Based upon the University Laser Safety Program and ANSI Z 136.1-2007 the following design features must be included in the new class 4 laser labs:

- All surfaces in the room shall be diffusely reflective,
- Any emergency exit sign, required for life safety, shall be visible,
- The room shall not contain windows or if they are already in place they must be covered, with a non-combustible material to eliminate transmitted laser radiation,
- Install Emergency Stop button to kill power to laser,
- Non-defeatable entryway safety controls shall be installed that interlock electrical
  power deactivating the laser in the event of unexpected entry into the laser
  controlled area. If this is not feasible from an operational perspective, a door
  blocking barrier shall be used at the entryway and all personnel trained and
  provided the proper eye protection upon entry.
- Outside the lab, install either a warning sign and laser activation light or a lighted sign box.