

**Alignment Procedures for Class 3b & 4 Lasers**

1. Exclude unnecessary personnel from the laser area during alignment.
2. Whenever possible, use low power visible lasers for path simulation of higher-power visible or invisible lasers.
3. Wear laser protective eyewear during alignment. Use special alignment eyewear when circumstances (e.g. wavelength, power, etc.) permit their use.
4. When aligning invisible (e.g. UV, IR) beams, use beam display devices such as image converter viewers or phosphor cards to locate beams.
5. Perform alignment tasks using high-power lasers at the lowest possible power level.
6. Use a shutter or beam block to block high power beams at their source except when actually needed during the alignment process.
7. Use a laser rated beam block to terminate high –powered beams downstream of the optics being aligned.
8. Use beam blocks and/or laser protective barriers in conditions where alignment beams could stray into areas with uninvolved personnel.
9. Place beam blocks behind optics (e.g.: turning mirrors) to terminate beams that might miss mirrors during alignment.
10. Locate and block all stray reflections before proceeding to the next optical component or section.
11. Be sure all beams and reflections are properly terminated

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