

The American Gem Society (AGS) Gem Science Committee is working to keep our Accredited Gem Lab® (AGL) relevant and able to educate and protect consumers. As a result, the requirements to qualify as an AGS Accredited Gem Lab® are currently being reviewed and updated. The requirements that appear in bold typeface below outline the updates we expect to see in the coming months. Please note that these requirements must be met by a Retail or ICGA firm member holding, or applying for the AGL designation:

- a. The firm must have a Certified Gemologist (CG)® or Certified Gemologist® Appraiser (CGA or ICGA) in its employ to directly supervise the gem laboratory;
- b. The firm must have the laboratory located within the premises of the firm member and have physical facilities permitting the proper use and display of the gem testing equipment;
- c. The firm must have and maintain an adequate and current gemological library which may be virtual or online; and
- d. The firm must have the laboratory equipped with the following gem testing instruments, as a minimum:
  - i. AGS Color Master Diamond Comparator Set, consisting of at least five AGS Master Diamonds which have been graded by the AGS Laboratories for color according to the AGS color scale. The girdles must be polished or faceted and laser inscribed to identify them as Master Diamonds. For more information, please reference the Dolor Master Requirements flyer at [www.ags.org/accreditedgemlab](http://www.ags.org/accreditedgemlab).
  - ii. **Color comparison set for colored gemstones and fancy colored diamonds such as Gem Dialogue, Munsell, GIA, GemeWizard, AGL ColorCodex or similar**
  - iii. Darkfield binocular microscope (minimum 10x with overhead fluorescent light attachment)
  - iv. Diamond scales to 1/100 carat, **scale attachments/hydrostat for determining specific gravity recommended**
  - v. Dichroscope
  - vi. **Gemological reference library including an edition of *The Practical Guide to Jewelry Appraising* by Cos Altobelli**
  - vii. **Internet connection**
  - viii. Lighting source: Daylight equivalent (approximately 6500 degrees Kelvin) such as the Diamondlite®
  - ix. Measuring device (Leveridge gauge or millimeter gauge)
  - x. **Metals tester**
  - xi. **Photography equipment (cell phone or digital camera acceptable)**
  - xii. Polariscopes
  - xiii. Refractometer with polarizing plate and **RI fluid**
  - xiv. **Synthetic diamond screening and detection equipment with minimum standards (see Addendum)**
  - xv. Ultra-violet light, both longwave and shortwave

It is also recommended, but not required that the firm have:

- i. **Diamond probe tester (thermal and electrical conductivity meters to test for diamond simulants)**
- ii. **Fiber Optic Light Source**
- iii. **Non-Contact Optical Scanner**
- iv. **Spectroscope**

An Accredited Gem Lab® must be operated in a professional and ethical manner, in accordance with the Membership Standards of the American Gem Society. Any member who operates a laboratory in such manner as to bring discredit upon the Society, by unwarranted discrediting of a competitor's merchandise, or by any other unethical conduct, shall be subject to probation, suspension, or expulsion from the Society or any other action recommended by the Grievance & Review Subcommittee.

An Accredited Gem Lab® is subject to audit without notice for compliance for the above elements. If the audit identifies non-compliant elements, the titleholder that oversees the AGL (AGL Principal) will have two years from the date of Notice of Non-Compliance to rectify any issues that would cause non-compliance.

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If you have any questions regarding this document, please contact [membership@ags.org](mailto:membership@ags.org). To apply for the AGL® designation, please visit [www.ags.org/accreditedgemlab](http://www.ags.org/accreditedgemlab) to access the application.

**Definition**

**Parameter**

**RECOMMENDATIONS**

<b>Core Sample</b>	Ratio of synthetic diamonds and diamond simulants incorrectly classified as 'diamond' to the total number of synthetic diamonds and diamond simulants	<b>Diamond False Positive Rate</b>	0%
	Ratio of diamonds being referred for further testing to the total number of diamonds	<b>Referral Rate</b>	5% or less
	Ratio of diamonds correctly classified as diamonds to the total number of diamonds	<b>Diamond Accuracy</b>	95% or more
	Ratio of synthetic diamonds being referred for further testing to the total number of synthetic diamonds	<b>Synthetic Diamond Referral Rate</b>	100% if listed
<b>Smalls Sample</b>	Ratio of synthetic diamonds and diamond simulants incorrectly classified as 'diamond' to the total number of synthetic diamonds and diamond simulants	<b>Diamond False Positive Rate</b>	0% if listed
	Ratio of diamonds being referred for further testing to the total number of diamonds	<b>Referral Rate</b>	5% or less, (recommended)
	Ratio of diamonds correctly classified as diamonds to the total number of diamonds	<b>Diamond Accuracy</b>	95% or more
	Ratio of synthetic diamonds being referred for further testing to the total number of synthetic diamonds	<b>Synthetic Diamond Referral Rate</b>	100% if listed

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