial lens

- Rules used to over refract trial lens in regular RGP fitting is applicable to the GOV[®] H & HP lens fitting. Except, **NO Vertex** is required. Vertex has been figured into the lens for user-friendly consideration.

For example: The final GOV[®] H or HP trial lens selected is H or HP / (43.50) / +3.00.

If over refraction by the above trial lens of is +4.00, the final prescription is

H or HP / (43.50) / +7.00 (**NO** vertex)

If over refraction by the above trial lens of is -1.50, the final prescription is

H or HP / (43.50) / +1.50

- For HP lens, the ADD is determined by refraction. An extra +0.50 ADD might be required if better near vision is a concern.

Warning: GOV[®] H & HP lenses are less likely to seal off and can be used for daywear. However, the wearers should be advise to monitored the rare chances of sticky lenses.

Dispensing and follow up visit

- The contact lenses should be inspected and cleaned thoroughly before dispensing.
- H & HP lens incorporate concentrically progressive ADD on peripheral portion of the contact lens. The daywear users may use the contact lenses for driving or reading just like multi-focal RGP. The far vision for wearing HP lenses shall be best when looking straight ahead, and its near vision shall be enhanced by looking downward with slightly chin up posture for seeing through lens edge.
- The H and HP lenses are designed for overnight ortho-K. The cornea molding can usually be accomplished with a single pair of lenses. They may be also safe for daywear. To test possibility of daywear, the lens movement and corneal condition must be monitored carefully, for initial 6-8 hours' continuous wearing, after dispensing to discover rare cases of lens binding.
- Go over the routine hygienic education, even for experienced contact lens wearers, such as lens insertion, removal and cleaning. A skillful prior contact lens wearer may not really comply with the Ortho-K procedures well.
- To prevent from air trapping in the steeper reverse zone, wearers may add a drop of normal saline in lens bowl and insert with head down posture. Air trapping is common for initial cases and could cause transient blurred vision due to air bubble impressions on the cornea.
- Direct insertion, without rinsing off of the soaking solution, which is commonly taught among RGP wearers, could be hazardous for overnight wear of H & HP lenses. The residual disinfectant underneath the steeper central bowl of H & HP lenses may cause chemical irritation or keratitis. Rinsing lenses with **saline** before insertion is strongly recommended.
- The wearing schedule should be better 8-10 hours per night, for the initial couple of days or even a few weeks, for the molding to stabilize. The maintenance schedule for 6-8 hours' wearing per night would be good enough to maintain clear vision for daily work thereafter.
- Only the lens edge can be gently touched with a velveteen pad to relieve foreign body sensation if required. No modification on any curvature of the H or HP lenses is allowed.
- Before follow up visit, the overnight lenses should always be removed right after morning rising. Wearers should carry the cleaned lenses for inspection.
- Instruct your wearer to remove the lens for any continuous eye pain or discomfort and ask the practitioners for help.