

Fire Services Requirements for Secondary School Laboratories

1. All exit doors of the laboratory shall be self-closing with a fire resistance period of not less than half hour.
2. The laboratory shall be completely separated from other part of the premises by walls of not less than one hour fire resistance period. High level ventilation to open balcony at a height of 1800 mm from floor level may be provided.
3. The following portable equipment shall be provided in the laboratory :-
 - _____ 4.5 kg CO₂ / 2 kg dry powder fire extinguisher(s) of approved type.
 - _____ fire blanket(s) measuring 1200 mm x 1200 mm of approved type, and
 - _____ bucket(s) of sand.
4. Storage of dangerous goods in the laboratory shall not exceed the exempted quantity as well as the aggregated quantity specified in the Dangerous Goods (General) Regulations.
5. Fume-cupboards, if provided, shall be adequately ventilated to the open air.
6. Poisonous substances and dangerous substances shall be kept in proper containers clearly marked with the names of the substances and kept in a locked room or cupboard, the key to which shall be kept under the control of the teacher/technician in charge of the laboratory.
7. The air conditioning system, if provided, shall be either window unit type or independent system exclusively servicing the school laboratory.

8. The air-conditioning system shall be able to provide adequate ventilation with fresh air from the outside.
9. The exhaust air from the air-conditioning system shall be directed to the open air.
10. An exhaust system shall be provided and switched on whenever the school laboratory is in use to prevent any accumulation of hazardous vapours.
11. All hazardous operations, e.g. those operations where toxic vapours will be generated or those involving corrosive substances shall be performed inside a fume-cupboard.