



# New York State Society of Opticians, Inc.

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## New York State Continuing Education Mail-In Course

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### *The Optical Frame*

By Jackie O'Keefe, ABOC, LDO

NYSO Course ID# 03-35

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Material or the way in which the lens is mounted can categorize ophthalmic frames. The two materials are metal and plastic (commonly known as Zyl). The other category includes full rimmed eyewires, semi rimless and drill mounts. All of these frames have a common. They are all comprised of parts.

#### Frame Parts - Front

The front of the frame that houses the lenses is known as the **frame front**. The area that rests on the nose is called the **bridge**. Most metal frames have two **adjustable nose pads** attached to the frame front with **pad arms**. These are located just under the bridge. The nose pads are attached to the pad arms by a screw, pushed on or crimped on. The pad arm allows for slight movement of the nose pads when resting on the bridge of the nose. Other metal frames have plastic snap-in or screw-on contoured, **form fitted bridges** made of rigid plastic or silicon. These do not allow for movement. There are a few metal frames that do not have any nose pads at all. They rest on the crest of the nose and are known as **strap**, windsor, granny, cylinder or w bridges. Better frame vendors further coat the padless bridge for longer wear. Plastic frames come with a variety of bridges. The **Saddle Bridge** makes contact on the entire nose (the sides and crest) and gets its name from the saddle. The **Keyhole Bridge** touches just the sides of the nose and is shaped similar to a keyhole. There are a few plastic frames that have adjustable nose pads that are attached with pad arms that are embedded into the plastic, but they are not as common. Others have silicon flat pads that snap in place and fit flush on the undersides of the bridge to prevent the frames from slipping.

Top bars are pieces attached above the bridge between the lens eyewires to reinforce the frame front. These are also known as double bar frames when there are two top bars. **Endpieces** are extensions on the

*This course is worth one (1) New York State Ophthalmic Dispensing credit, which can be applied to Ophthalmic Dispensing licensing requirements.*

temporal side of the frame front that attach the frame front to the temples. Frames that have both plastic and metal are known as **combination frames**. The most common consists of a metal **chassis** that houses the lenses and is then covered on the top with **Top Rims** made of plastic or aluminum. They are attached to the chassis with tiny screws. Temples are hinged on to the Top Rim and can be either material.

#### Frame Parts - Temples

Temples are also known as earpieces, arms, and wings that go behind your ears. They are designed to help keep the eyeglasses from slipping down the wearer's face. The bridge of the frame should not support all of the weight. Temples come in a number of lengths and many have spring or tension **Springed Hinges** that allow the temple to swing out without causing it to break off. **Barrels** attach the temples to the FO and are fastened to both. These flat, tiny circular barrels are integrated and a screw is used to hold them together. Combined, (when assembled) the barrels will be of unequal numbers. This ensures a better attachment. Metal frames that are not hypoallergenic use **Temple Tips** to cover the metal that makes contact with the back of the ear. Temple tips are plastic sleeves that slide on for more comfort. Temples come in a variety of styles. **Skull** (sk) temples are firm and bend at the top of the ear. **Comfort Cables** (cc) coil around the back of the ear, are made of metal and are recommended for toddlers. **Riding Bow** (rb) temples wrap around the back of the ear and are made of plastic. **Library** or **Paddle** temples, although not as

common, are still available. Let's take a closer look at these. (See table 1)

**Frame Parts – Drill Mounts and Semi Rimless**

Rimless mountings are exactly what they are...mountings. The name "mounting" comes from the fact that the lenses are "laid on top of" or, if you will, "mounted onto" the rimless mounting. Mountings usually take the form of drill mount rimless and semi rimless.

**3-Piece Drill Mounts** consist of a bridge and two temples. The lenses are mounted on by drilling holes through the lens and attaching them to the bridge and temples by use of a screw. Usually the screw is inserted from the front of the lens and a hexnut is used to secure the screw from the backside of the lens. Most of today's drill mounts use plastic **bushings** to cushion hold the lens in place. These tiny plastic sleeves slide in between the screw and the drilled hole of the lens. Few frame manufactures use a screwless hinge system to hold the lens in place. There are a few plastic drill mounts available in today's market although most are made of metal. **Pince-nez** sports just a bridge and "pinches" the nose as held in place. **Numont** mountings are similar although they do support temples. The lenses are drilled at the nasal and the mounting arm extends out to the temples, which are attached by barrels. **Rimway** style mounts have a top rim that is hidden behind the top of both lenses and

Table 1 <b>Temples at a glance</b>		
Skull	Bend at the top of the ear and fit close to the skull of the head. Hence the name.	Plastic and Metal Frames
Riding Bow	Wrap around the back of the ear and fit snugly against the side of the head.	Plastic Frames
Library	Similar to skull, wider with narrowing at the end to allow for slight bending.	Plastic and Metal Frames
Paddle	Flat and wide and do not bend behind the ear. Slight pressure is used to keep the frames from slipping.	Plastic and Metal Frames
Comfort Cables	Coil around the back of the ear and can be coated for more comfort.	Metal Frames

attaches to the bridge and endpieces.

Semi-rimless mountings have a **mounting arm** onto which the lens rests. A monofilament nylon cord is threaded on each side of the arm to hold the lens in place. This cord can be on the top or bottom of the frame. The outer lens edge needs to be grooved with a small wheel as this is how the lens stays in the frame. Another type of semi rimless is the tension mounted **Balgrip**. The lenses are notched on the nasal and temporal edges and the mounted frame clips on with slight pressure.

NYSSO NYS CE Sponsor #042001 - 042003.001

## The Optical Frame

Circle the best answer for each question and return to:  
NYSSO, 48 Howard Street, Albany 12207 • fax (518) 463-8656

Name: \_\_\_\_\_ License #: \_\_\_\_\_

Mailing Address \_\_\_\_\_

NYSSO Member:  Yes  No *If no, the registration fee is \$30.00; please complete the section below or the membership application on the reverse side:*Method of Payment:  Check (payable to NYSSO)  Credit Card (please complete section below):Type of Credit Card:  Visa  Mastercard Dollar Amount \_\_\_\_\_

Expiration Date: \_\_\_\_\_ Card #: \_\_\_\_\_ Signature: \_\_\_\_\_

- |   |  |  |
|---|--|--|
| <p>1. Springed hinges are on what part of the frame?<br/>a. Pad arms<br/>b. Temples<br/>c. Endpieces<br/>d. Bridge</p> <p>2. Most lenses are attached to 3-piece drill mounts with<br/>a. Glue<br/>b. Monofilament<br/>c. Screws<br/>d. Bushings</p> <p>3. Plastic frames sport which type of bridge?<br/>a. Saddle<br/>b. Adjustable<br/>c. Keyhole<br/>d. All of the above</p> <p>4. Which type of frame holds the lenses with tension?<br/>a. Balgrip<br/>b. Numont<br/>c. Pince-nez<br/>d. Combination</p> <p>5. What holds the nose pads on to the frame front?<br/>a. Arm guards<br/>b. Pad arms<br/>c. Frame pads<br/>d. Extended pads</p> | <p>6. Metal frames use the following to cover the temples:<br/>a. Comfort cables<br/>b. Paddle temples<br/>c. Barrels<br/>d. Temple tips</p> <p>7. Temples that are used for metal frames are commonly known as:<br/>a. Skull<br/>b. Library<br/>c. Paddle<br/>d. All of the above</p> <p>8. The temples and frame front, attached together by screws share which component?<br/>a. Barrels<br/>b. Straps<br/>c. Pads<br/>d. None of the above</p> <p>9. The extensions on the temporal sides of the frame front are know as:<br/>a. Top bars<br/>b. Endpieces<br/>c. Chassis<br/>d. Top rims</p> <p>10. Bridges that are screwed on or snap in place on metal frames are called?<br/>a. Rocking pads<br/>b. Strap bridges<br/>c. Form fitted bridges<br/>d. Keyhole bridges</p> | <p>11. The nose pads are attached to the frame front by:<br/>a. Rocking pads<br/>b. Barrels<br/>c. Spring hinges<br/>d. Pad arms</p> <p>12. Metal frames that do not have nose pads are referred to as:<br/>a. Form fitted<br/>b. Strap<br/>c. Titanium<br/>d. Top Rims</p> <p>13. Frames that are made of metal and plastic are called:<br/>a. Chassis<br/>b. Combinations<br/>c. Bi-laminates<br/>d. Two toned</p> <p>14. Temples that do not coil around the back of the ear are:<br/>a. Comfort cables<br/>b. Spring hinges<br/>c. Skull<br/>d. Riding bow</p> <p>15. Which temple style is best suited for toddlers?<br/>a. Comfort cable<br/>b. Skull<br/>c. Paddle<br/>d. Library</p> |
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# Membership Application

INDIVIDUAL'S NAME \_\_\_\_\_ COMPANY \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_


BUSINESS ADDRESS \_\_\_\_\_

PHONE (HOME) \_\_\_\_\_ PHONE (BUSINESS) \_\_\_\_\_

FAX \_\_\_\_\_ EMAIL \_\_\_\_\_

Preferred Address:  Home  Business Preferred Phone:  Home  Business

Membership Type:  Active (\$150.00)  Newly Licensed-Active (\$75.00)  Associate (\$75.00)  
 (see below for category descriptions)  Corporate (\$150.00)  Student (\$10.00)

Method of Payment:  Check (payable to NYSSO)  Credit Card (please complete section below) 

Type of Credit Card:  Visa  Mastercard Dollar Amount: \_\_\_\_\_

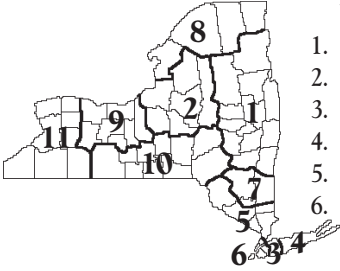
Expiration Date: \_\_\_\_\_ Card #: \_\_\_\_\_ Signature: \_\_\_\_\_ 10/02

**Voluntary Opticians PAC Contribution**  
 (Contributions to the NYSSO Political Action Committee)

\$25.00  \$50.00  \$75.00  \$100.00  Other \_\_\_\_\_

**Membership Year is September 1-August 31.**  
 Mail Application to: NYSSO, 48 Howard Street, Albany, NY 12207. NYSSO Membership Services Line (518) 426-0599  
 E-mail: [nysso@caphill.com](mailto:nysso@caphill.com) • Web Page: [www.nysso.org](http://www.nysso.org)

<p>To be listed accurately in the NYSSO Membership Directory, please indicate which of the following services are offered by your business:</p> <p><input type="checkbox"/> Artificial Eyes <input type="checkbox"/> Contact Lenses  <input type="checkbox"/> Eyeglasses <input type="checkbox"/> Refractions Available  <input type="checkbox"/> Hearing Aids <input type="checkbox"/> Low Vision</p>	<p style="text-align: center;"><u>Please Complete the Following:</u></p> <p>Chapter (see map) _____ Date of Birth: ____/____/____                  NYS License # _____ Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female                  Contact Lens Fitter # _____ Signature _____                  Sponsor (if applicable): _____ Date _____</p>
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<p>Please indicate to which organizations you belong:</p> <p><input type="checkbox"/> American Board of Opticianry Certified (ABO)  <input type="checkbox"/> Fellow, National Academy of Opticianry (FNAO)  <input type="checkbox"/> Opticians Association of America (OAA)  <input type="checkbox"/> National Contact Lens Examiners (NCLE)  <input type="checkbox"/> Contact Lens Society of America (CLSA)</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p><b><u>NYSSO Chapters</u></b></p> <table style="width: 100%;"> <tr> <td>1. Capital District</td> <td>7. Mid Hudson Valley</td> </tr> <tr> <td>2. Central</td> <td>8. North Country</td> </tr> <tr> <td>3. Long Island-Nassau</td> <td>9. Rochester</td> </tr> <tr> <td>4. Long Island-Suffolk</td> <td>10. Southern Tier</td> </tr> <tr> <td>5. Lower Hudson Valley</td> <td>11. Western Out of State</td> </tr> <tr> <td>6. Metropolitan</td> <td></td> </tr> </table> </div> </div>	1. Capital District	7. Mid Hudson Valley	2. Central	8. North Country	3. Long Island-Nassau	9. Rochester	4. Long Island-Suffolk	10. Southern Tier	5. Lower Hudson Valley	11. Western Out of State	6. Metropolitan	
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## Membership Categories

<p><b><u>ACTIVE MEMBERSHIP</u></b> – Annual dues of \$150.00. Any person possessing a valid New York State Ophthalmic Dispensing License is eligible to become an Active Member.</p> <p><b><u>NEWLY LICENSED MEMBERSHIP</u></b> – Annual dues of \$75.00 (first year), \$100.00 (second year), and \$150.00 (third year). Any newly licensed optician (licensed within the past six months) is eligible for the special three-year pro-rated membership incentive. Newly licensed opticians who join under the special offer will be entitled to full Active Member benefits.</p> <p><b><u>ASSOCIATE MEMBERSHIP</u></b> – Annual dues of \$75.00. Any person who does not qualify for Active membership but is supportive of opticianry shall be eligible to become an Associate Member. Associate Members are entitled to all the rights of an Active Member, except voting and may participate in all activities of this Society, unless specifically excluded by the Board of Directors.</p>	<p><b><u>CORPORATE MEMBERSHIP</u></b> – Annual dues of \$150.00. Any proprietorship or corporation maintaining 51% of its licensed opticians as members of this Society and upholding the by-Laws and constitution of the Society is eligible to become a Corporate Member. Corporate Members are entitled to all rights of an Active Member, except voting and may participate in all activities of the Society, unless specifically excluded by the Board of Directors.</p> <p><b><u>STUDENT MEMBERSHIP</u></b> – Annual dues of \$10.00. Any person who is enrolled as a student in a New York State-accredited program for Ophthalmic Dispensing is eligible to become a Student Member. Student Members are entitled to all rights of an Active Member, except voting and may participate in all activities of this Society, unless specifically excluded by the Board of Directors.</p>
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