Projectors used with interactive whiteboards have the potential to cause eye damage if not used correctly. Advice about these issues when using the equipment is given below, however it is important to consider them at the time of purchase.

Where there is likely to be a person standing in front of the beam, consideration should be given to the use of a method of brightness reduction, such as a neutral density filter or brightness adjustment facility. These modifications can be removed or adjusted for other purposes such as cinema projections, where there is not an intention that someone will stand in front of the beam, so allowing the projector to be used to its full image quality potential. Ask the manufacturer what is available.

**Installation**

When planning the position of the interactive whiteboard, you need to consider health and safety issues relating to the cabling. All cabling must be safely secured for the entire length of the cable, right up to the chosen position of the equipment it will be connecting to.

Try to ensure projectors are located so that they are not in a presenter's line of sight when they stand in front of the screen to address an audience. The best way to achieve this is by ceiling-mounting rather than floor or table-mounting the projector.

Digital projectors must be firmly fixed to ceilings and it is strongly recommended that installations are performed by qualified personnel, as part of the purchase agreement. If classrooms have false ceilings, which are flexible, the projectors will have to be specially installed; otherwise the whiteboards will need frequent recalibrating. It is known that asbestos has been used in the ceilings/ceiling tiles of many schools and the installation contractor needs to be aware of this and ensure they complete the asbestos register and carry out the work safely. If there is a possibility that asbestos could be present, then the correct procedures for dealing with this need to be followed.

**Security**

Ceiling-mounted projectors can easily be unbolted unless protected. Standard security measures, such as ultraviolet pens and data tagging, and physical security such as Kensington locks or cages should be used to protect projectors. Some projectors have built-in security measures such as pin codes.

When fixing equipment or cages above, head lock nuts and/or safety chains should be used as there have been reports of fixings vibrating lose. The fixings should be checked on a regular basis.

**Use**

All suppliers of interactive whiteboards are required to provide health and safety advice regarding the safe use of projectors which complies with requirements under section 6 of the Health and Safety at Work etc. Act 1974.

All users of interactive whiteboards should be informed of the health and safety implications of incorrect use and instruction should be given to them about correct use.

It is important to be aware of the health and safety implications of using projection equipment, such as interactive whiteboards, in the classroom, particularly if children and teachers might be standing in front of the beam to present to the rest of the class.

All projectors, if misused, have the potential to cause eye injury, and hence some simple guidelines should be followed:

1. It must be made clear to all users that no one should stare directly into the beam of the projector.

1. When entering the beam, users should not look towards the audience for more than a few seconds. Even though you are not looking directly into the beam, the light is still entering your eye and there is concern that this can damage your peripheral vision.
2. All users, especially pupils/students should be encouraged to keep their backs to the projector beam when stood in the beam. The use of a stick or laser pointer is recommended to avoid the need for the user to enter the beam.
3. Children should be supervised at all times during the operation of the projector.
4. The ‘[safe use of interactive whiteboards poster](http://www.kelsi.org.uk/policies-and-guidance/health-and-safety-guidance/curriculum-topics)’ should be placed next to each interactive whiteboard.

It is generally viewed that a maximum of 1,500 ANSI lumens is adequate for projection equipment in most classroom environments. To minimise the lamp power needed to project a visible presentation, room blinds should be used to reduce ambient light levels.

Further information can be obtained from the [Health and Safety Executive’s advice on the use of interactive whiteboards](http://www.hse.gov.uk/radiation/nonionising/whiteboards.htm).